



TAMPA ELECTRIC

BIG BEND STATION

**TITLE V
OPERATING
PERMIT APPLICATION**

VOLUME II

0570039-002-AV

6/14/1996

Continued

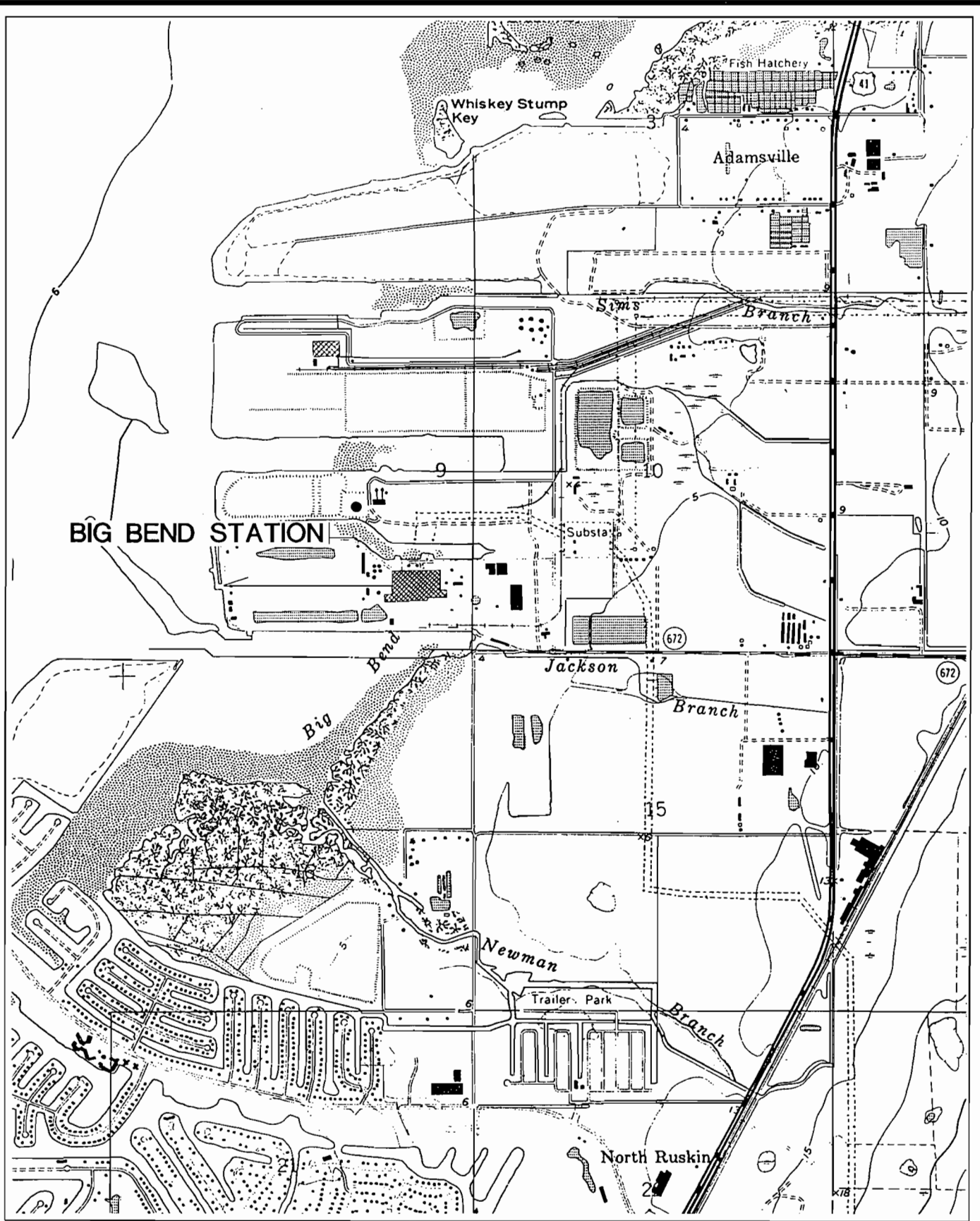
JUNE 1996

✓

**JULY 1997
ADDENDUM**

DOCUMENT II.D.1

AREA MAP SHOWING FACILITY LOCATION



DOCUMENT II.D.1.

BIG BEND STATION AREA MAP

Source: USGS Quad, Gibsonton, FL, 1987.

ECT
Environmental Consulting & Technology, Inc.

DOCUMENT II.D.2
FACILITY PLOT PLANS

Fuel Handling and Storage Sources (FH)

Description	Source ID	Location	Process
Barge Clamshell to Conveyor D1	FH-001	II.D.2.E	II.D.3.A
Barge Bucket Elevator to Conveyor A1	FH-002	II.D.2.E	II.D.3.A
Conveyor A1 to Conveyor B1	FH-003	II.D.2.E	II.D.3.A
Conveyor B1 to Conveyor D1	FH-004	II.D.2.E	II.D.3.A
Self-Unloading Barge to Conveyor D1	FH-005	II.D.2.E	II.D.3.A
Conveyor D1 to Conveyor E1	FH-006	II.D.2.E	II.D.3.A
Conveyor E1 to Conveyor Y or Conveyor F1	FH-007	II.D.2.E	II.D.3.A
Conveyor Y to Conveyor Z	FH-008a	II.D.2.E	II.D.3.A
Conveyor Z to West Emergency Pile	FH-008b	II.D.2.E	II.D.3.A,B
Dozer Operations on West Emergency Storage Pile	FH-009	II.D.2.E	II.D.3.A,B
West Emergency Storage Pile	FH-010	II.D.2.E	II.D.3.A,B
Dozer Reclaim from West Emergency Pile to Portable Conveyor	FH-011a	II.D.2.E	II.D.3.A
Portable Conveyor to Conveyor F1	FH-011b	II.D.2.E	II.D.3.A
Conveyor Z to Conveyor P	FH-012	II.D.2.E	II.D.3.C
Conveyor P to Intermediate Conveyor	FH-013	II.D.2.E	II.D.3.C
Intermediate Conveyor to North Stacker Conveyor (G2)	FH-014	II.D.2.E	II.D.3.C
North Stacker Conveyor (G2) to North/Center Storage Pile	FH-015	II.D.2.E	II.D.3.C
Mobile Reclaimer to North Stacker Conveyor (G2)	FH-016	II.D.2.E	II.D.3.C
North Stacker Conveyor (G2) to Conveyor P	FH-017	II.D.2.E	II.D.3.C
Dozer Operations on North Storage Pile	FH-018	II.D.2.E	II.D.3.C
North Storage Pile	FH-019	II.D.2.E	II.D.3.C
Dozer Operations on Middle (Common) Storage Pile	FH-020	II.D.2.E	II.D.3.C,D
Fuel Storage - Middle (Common) Storage Pile	FH-021	II.D.2.E	II.D.3.C
Conveyor F1 to South Stacker Conveyor (G1)	FH-022	II.D.2.E	II.D.3.D
South Stacker Conveyor (G1) to South/Center Storage Pile	FH-023	II.D.2.E	II.D.3.D
South Reclaimer to South Reclaimer Conveyor (G1)	FH-024	II.D.2.E	II.D.3.D
South Reclaimer Conveyor (G1) to Conveyor F1	FH-025	II.D.2.E	II.D.3.D
Dozer Operations on South Storage Pile	FH-026	II.D.2.E	II.D.3.D
South Storage Pile	FH-027	II.D.2.E	II.D.3.D
Conveyor P to Conveyor J2	FH-028	II.D.2.E	II.D.3.C
Conveyor J2 to Conveyor Q2	FH-029	II.D.2.E	II.D.3.E
Conveyor F1 to Conveyor J1	FH-030	II.D.2.E	II.D.3.D
Conveyor J1 to Conveyor Q1	FH-031	II.D.2.E	II.D.3.E
Conveyors Q1 and Q2 to Blending Bins	FH-032 thru FH-035	II.D.2.E	II.D.3.E
Blending Bins to Conveyors T1, T2	FH-036 thru FH-047	II.D.2.E	II.D.3.E
Conveyor T1 to Crusher #1	FH-048	II.D.2.E	II.D.3.F
Conveyor T2 to Crusher #2	FH-049	II.D.2.E	II.D.3.F
Crusher to Conveyor W1	FH-050	II.D.2.E	II.D.3.F
Crusher to Conveyor W2	FH-051	II.D.2.E	II.D.3.F
Conveyor U to East Emergency Storage Pile	FH-052	II.D.2.E	II.D.3.F
Dozer Operations on East Emergency Storage Pile	FH-053	II.D.2.E	II.D.3.F
East Emergency Storage Pile	FH-054	II.D.2.E	II.D.3.F
Conveyor W1 to Conveyor L1	FH-055	II.D.2.E	II.D.3.F
Conveyor W2 to Conveyor L2	FH-056	II.D.2.E	II.D.3.F
Dozer Reclaim from East Emergency Pile to "K" Feeders	FH-057	II.D.2.E	II.D.3.F
"K" Feeders to Conveyors L1 or L2	FH-058	II.D.2.E	II.D.3.F
Conveyors L1 and L2 to Conveyors M1 and M2, and Conveyors M1 and M2 to Coal Bunkers	FH-059 thru FH-062	II.D.2.E	II.D.3.F
Dozer Operations on Storage Pile	FH-063	II.D.2.E	II.D.3.B
Dozer Reclaim from Storage Pile to Loadout Conveyor	FH-064	II.D.2.E	II.D.3.B
Loadout Conveyor to Rail Transfer Conveyor	FH-065	II.D.2.E	II.D.3.B
Railcar Loading	FH-066	II.D.2.E	II.D.3.B
Transloading Storage Pile to Loadout Conveyor	FH-067	II.D.2.E	II.D.3.C,D
Transloading Fuel Loading to Truck	FH-068	II.D.2.E	II.D.3.C,D
Transloading Fuel Loading to Truck	FH-069	II.D.2.E	II.D.3.E
Long Term Storage Pile	FH-070	II.D.2.E	II.D.3.D
Dozer Operations on Long Term Storage Pile	FH-071	II.D.2.E	II.D.3.D
Fuel Trucks, Full	FH-072	II.D.2.E	II.D.3.E
Fuel Trucks, Empty	FH-073	II.D.2.E	II.D.3.E

Combustion Sources (CS)

Description	Source ID	Location	Process
Unit No. 1	CS-001	II.D.2.C	II.D.3.H
Unit No. 2	CS-002	II.D.2.C	II.D.3.H
* Unit No. 3	CS-003	II.D.2.C	II.D.3.H
* Unit No. 4	CS-004	II.D.2.C	II.D.3.H
Combustion Turbine #1	CS-005	II.D.2.C	II.D.3.I
Combustion Turbine #2	CS-006	II.D.2.C	II.D.3.I
Combustion Turbine #3	CS-007	II.D.2.C	II.D.3.I

Limestone Handling and Storage Sources (LSH)

Description	Source ID	Location	Process
Railcar/Truck Unloading	LSH-001	II.D.2.D	II.D.3.J
Conveyor LB to Conveyor LC	LSH-002	II.D.2.D	II.D.3.J
Conveyor LD to Conveyor LE	LSH-003	II.D.2.D	II.D.3.J
Conveyor LE to South Storage Silo	LSH-004, 005	II.D.2.D	II.D.3.J
Conveyor LE to North Storage Silo	LSH-006, 007	II.D.2.D	II.D.3.J
Trucks, Full	LSH-008	II.D.2.D	II.D.3.J
Trucks, Empty	LSH-009	II.D.2.D	II.D.3.J

Fly Ash Handling and Storage Sources (FA)

Description	Source ID	Location	Process
From Units 1 and 2 or Trucks to Silo #1	FA-001	II.D.2.F	II.D.3.K
Dry Transfer From Silo #1 to Trucks	FA-002	II.D.2.F	II.D.3.K
Wet (Pug Mill) Transfer From Silo #1 to Trucks	FA-003	II.D.2.F	II.D.3.K
From Units 1,2, and 3 to Silo #2	FA-004	II.D.2.F	II.D.3.K
Dry Transfer From Silo #2 to Trucks	FA-005	II.D.2.F	II.D.3.K
From Unit 4 to Silo #3	FA-006	II.D.2.F	II.D.3.K
Dry Transfer From Silo #3 to Trucks	FA-007	II.D.2.F	II.D.3.K
Wet (Pug Mill) Transfer From Silo #3 to Trucks	FA-008	II.D.2.F	II.D.3.K
Trucks, Full	FA-009	II.D.2.F	II.D.3.K
Trucks, Empty	FA-010	II.D.2.F	II.D.3.K

Gypsum Handling and Storage Sources (GH)

Description	Source ID	Location	Process
Stacker Conveyor to North Stackout Pile	GH-001	II.D.2.G	II.D.3.L
Storage - North Stackout Pile	GH-002	II.D.2.G	II.D.3.L
Dozer Operations on North Stackout Pile	GH-003	II.D.2.G	II.D.3.L
Dozer Transfer from North Stackout Pile to Trucks	GH-004	II.D.2.G	II.D.3.L
Trucks (Full) at North Stackout Pile to Off-Site	GH-005	II.D.2.G	II.D.3.L
Trucks (Empty) at North Stackout Pile to Off-Site	GH-006	II.D.2.G	II.D.3.L
Conveyor GD to Conveyor GE	GH-007	II.D.2.G,H	II.D.3.L
Conveyor GE to Conveyor GF	GH-008	II.D.2.H	II.D.3.L
Conveyor GF to Radial Stacker	GH-009	II.D.2.H	II.D.3.L
Radial Stacker to South Stackout Pile	GH-010	II.D.2.H	II.D.3.L
Storage - South Stackout Pile	GH-011	II.D.2.H	II.D.3.L
Dozer Operations on South Stackout Pile	GH-012	II.D.2.H	II.D.3.L
Dozer Operations on Long Term Storage Pile	GH-013	II.D.2.H	II.D.3.L
Storage - Long Term Storage Pile	GH-014	II.D.2.H	II.D.3.L
Dozer Transfer from Long Term Storage Pile to Trucks	GH-015	II.D.2.H	II.D.3.L
Trucks (Full) at Long Term Storage Pile to Off-Site	GH-016	II.D.2.H	II.D.3.L
Trucks (Empty) at Long Term Storage Pile to Off-Site	GH-017	II.D.2.H	II.D.3.L

Slag and Bottom Ash Handling Sources (BH)

Description	Source ID	Location	Process
Slag Trucks, Full	BH-001	II.D.2.I	II.D.3.M
Slag Trucks, Empty	BH-002	II.D.2.I	II.D.3.M
Bottom Ash Trucks, Full	BH-003	II.D.2.J	II.D.3.M
Bottom Ash Trucks, Empty	BH-004	II.D.2.J	II.D.3.M

GC Services

Description	Source ID	Location	Process
Paint Spray Application	GCS-001	II.D.2.K	II.D.3.N
Abrasive Blast Booth	GCS-002	II.D.2.K	II.D.3.O

* Note:

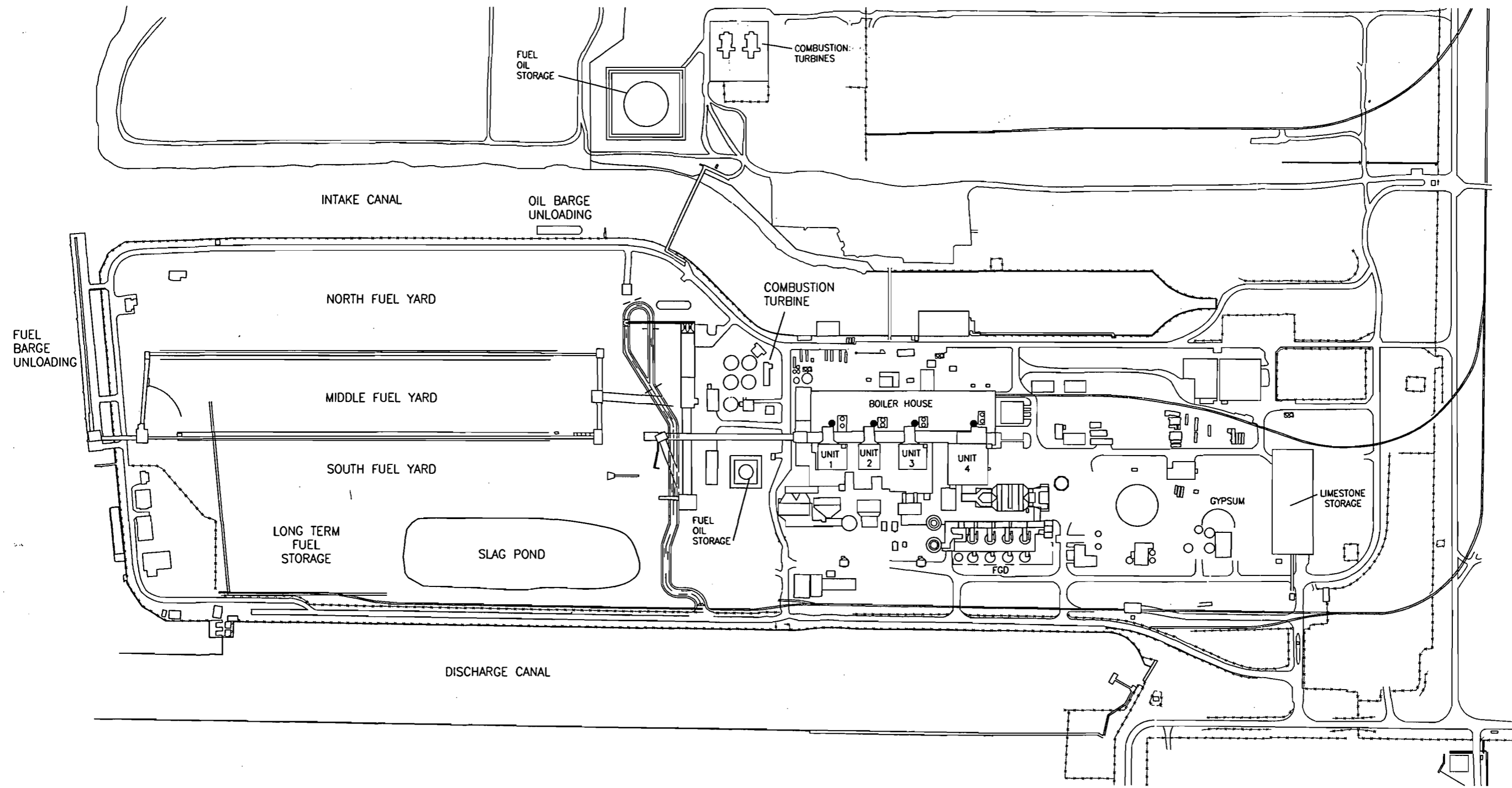
In the integrated mode of operation, Unit No. 3 and Unit No. 4 exhaust combine and exit through Stacks CS-003 and CS-004.

DOCUMENT II.D.2.A.

BIG BEND STATION EMISSION SOURCE IDENTIFICATION KEY SHEET

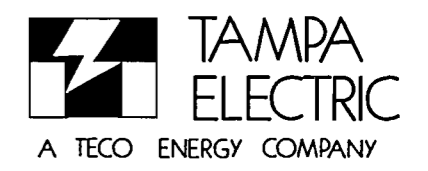
Source: TEC, 1994. ECT, 1996.





DOCUMENT II.D.2.B.
OVERALL FACILITY PLOT PLAN

Source: ECT, 1996.



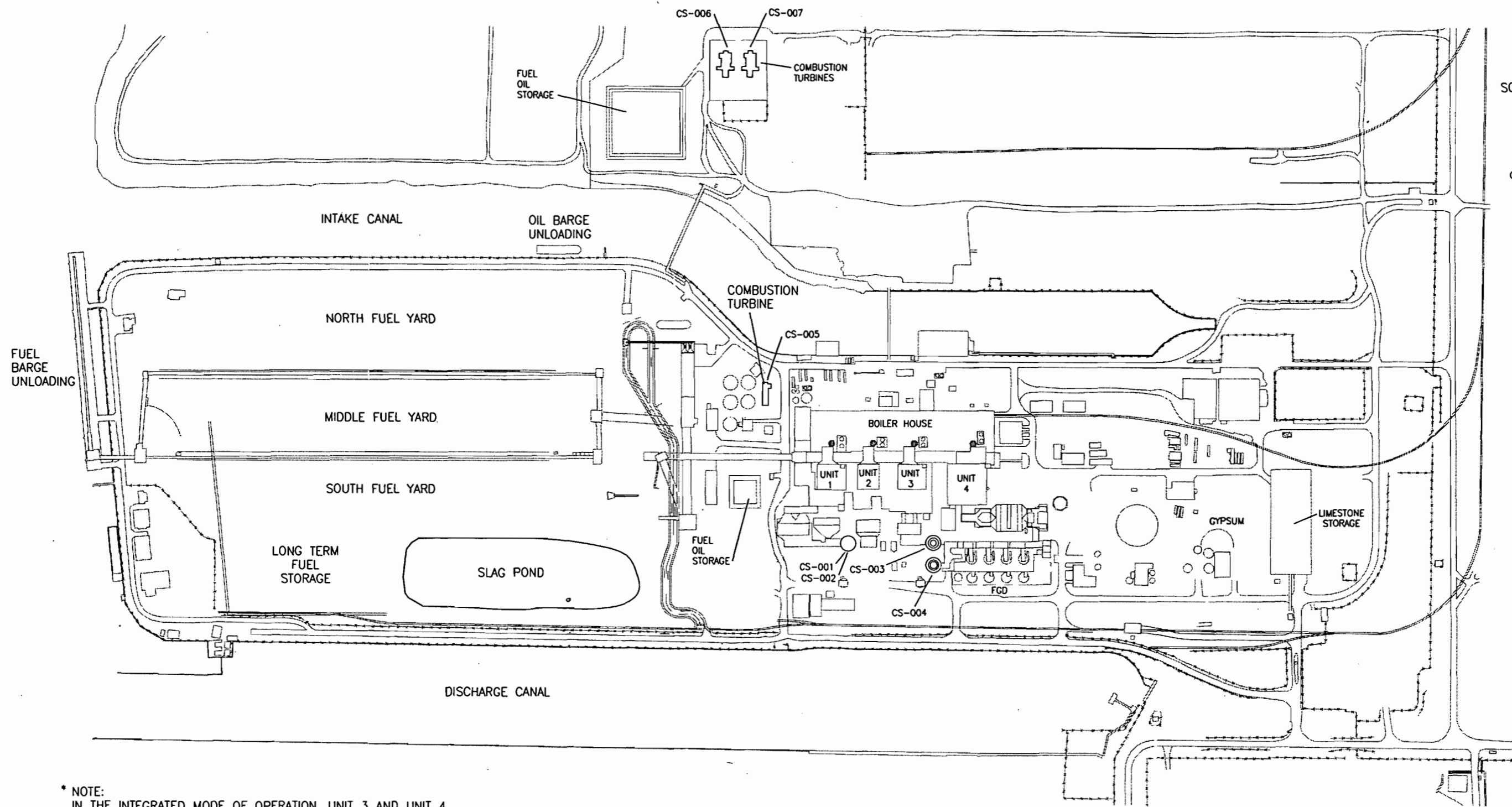


NO SCALE

SCALE: 1"=400' (APPROX.)

LEGEND

CS-007 EMISSION POINT

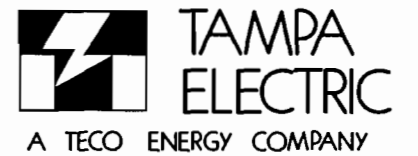


* NOTE:
 IN THE INTEGRATED MODE OF OPERATION, UNIT 3 AND UNIT 4
 COMBINE AND EXHAUST THROUGH STACKS CS-003 AND CS-004.

DOCUMENT I.D.2.C.

COMBUSTION EMISSION SOURCES

Source: ECT, 1996.

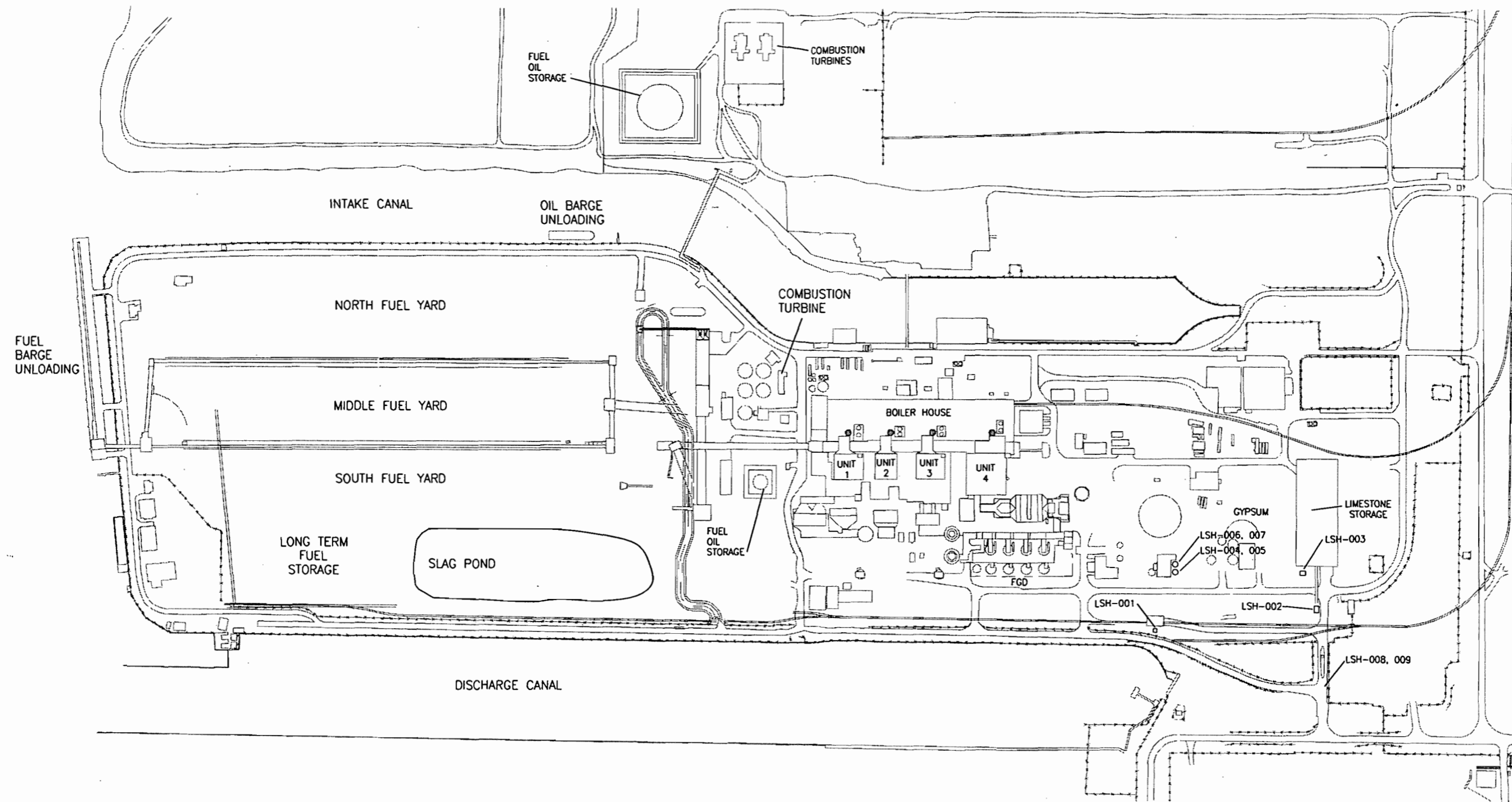




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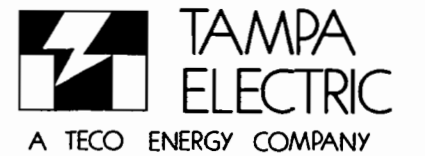
LSH-003 EMISSION POINT

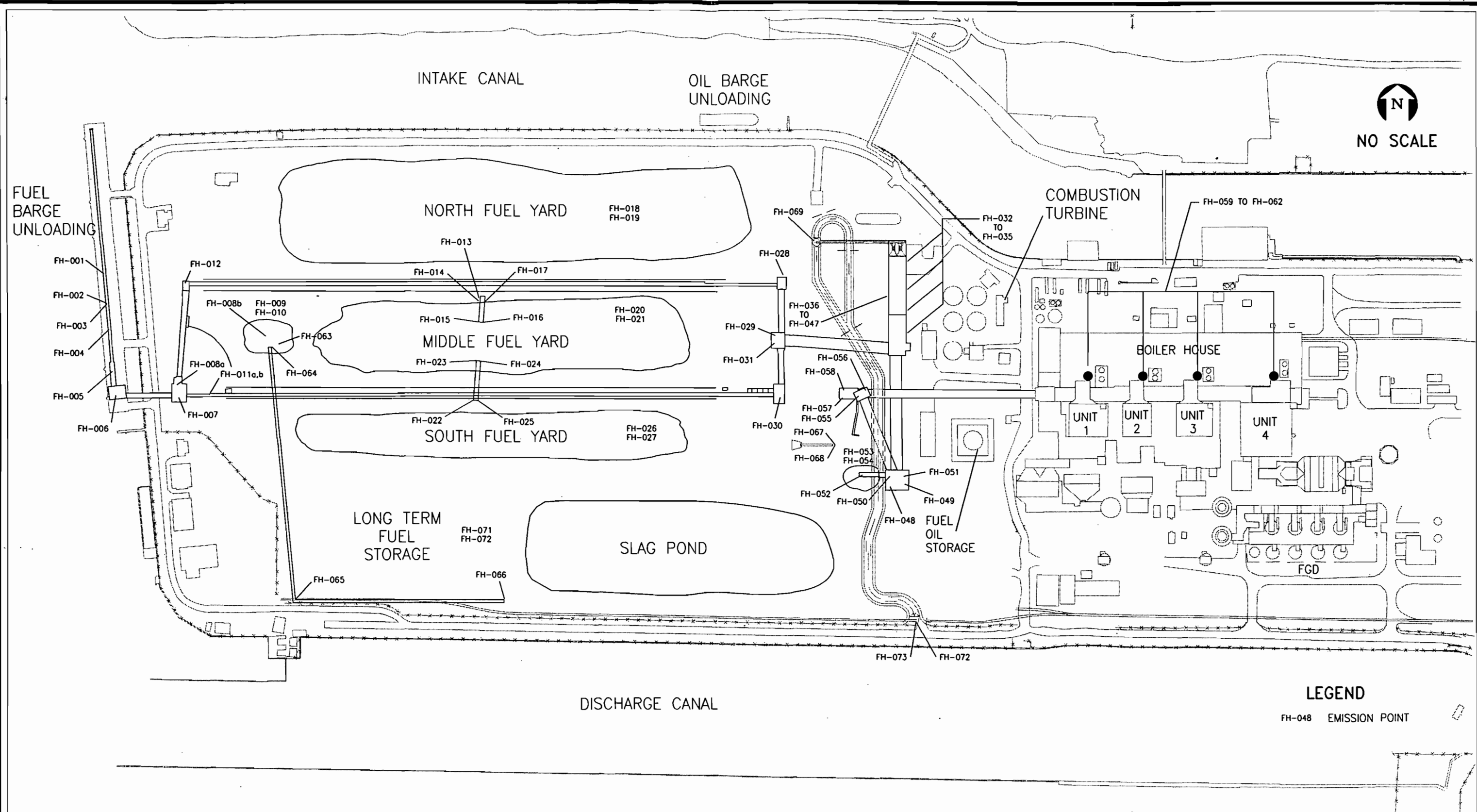


DOCUMENT I.I.D.2.D.

LIMESTONE HANDLING EMISSION SOURCES

Source: ECT, 1996.

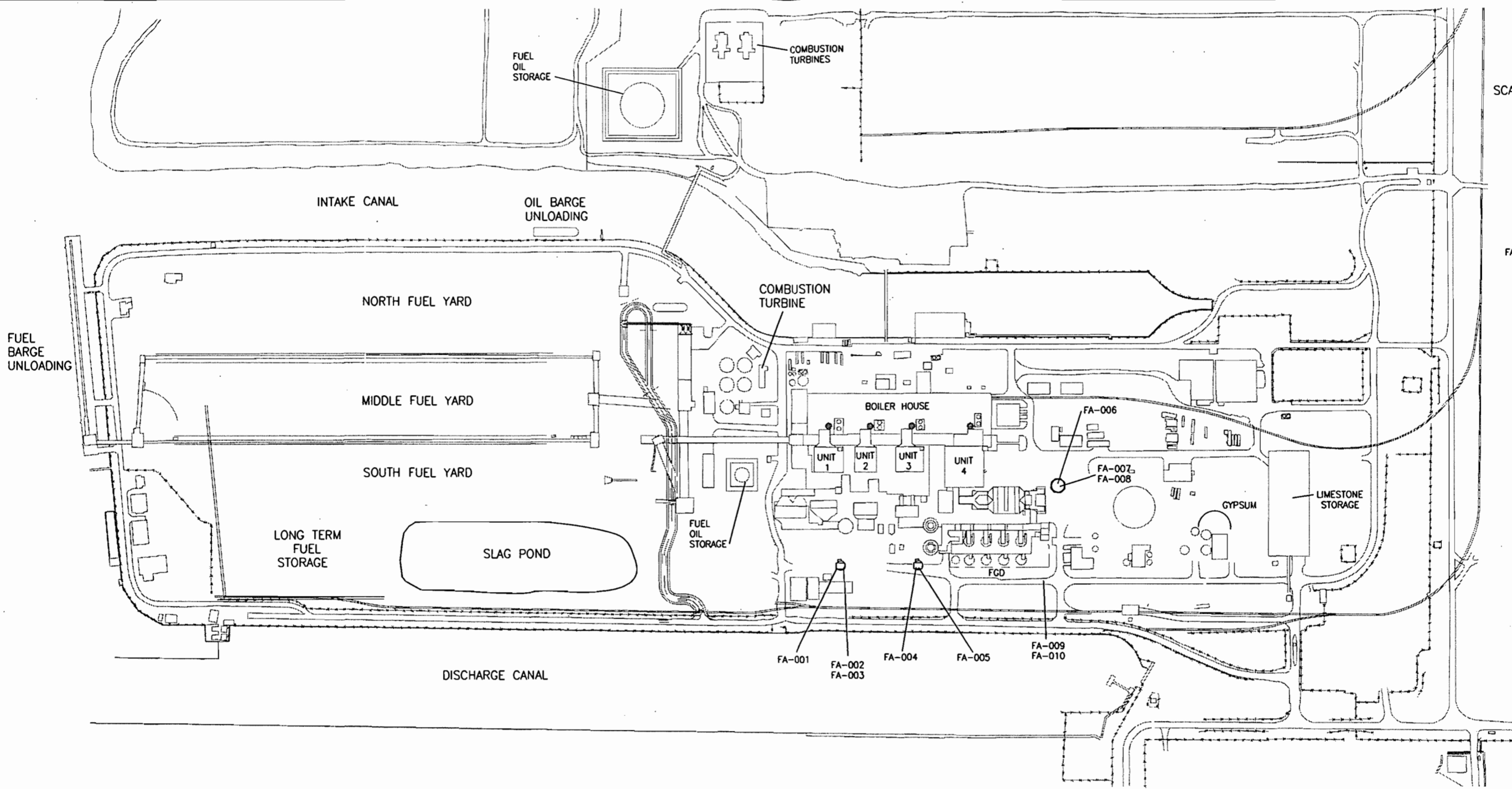




DOCUMENT IID.2.E.
 BIG BEND STATION
 FUEL HANDLING AND STORAGE EMISSION SOURCES

Source: ECT, 1996.





SCALE: 1"=400' (APPROX.)

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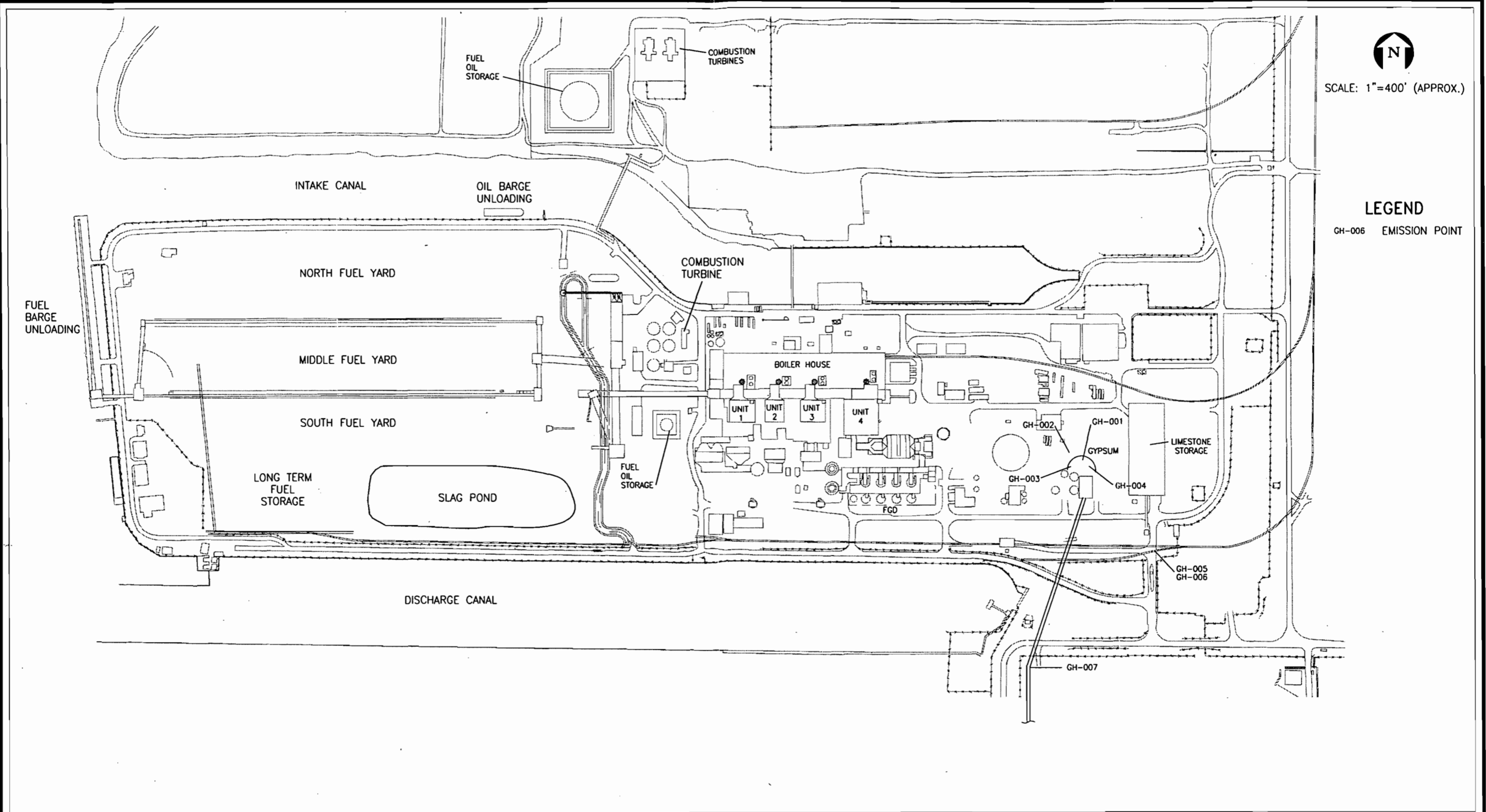
FA-005 EMISSION POINT

DOCUMENT I.I.D.2.F.

**BIG BEND STATION
FLY ASH HANDLING AND STORAGE EMISSION SOURCES**

Source: ECT, 1996.

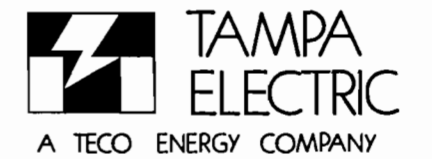


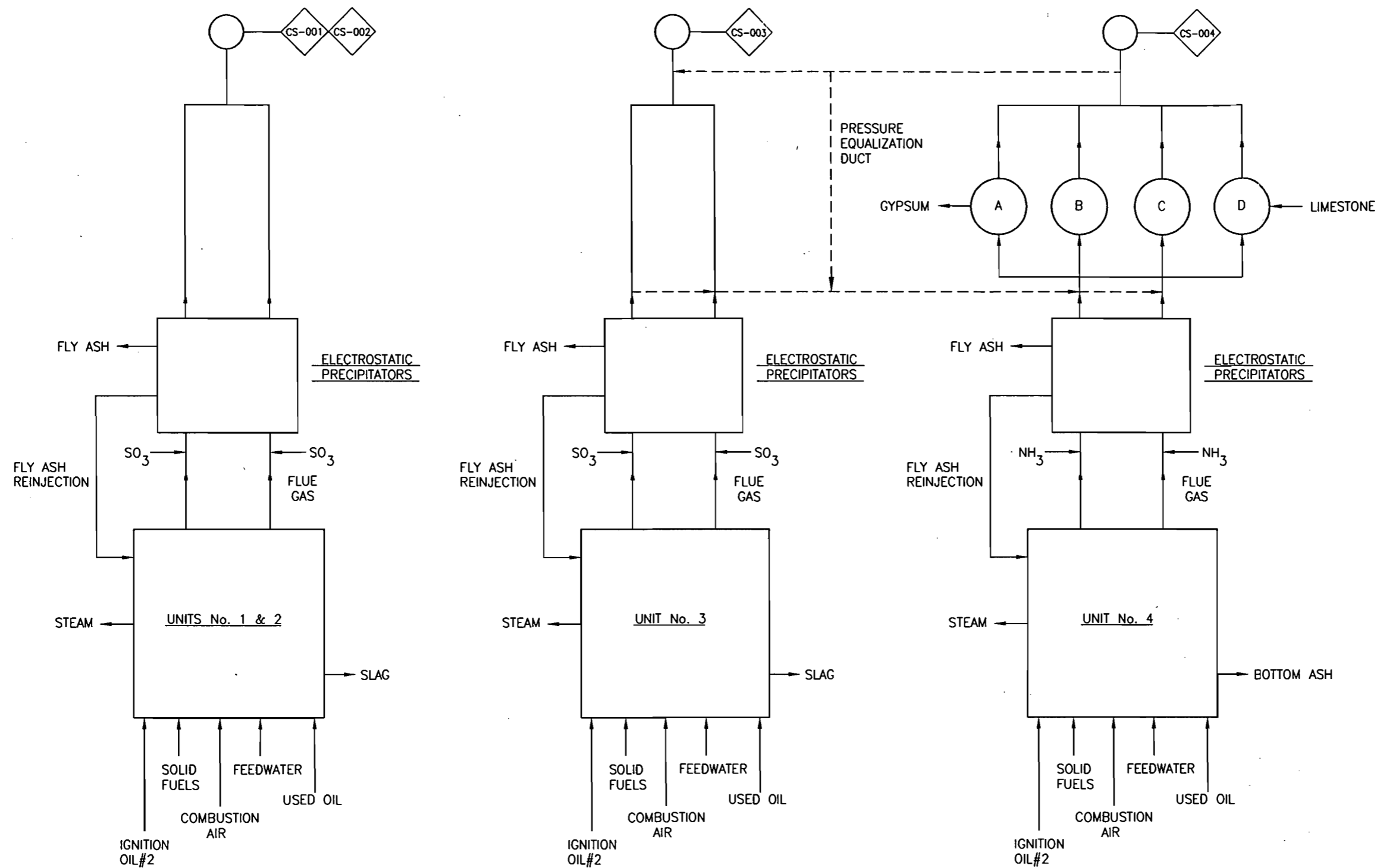


DOCUMENT I.D.2.G.

**BIG BEND STATION
GYPSUM HANDLING AND STORAGE EMISSION SOURCES**


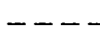
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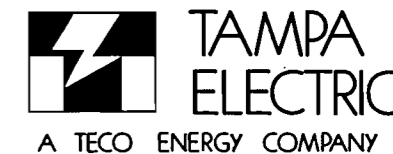
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DESULFURIZATION
MODULES

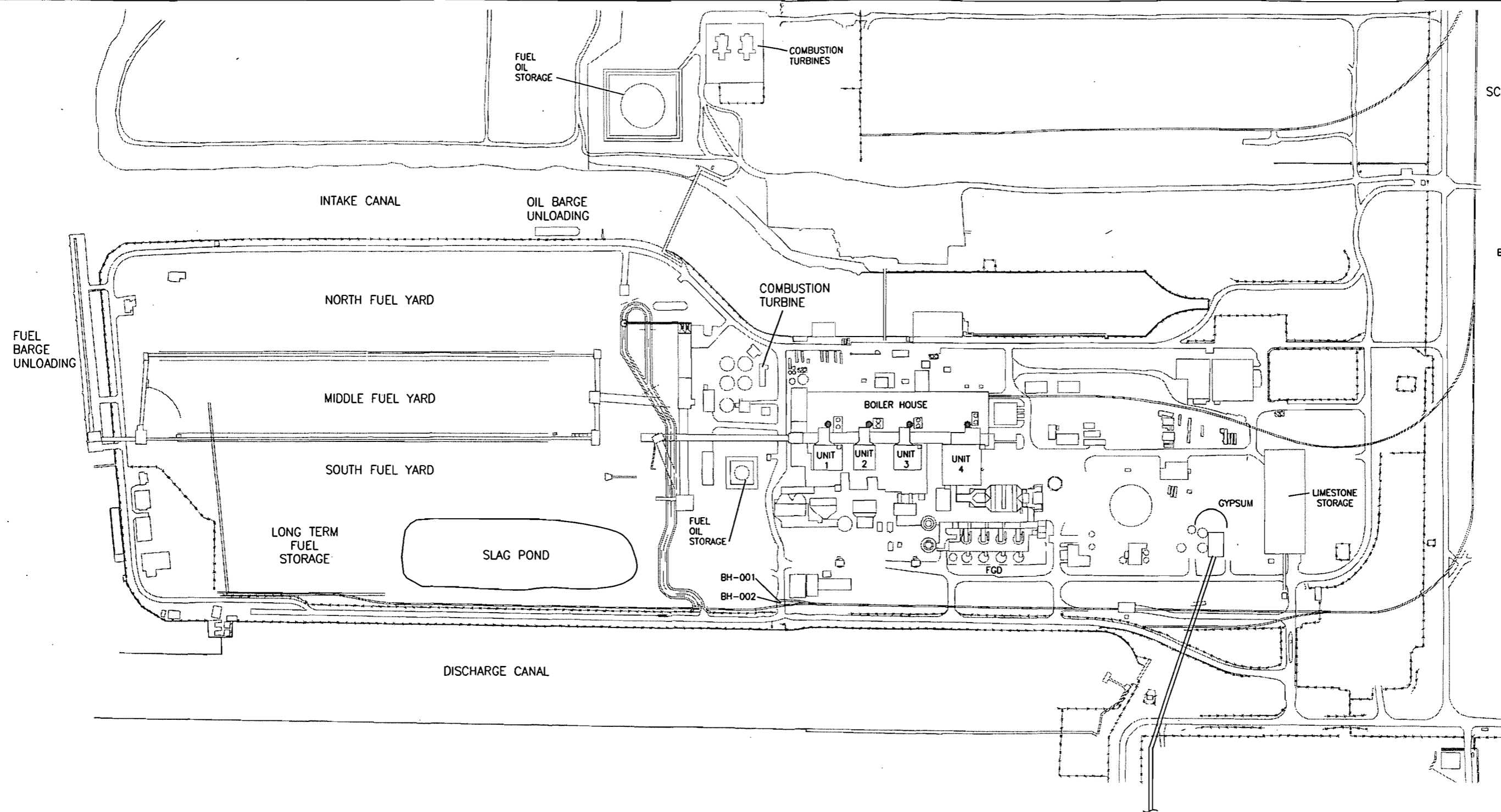
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-  EMISSION POINT
-  UNIT 3 FLUE GAS INTEGRATION

DOCUMENT I.D.3.H.
BOILER PROCESS FLOW DIAGRAM

Source: ECT, 1996.



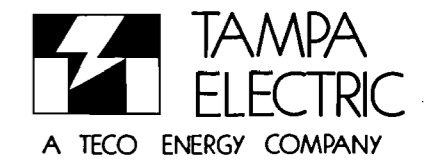


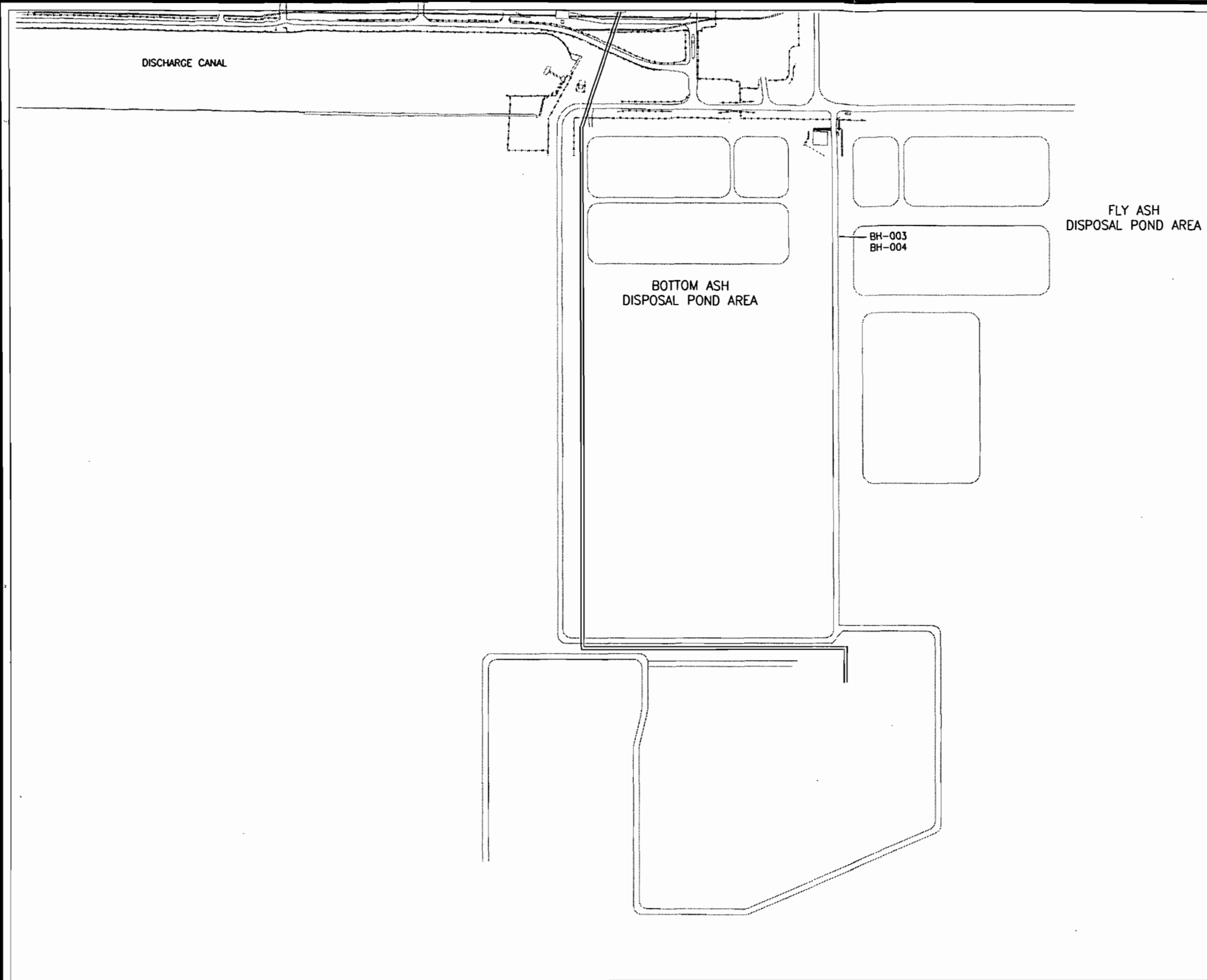
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LEGEND

BH-001 EMISSION POINT

DOCUMENT IID.2.I.
 BIG BEND STATION
 SLAG AND BOTTOM ASH HANDLING EMISSION SOURCES
 Source: ECT, 1996.





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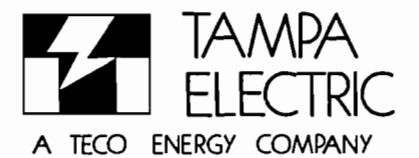
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BH-004 EMISSION POINT

DOCUMENT II.D.2.J.

BIG BEND STATION
 SLAG AND BOTTOM ASH HANDLING EMISSION SOURCE

Source: ECT, 1996.

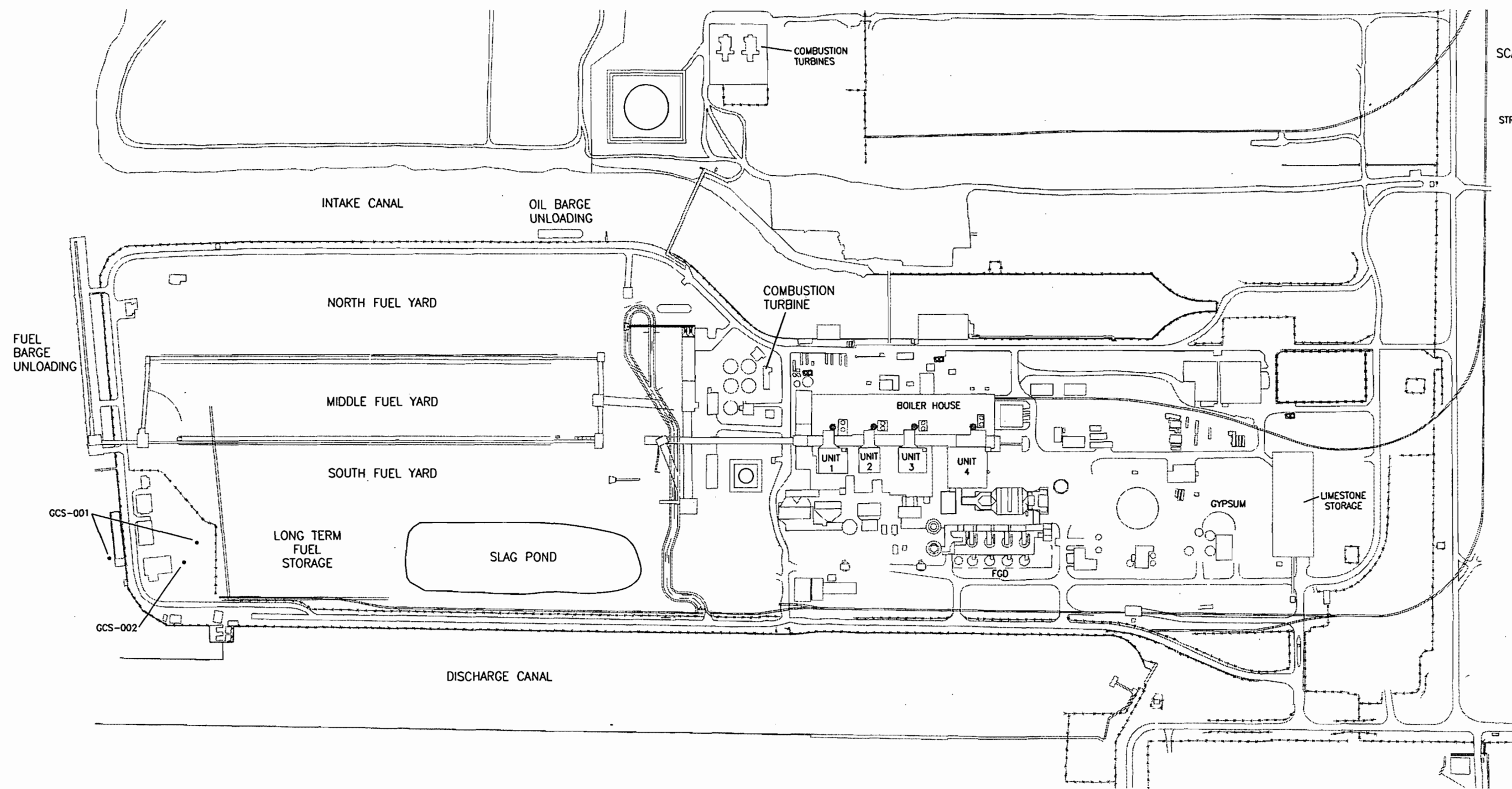




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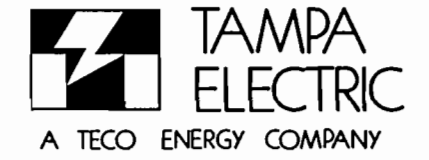
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STR-008 EMISSION POINT



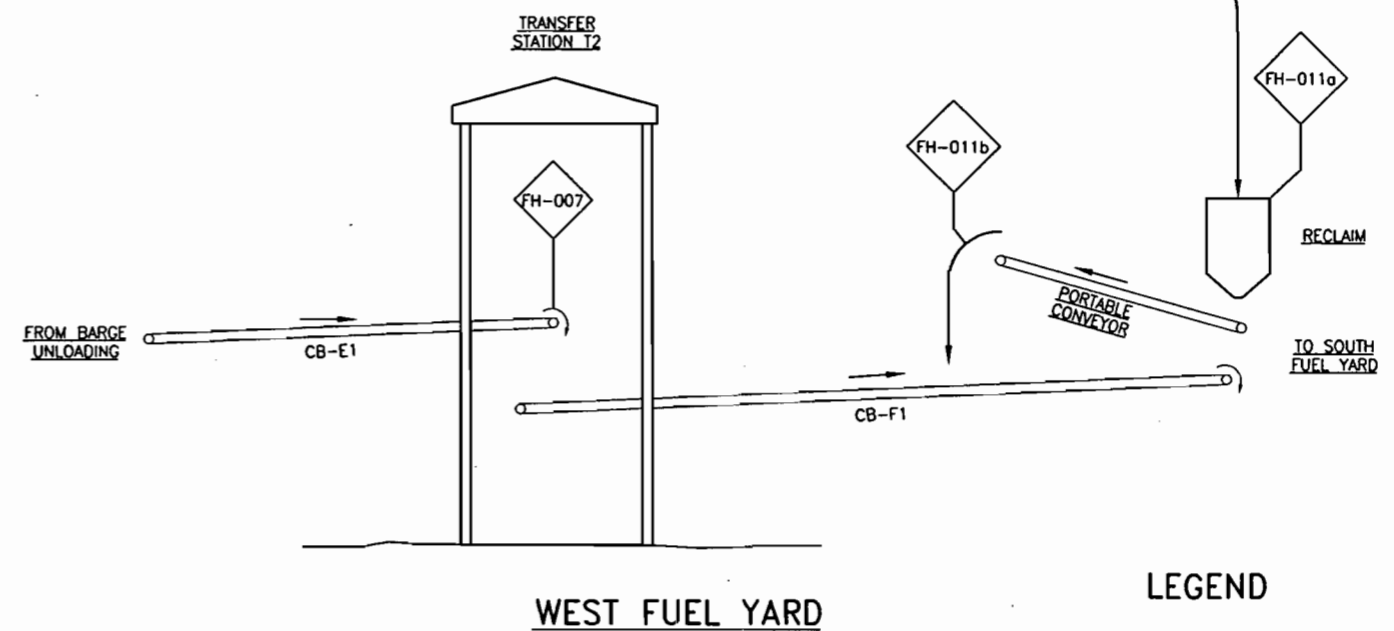
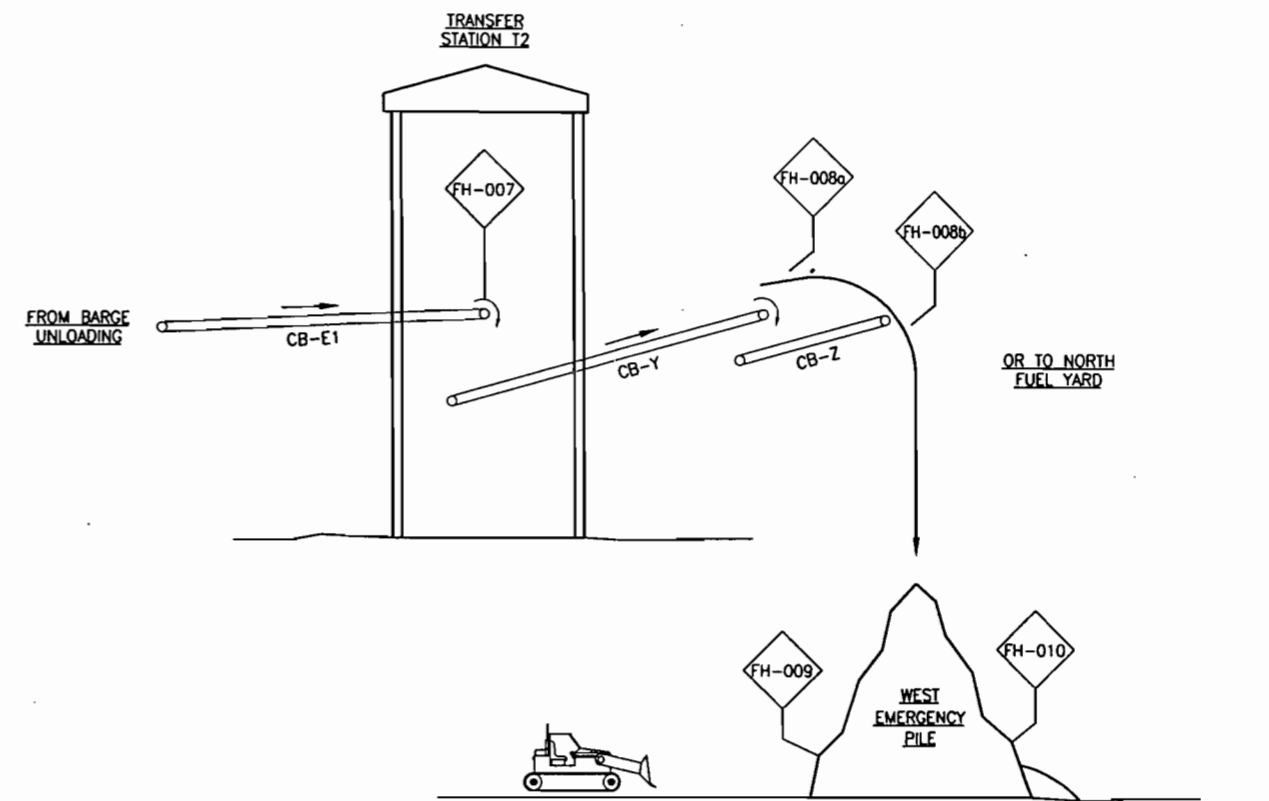
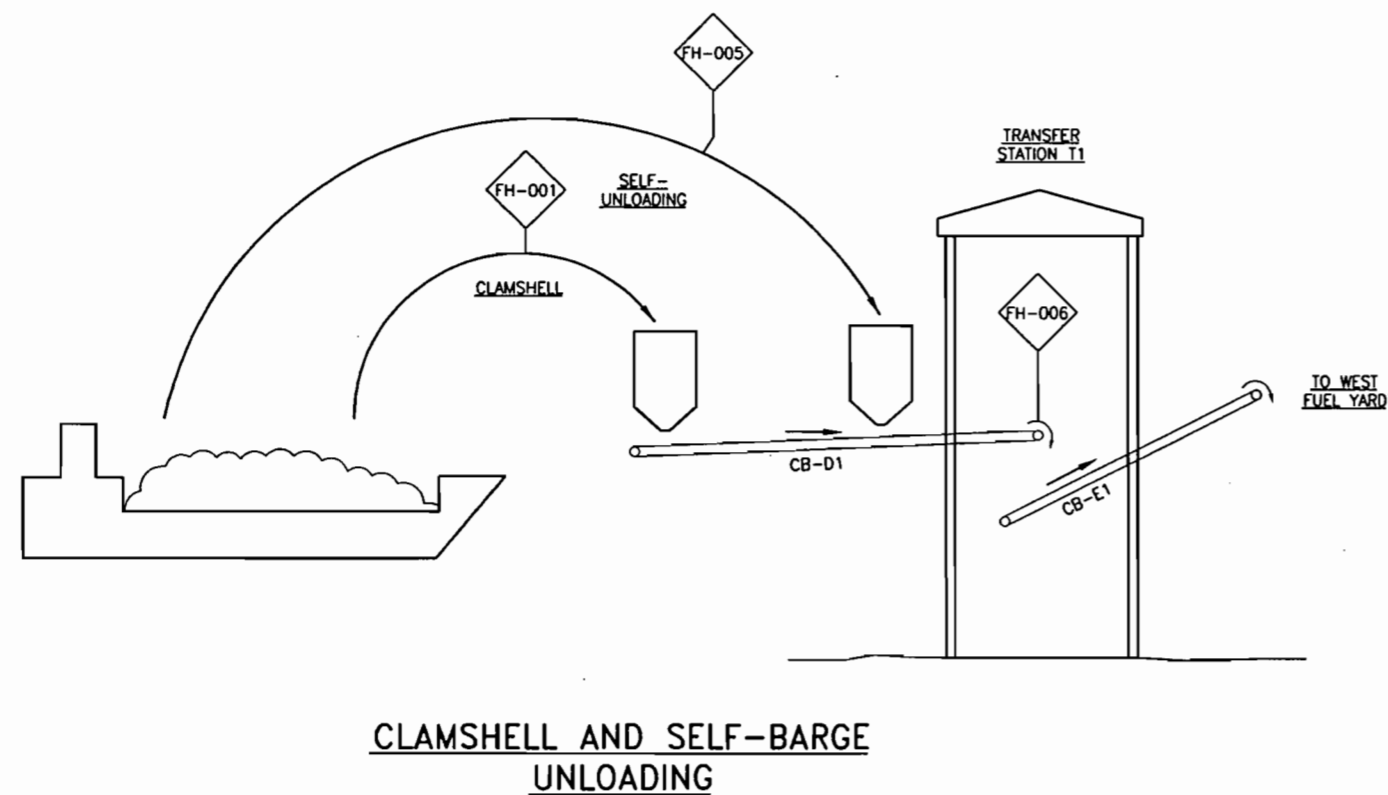
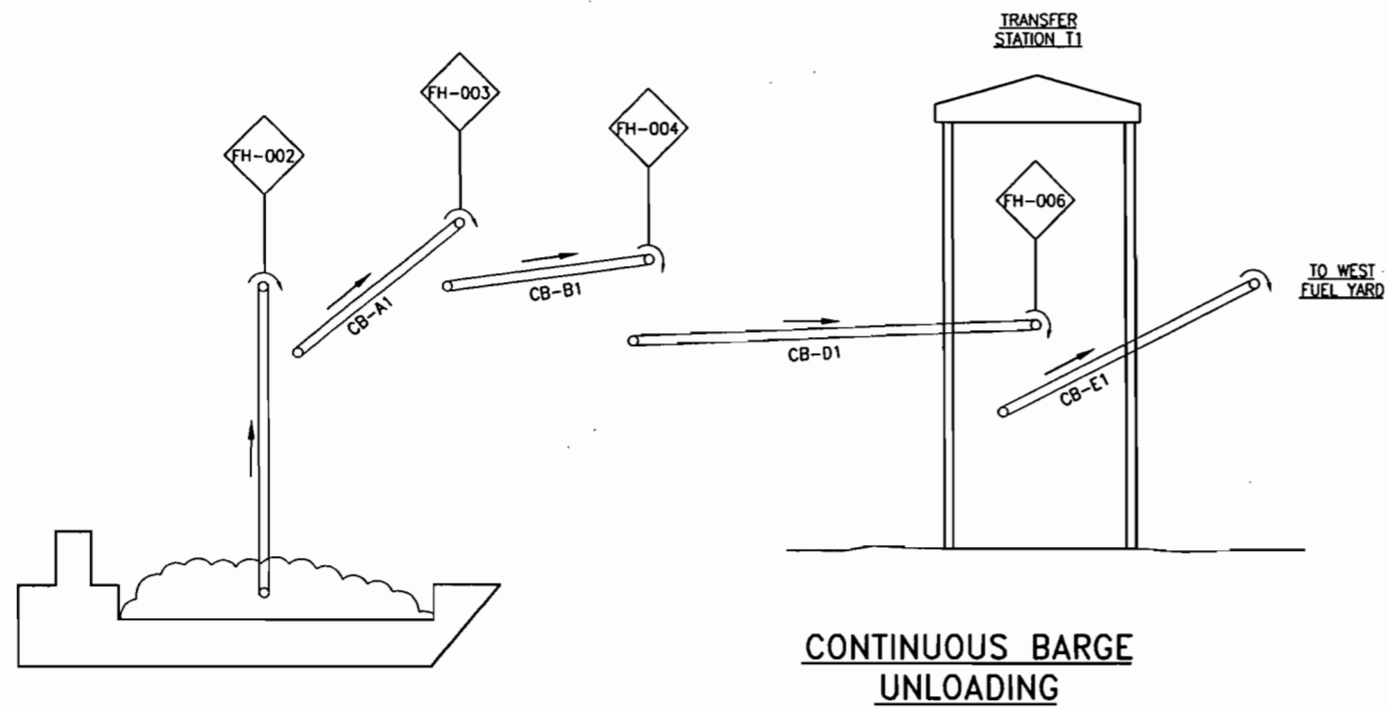
DOCUMENT I.D.2.K.
GC SERVICE EMISSION SOURCES

Source: ECT, 1996.



DOCUMENT II.D.3

PROCESS FLOW DIAGRAMS

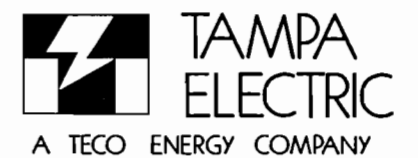


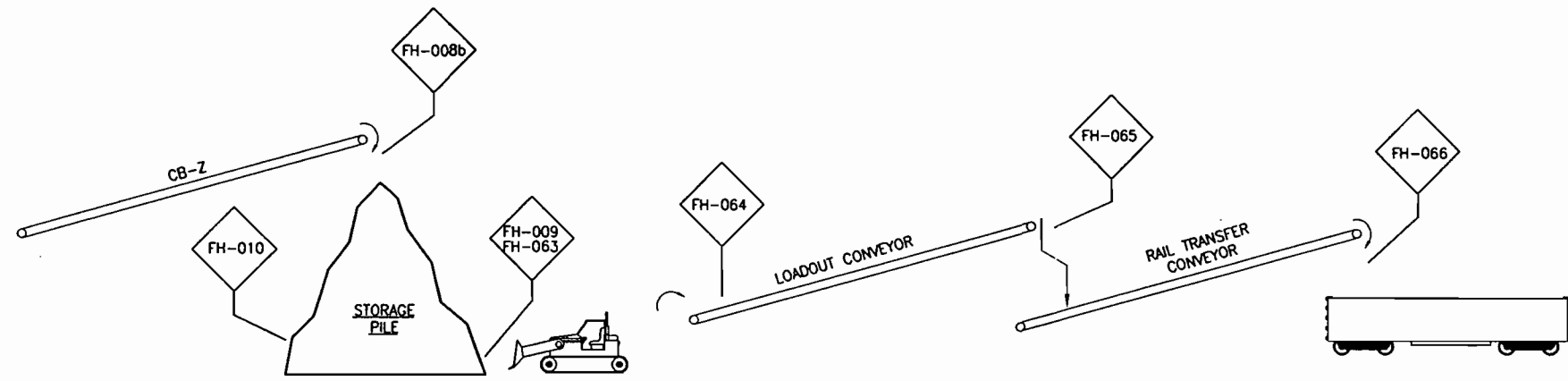
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 ◊ FH-009 EMISSION POINT

DOCUMENT II.D.3.A.

FUEL HANDLING PROCESS FLOW SCHEMATIC, BARGE UNLOADING AND WEST FUEL YARD

Source: ECT, 1996.





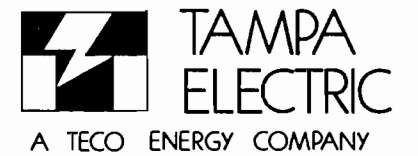
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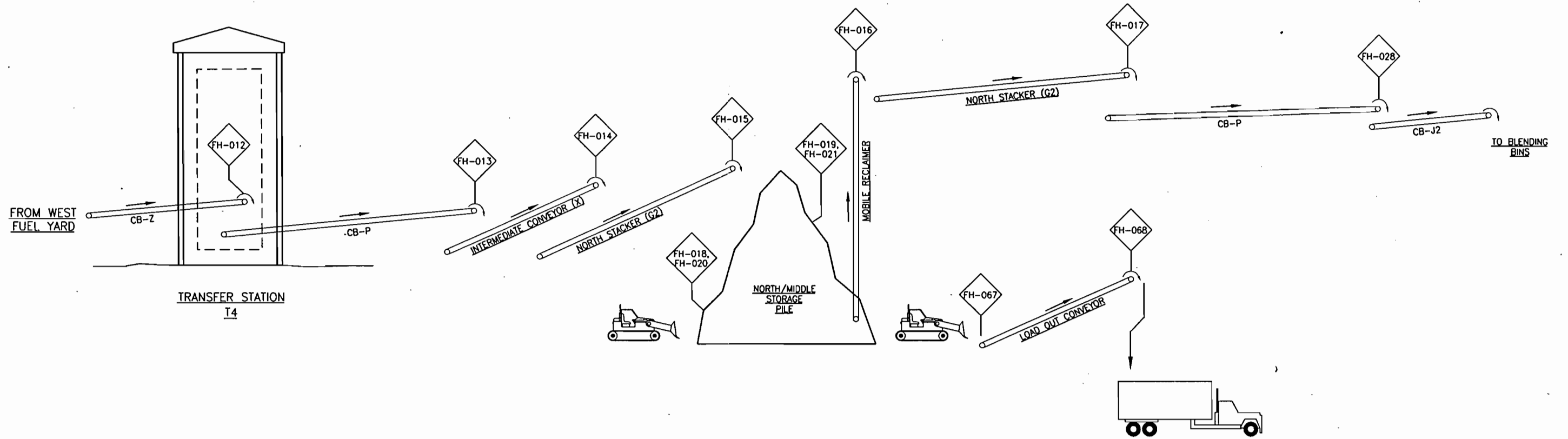
 EMISSION POINT

DOCUMENT I.I.D.3.B.

FUEL HANDLING PROCESS FLOW SCHEMATIC, RAILCAR LOADOUT

Source: ECT, 1996.





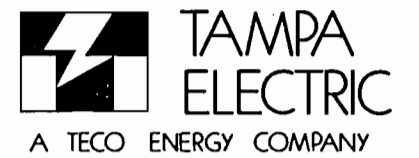
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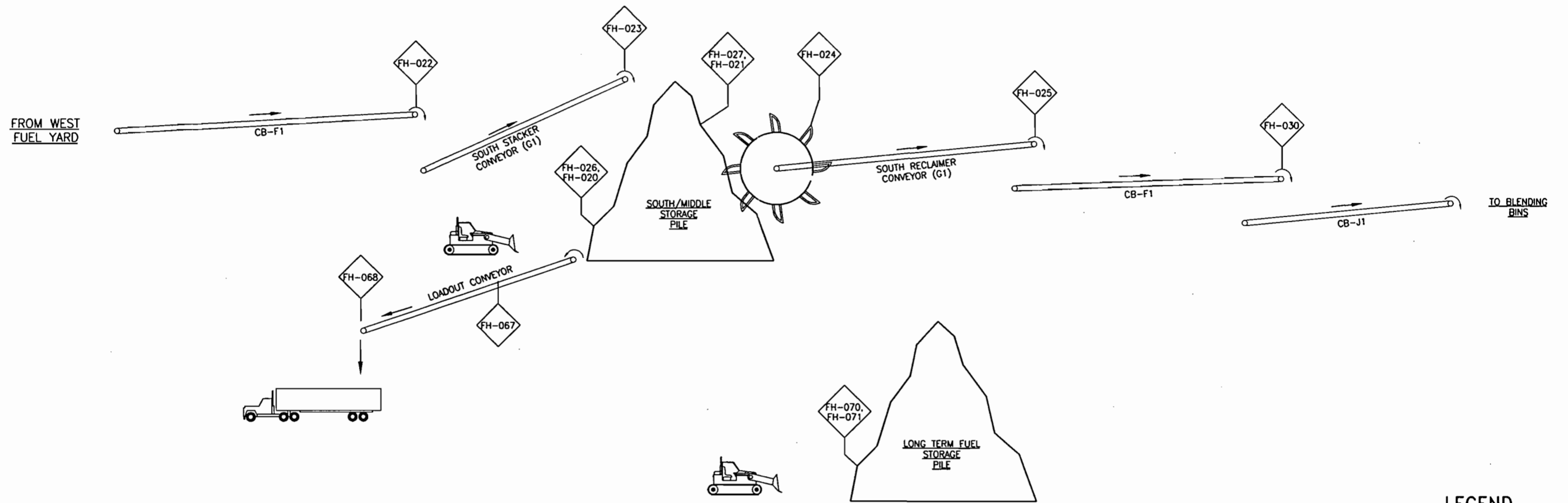
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DOCUMENT I.D.3.C.

FUEL HANDLING PROCESS FLOW DIAGRAM NORTH FUEL YARD

Source: ECT, 1996.





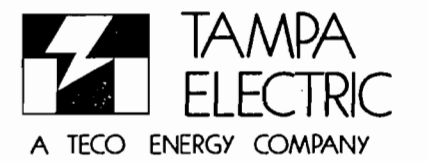
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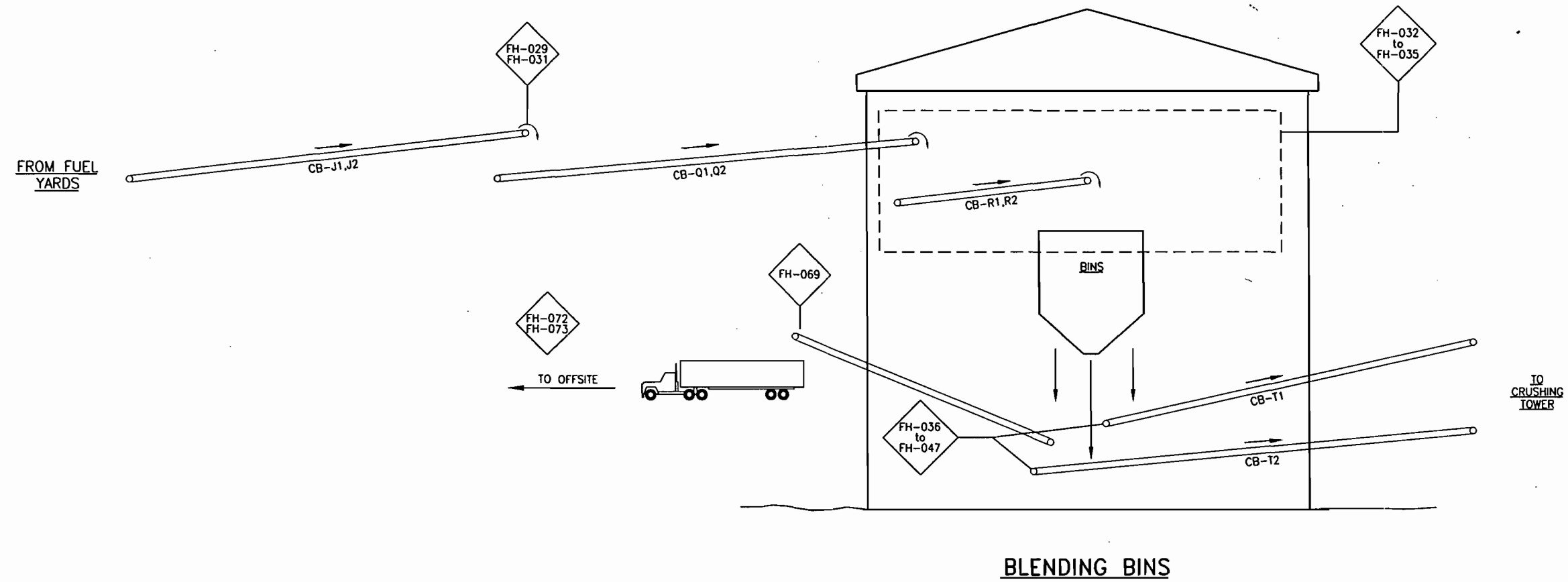
 EMISSION POINT

DOCUMENT I.I.D.3.D.

FUEL HANDLING PROCESS FLOW DIAGRAM, SOUTH FUEL YARD

Source: ECT, 1996.





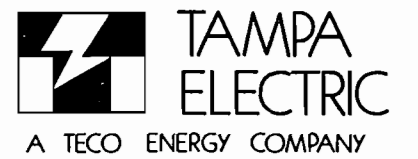
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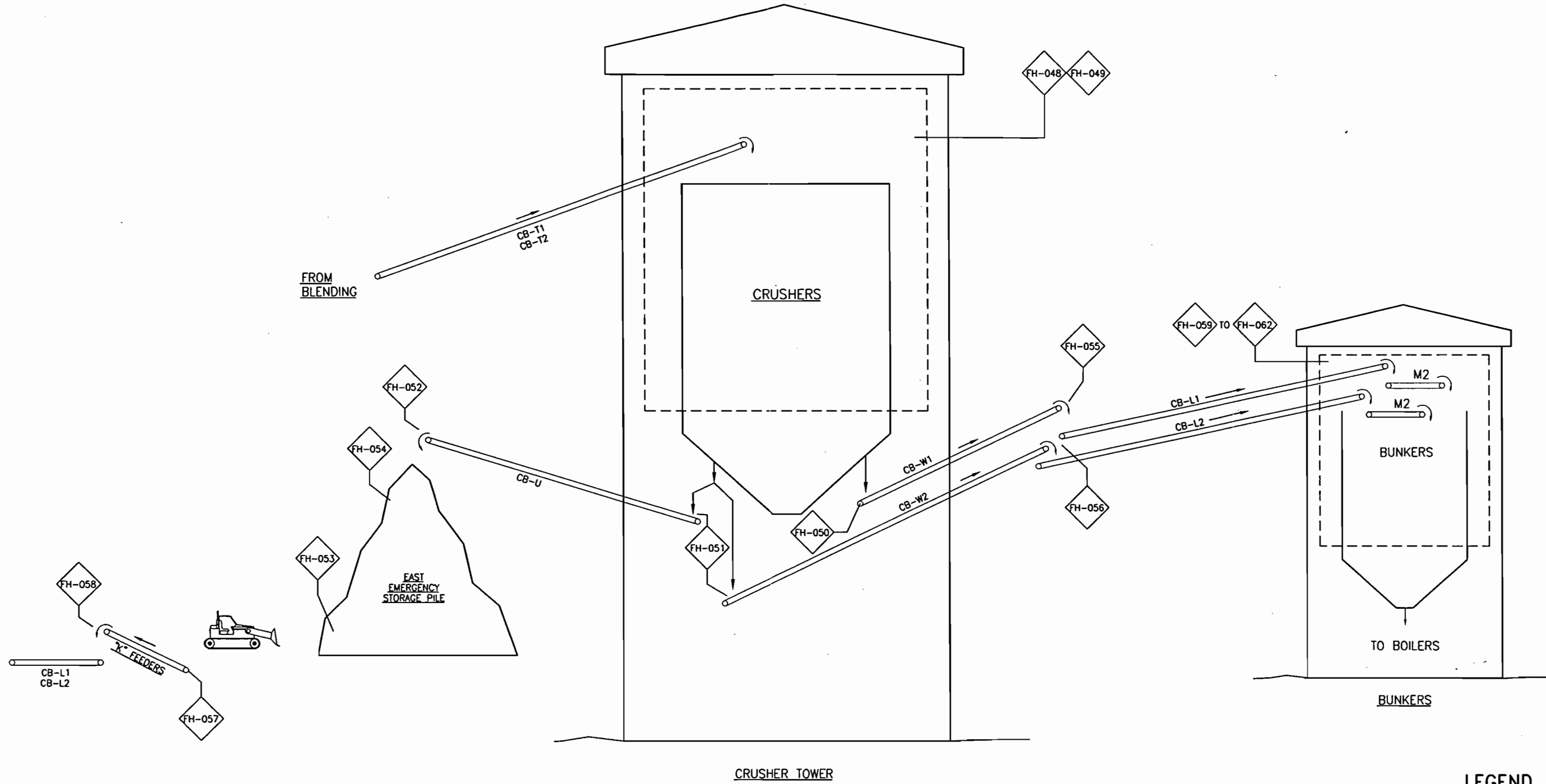


DOCUMENT I.D.3.E.

FUEL HANDLING PROCESS FLOW DIAGRAM, BLENDING BINS

Source: ECT, 1996.





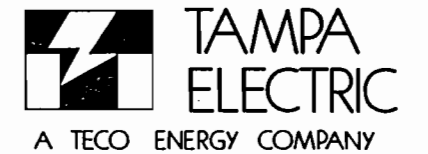
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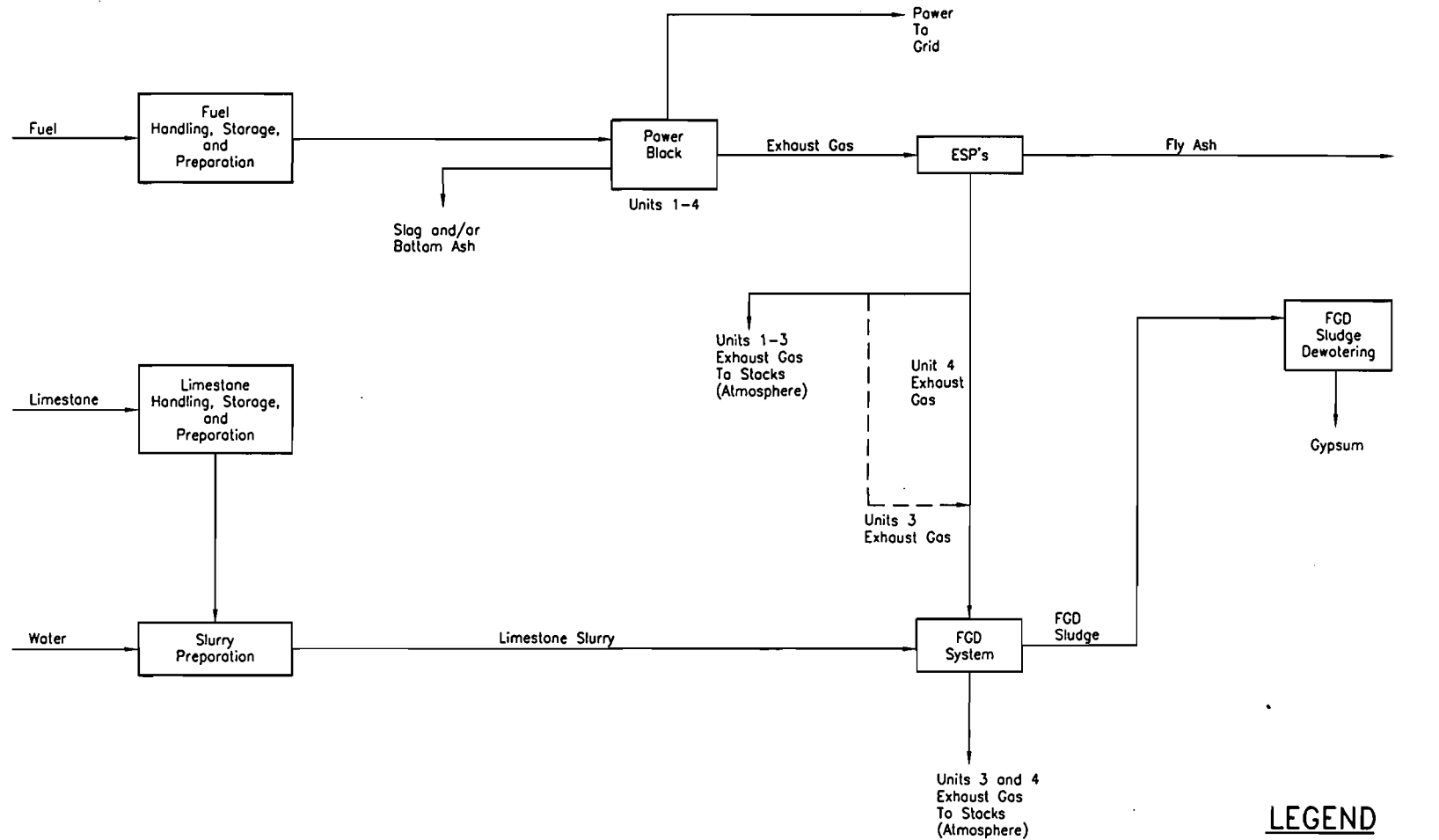
 EMISSION POINT

DOCUMENT I.D.3.F.

FUEL HANDLING PROCESS FLOW DIAGRAM, CRUSHER TOWER AND BUNKERS

Source: ECT, 1996.



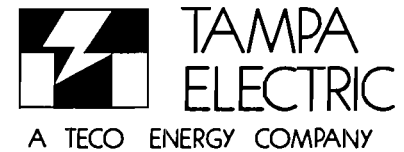


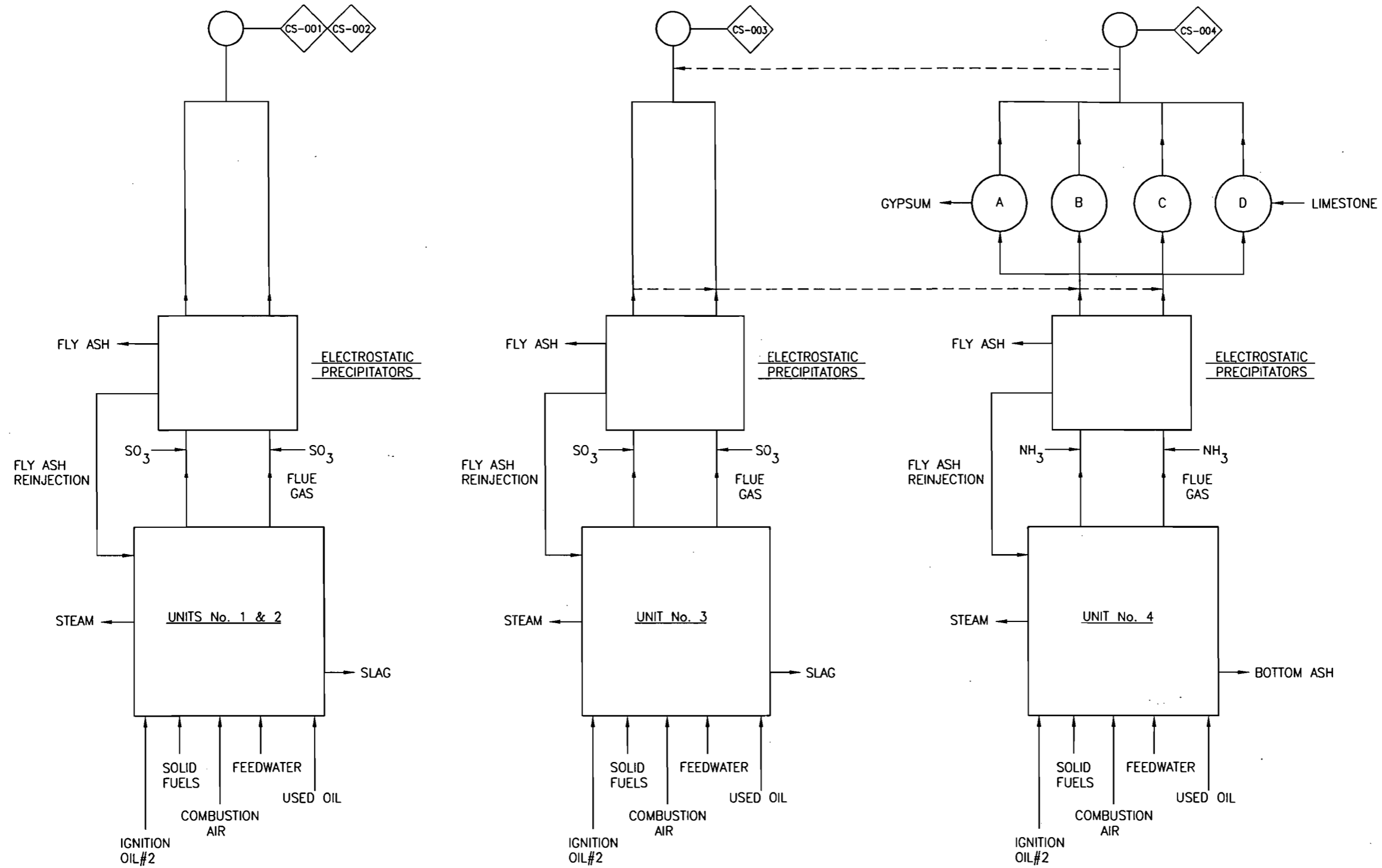
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 - - - - Unit 3 Flue Gas Integration

DOCUMENT I.D.3.G.

OVERALL BOILER PROCESS FLOW DIAGRAM



Source: ECT, 1996.





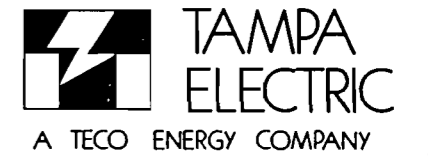
FLUE GAS DESULFURIZATION MODULES

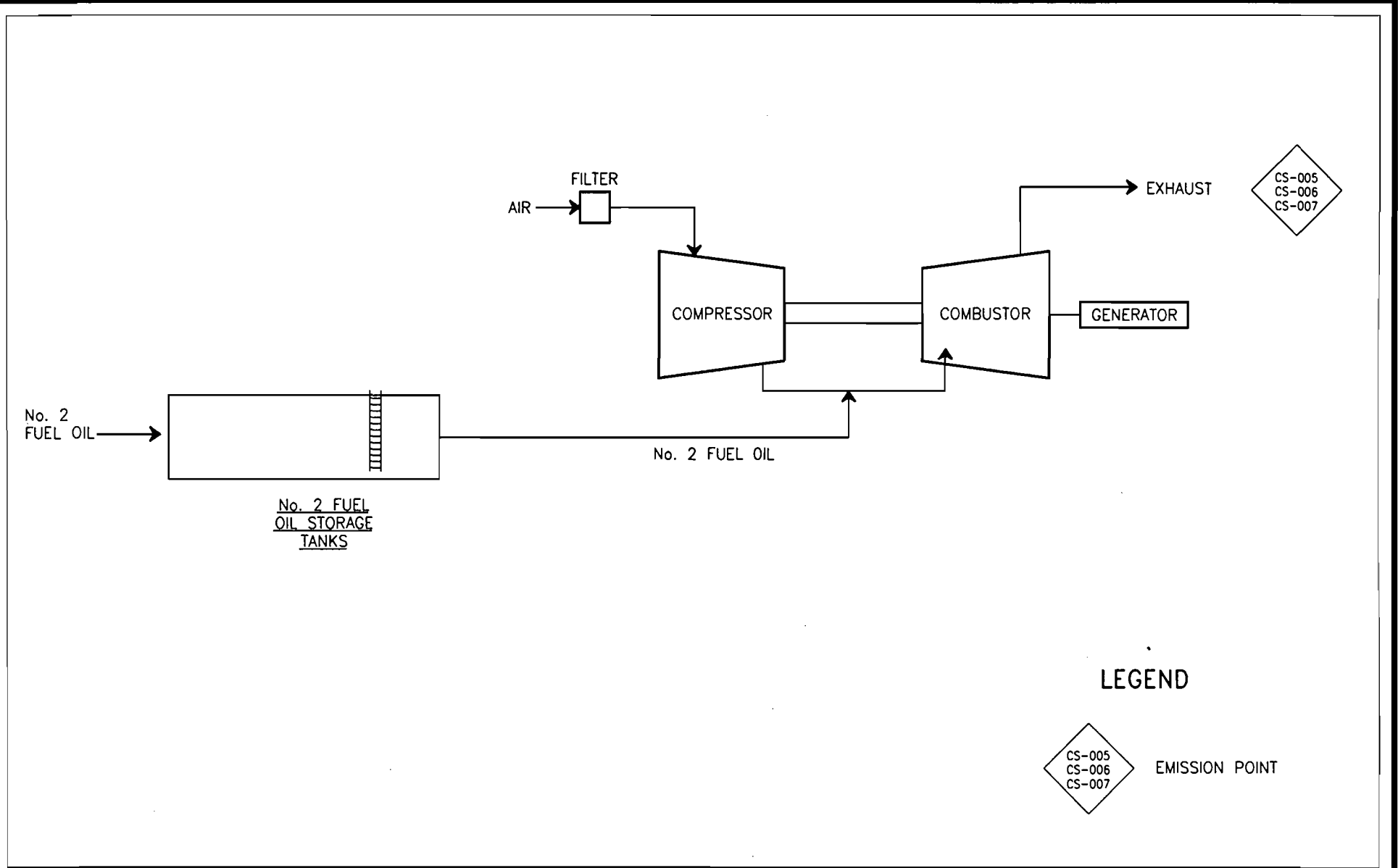
LEGEND

-  EMISSION POINT
-  UNIT 3 FLUE GAS INTEGRATION

DOCUMENT II.D.3.H.
BOILER PROCESS FLOW DIAGRAM

Source: ECT, 1996.





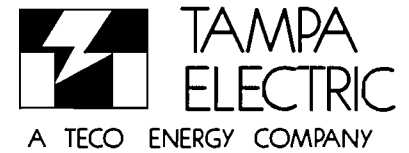
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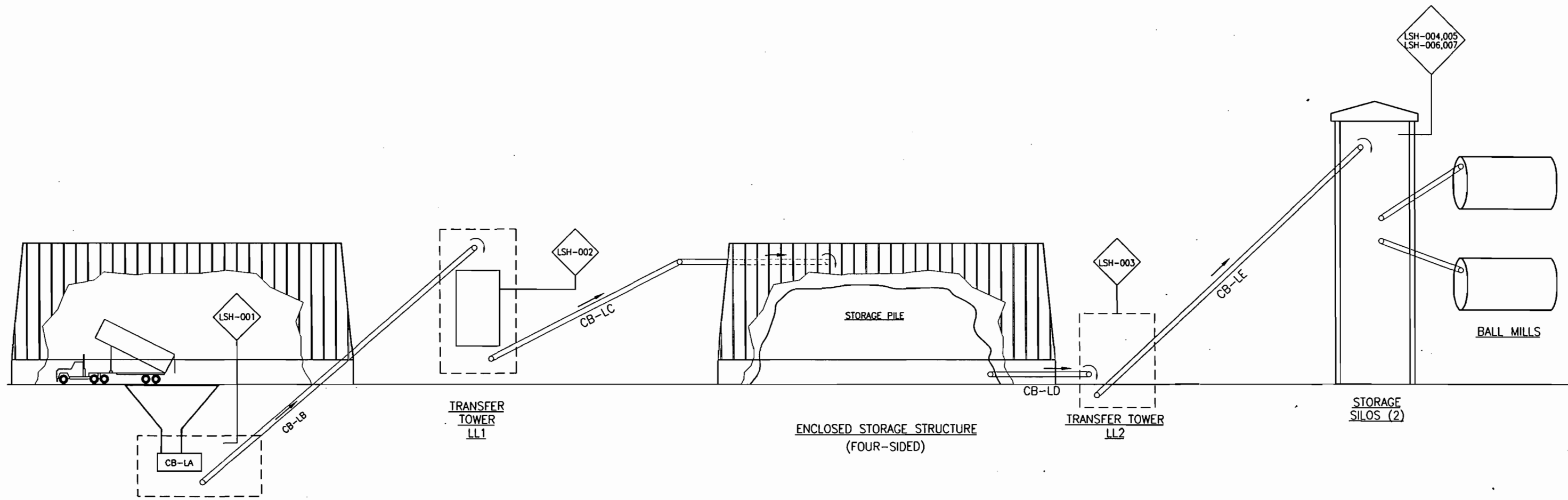


DOCUMENT II.D.3.I.

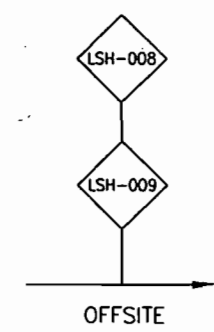
COMBUSTION TURBINE PROCESS FLOW DIAGRAM

Source: ECT, 1996.

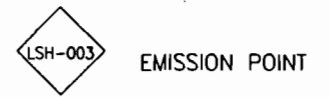




RAILCAR/TRUCK UNLOADING
(TWO-SIDED STRUCTURE)



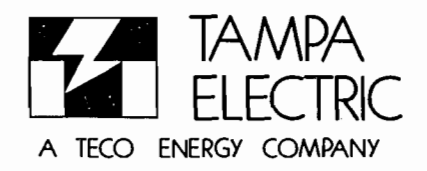
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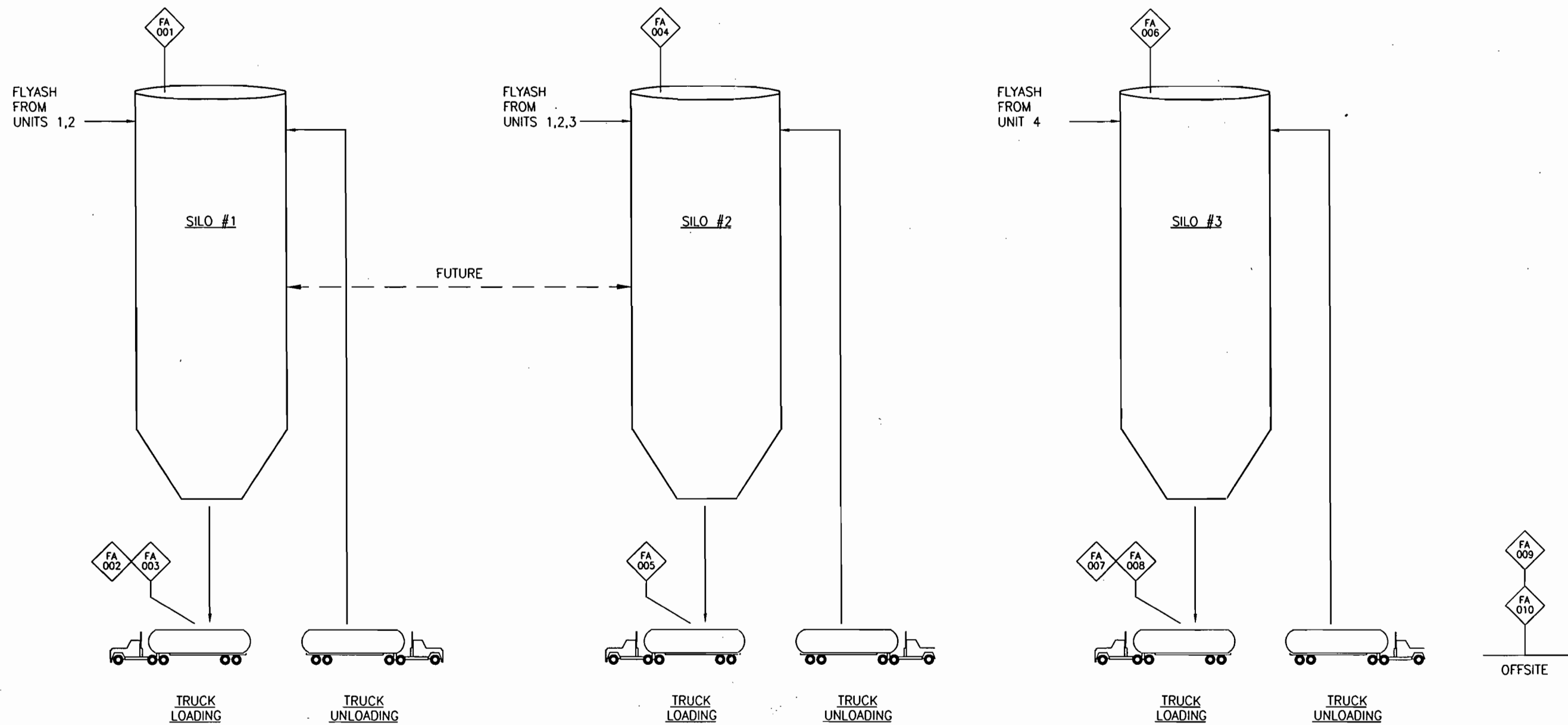


DOCUMENT I.I.D.3.J.

LIMESTONE HANDLING PROCESS FLOW DIAGRAM

Source: ECT, 1996.





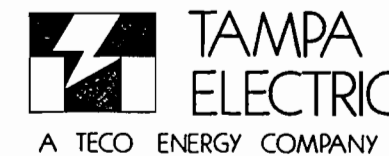
LEGEND

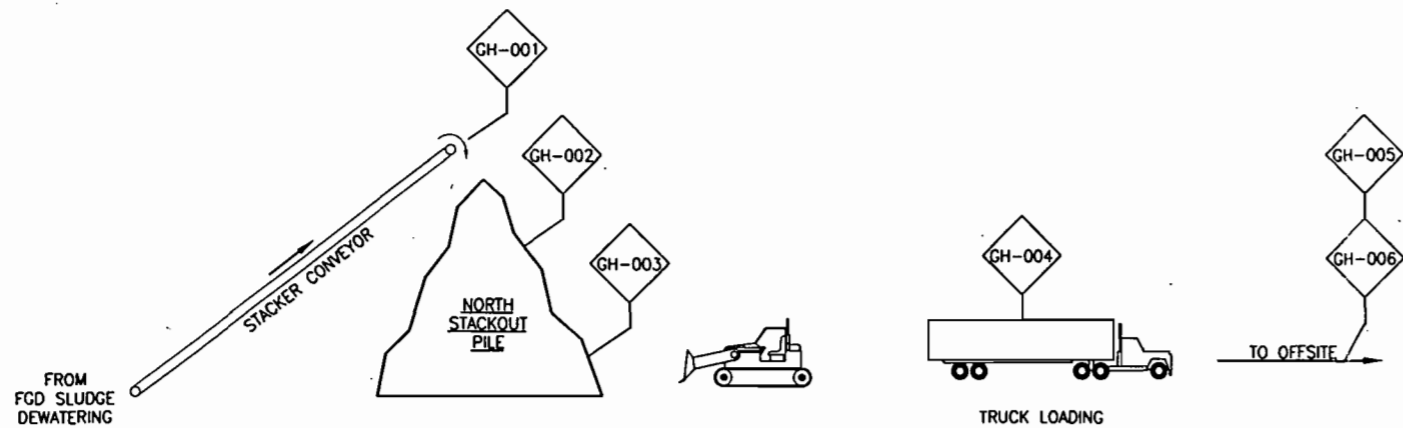
FA 007 EMISSION POINT

DOCUMENT I.D.3.K.

FLYASH HANDLING PROCESS FLOW DIAGRAM

Source: ECT, 1996.

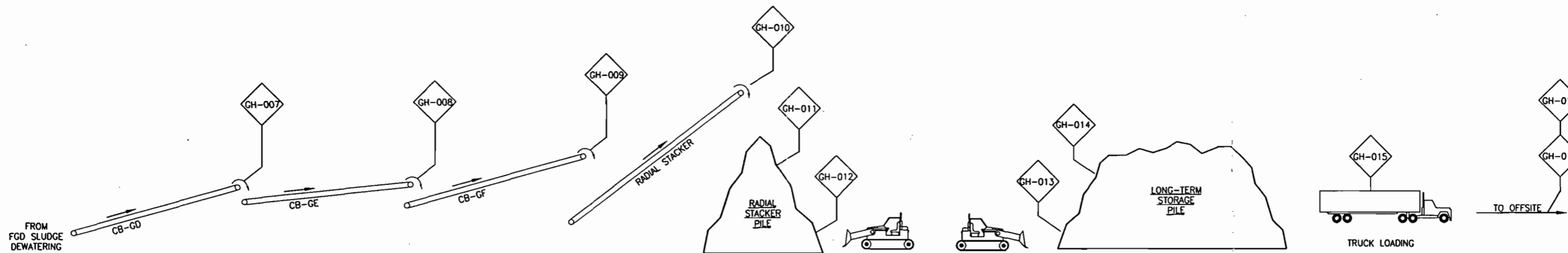




NORTH STACKOUT AREA

LEGEND

◇ GH-008 EMISSION POINT

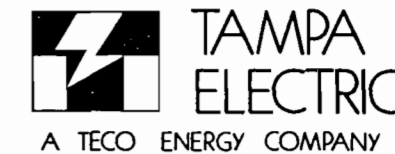


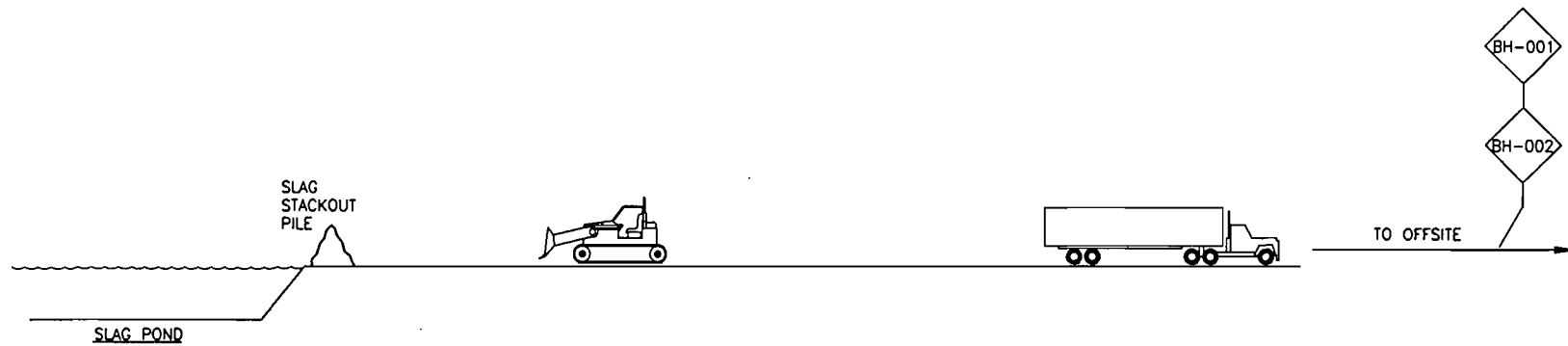
LONG TERM STORAGE AREA

DOCUMENT I.D.3.L.

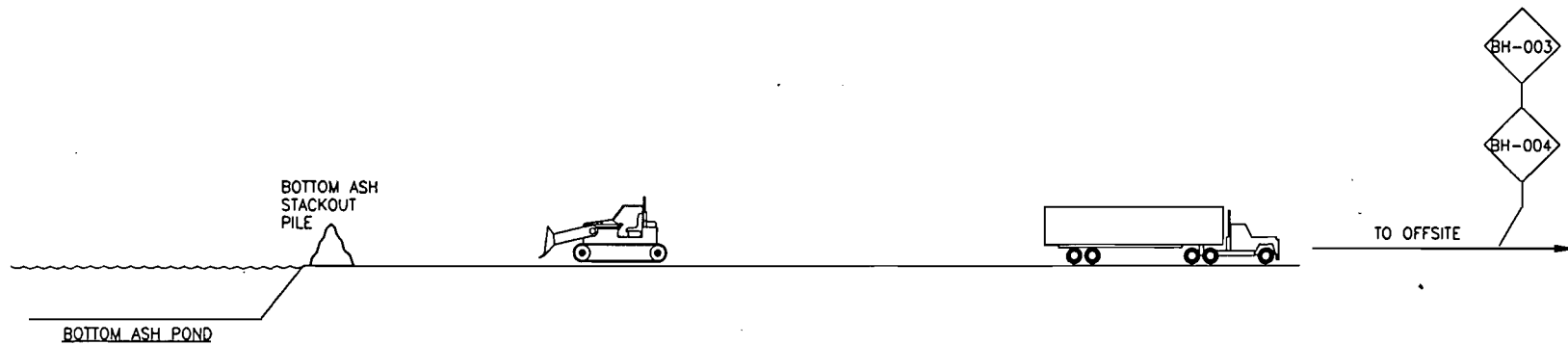
GYPSUM HANDLING PROCESS FLOW DIAGRAM

Source: ECT, 1996.





SLAG HANDLING



BOTTOM ASH HANDLING

LEGEND



DOCUMENT II.D.3.M.

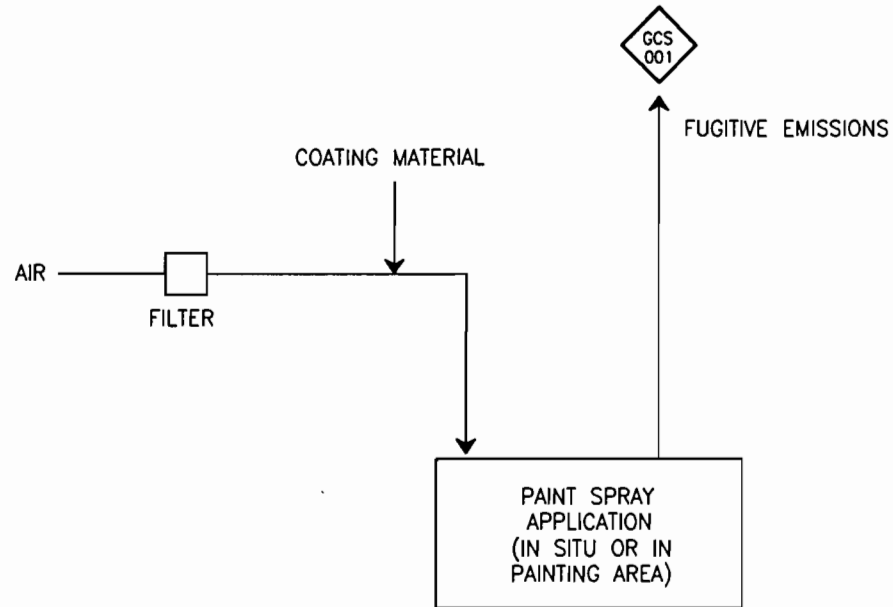
SLAG AND BOTTOM ASH HANDLING PROCESS FLOW DIAGRAM

Source: ECT, 1996.




TAMPA
ELECTRIC

A TECO ENERGY COMPANY



LEGEND

 EMISSION DESIGNATOR

Revision 1, 07/18/97

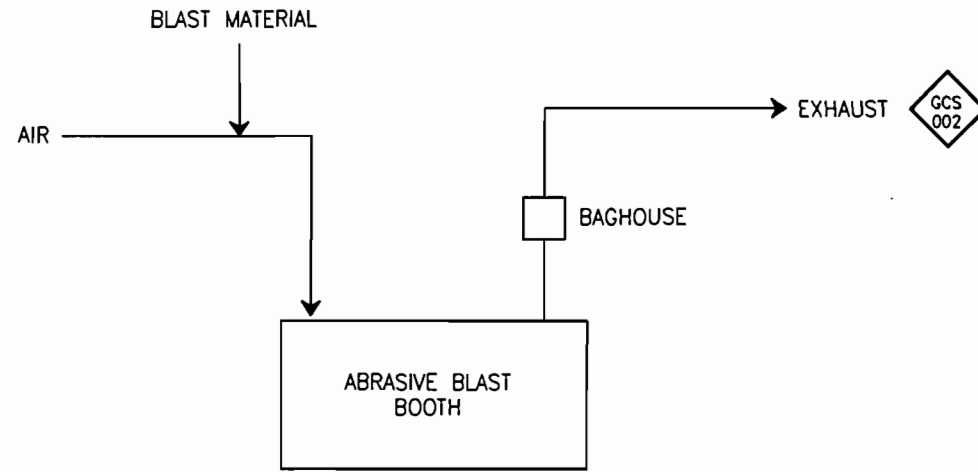
DOCUMENT I.D.3.N.
PROCESS SCHEMATIC DIAGRAM
GC SERVICE PAINT SPRAY APPLICATION

Source: ECT, 1997.




**TAMPA
ELECTRIC**

A TECO ENERGY COMPANY



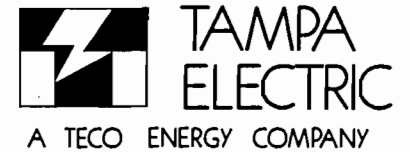
LEGEND

 EMISSION POINT AND EMISSION POINT NUMBER

Revision I, 07/18/97

DOCUMENT I.I.D.3.O.
PROCESS SCHEMATIC DIAGRAM
GC SERVICE ABRASIVE BLAST BOOTH

Source: ECT, 1997.



DOCUMENT II.D.4

PRECAUTIONS TO PREVENT EMISSIONS OF
UNCONFINED PARTICULATE MATTER

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter emissions that may result from operations include:

- Vehicular traffic on paved and unpaved roads.
- Wind-blown dust from yard areas.
- Periodic abrasive blasting.

The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- Chemical or water application to:
 - Unpaved roads
 - Unpaved yard areas
- Paving and maintenance of roads, parking areas and yards.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary

DOCUMENT II.D.5

FUGITIVE EMISSIONS IDENTIFICATION

IDENTIFICATION OF FUGITIVE EMISSIONS BIG BEND STATION

Fugitive emission sources located at the Big Bend Station consist of activities associated with the storage and handling of solid fuels, fly ash, limestone, gypsum, slag, and bottom ash. The following sections discuss how the fugitive emission sources are addressed in the application form.

Limestone Handling and Storage Fugitive Emission Sources

All limestone handling and storage point and fugitive emission sources are addressed as one emissions unit identified as LSH-FUG (E.U. 12). This emission unit includes point and fugitive emission sources LSH-001 through LSH-009.

Fly Ash Handling and Storage Fugitive Emission Sources

All fly ash handling and storage fugitive emission sources are addressed as one emissions unit identified as FA-FUG (E.U. 13). This emission unit includes fugitive emission sources FA-002, FA-003, FA-005, and FA-007 through FA-010.

Gypsum Handling and Storage Fugitive Emission Sources

All gypsum handling and storage fugitive emission sources are addressed as one emissions unit identified as GH-FUG (E.U. 14). This emission unit includes fugitive emission sources GH-001 through GH-017.

Solid Fuel Handling and Storage Fugitive Emission Sources

All solid fuel handling and storage fugitive emission sources are addressed as one emissions unit identified as FH-FUG (E.U. 15). This emission unit includes fugitive emission sources FH-001 through FH-031, FH-036 through FH-047, FH-050 through FH-058, and FH-063 through FH-073.

Slag and Bottom Ash Handling Fugitive Emission Sources

All slag and bottom ash handling fugitive emission sources are addressed as one emissions unit identified as BH-FUG (E.U. 16). This emission unit includes fugitive emission sources BH-001 through BH-004.

A description of each fugitive emission source is provided on Document II.D.2.A., Big Bend Station Emission Source Identification Key Sheet.

DOCUMENT II.D.7

LIST OF INSIGNIFICANT ACTIVITIES

Tampa Electric Company - Big Bend Station
List of Exempt Activities (Page 1 of 2)

Activity ¹	Basis
Comfort heating with a gross maximum heat input of less than one million Btu per hour.	Rules 62-210.300(3)(a)4. and 62-213.430(6),F.A.C.
Internal combustion engines in vehicles used for transportation of passengers or freight.	Rules 62-210.300(3)(a)9. and 62-213.430(6),F.A.C.
Steam Cleaning Equipment	Rules 62-210.300(3)(a)9. and 62-213.430(6),F.A.C.
Vacuum pumps in laboratory operations	Rules 62-210.300(3)(a)9. and 62-213.430(6),F.A.C.
Sanders having a total sanding surface of five square feet or less and other equipment used exclusively on woods or plastics or their products having a density of 20 pounds per cubic foot or more.	Rules 62-210.300(3)(a)11. and 62-213.430(6),F.A.C.
Equipment used exclusively for space heating, other than boilers	Rules 62-210.300(3)(a)12. and 62-213.430(6),F.A.C.
Laboratory equipment used exclusively for chemical or physical analyses (including fume hoods and vents)	Rules 62-210.300(3)(a)15. and 62-213.430(6),F.A.C.
Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.	Rules 62-210.300(3)(a)24. and 62-213.430(6),F.A.C.
Degreasing units using heavier-than-air vapors exclusively, except any unit using or emitting any substance classified as a hazardous air pollutant	Rules 62-210.300(3)(a)26. and 62-213.430(6),F.A.C.
No. 2 Fuel Oil Storage Tanks > 550 Gallons	Rule 62-213.430(6),F.A.C.
Refrigeration Units	Rule 62-213.430(6),F.A.C.
Storage Tanks < 550 Gallons	Rule 62-213.430(6),F.A.C.
Inorganic Substance Storage Tanks > 550 Gallons	Rule 62-213.430(6),F.A.C.
Vehicle Refueling Operations	Rule 62-213.430(6),F.A.C.
Turbine Vapor Extractor	Rule 62-213.430(6),F.A.C.

Tampa Electric Company - Big Bend Station
List of Exempt Activities (Page 2 of 2)

Activity ¹	Basis
Architectural (Equipment) Maintenance Painting	Rule 62-213.430(6), F.A.C.
Sand Blasting and Abrasive Grit Blasting Where Temporary Total Enclosures Are Used to Contain Particulates	Rule 62-213.430(6), F.A.C.
Belt Conveyors	Rule 62-213.430(6), F.A.C.
Parts Cleaning and Degreasing Stations	Rule 62-213.430(6), F.A.C.

¹ "Trivial activities", as listed in the Division of Air Resources Management guidance document DARM-PER/V-15, revised March 15, 1996, have been excluded from the Title V permit application as directed by this document.

Source: ECT, 1997.

Tampa Electric Company - Big Bend Station
 List of Unregulated Activities (Page 1 of 1)

Activity	Basis
One or more emergency generators which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.	Rule 62-210.300(3)(a)20., F.A.C.
One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.	Rule 62-210.300(3)(a)21, F.A.C
Surface coating operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOCs, by volume.	Rule 62-210.300(3)(a)23., F.A.C.

Source: ECT, 1997.

DOCUMENT II.D.8

LIST OF EQUIPMENT/ACTIVITIES
REGULATED UNDER TITLE VI

**LIST OF EQUIPMENT/ACTIVITIES
REGULATED UNDER TITLE VI
BIG BEND STATION**

Unit No.	Location	Type Refrigerant	Charge (lbs)
2144	#2 Control Room (1B)	R22	>50
2145	#2 Control Room (1A)	R22	>50
2146	#2 Cable Tray Room (2B)	R22	>50
2147	#2 Cable Tray Room (2A)	R22	>50
793	FGD Bldg. 6th Fl (B)	R11	600
794	FGD Bldg. 6th Fl (A)	R11	600
140	#1 Control Room	R22	60
141	#1 Control Room	R22	60
142	#1 Control Room	R22	60

DOCUMENT II.D.9

ALTERNATE METHODS OF OPERATION

Tampa Electric Company
Big Bend Station
Facility - Alternate Methods of Operation

Flue Gas Integration

Units Affected: Units 3 and 4.

Discussion: As an option, Unit #3 exhaust gas following particulate matter removal by the unit's electrostatic precipitator (ESP) will be routed to the inlet of Unit #4 flue gas desulfurization (FGD) system scrubber. The FGD scrubber will continue to treat the exhaust gas from Unit #4. The FGD scrubber outlet stream, consisting of the combined Unit #3 and Unit #4 treated exhaust, will then be split and discharged through Stacks #2 and #3. Stack #3 will include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) will be located at the outlet of Unit #3 and Unit #4 ESPs. Continuous SO₂, CO₂ and NO_x monitoring systems (CEMS) will also be located at the outlet of Unit #3 and Unit #4 ESPs. Continuous SO₂, CO₂ and flow monitoring systems (CEMS) will be located in Stacks #2 and #3. These monitoring systems will be used to verify compliance with all current applicable requirements.

II.D.11

ENHANCED MONITORING PLAN
(RESERVED)

DOCUMENT II.D.12

RISK MANAGEMENT PLAN VERIFICATION

RISK MANAGEMENT PLAN VERIFICATION

A preliminary evaluation indicates that Big Bend Station will be subject to the Risk Management Plan (RMP) requirements of Section 112(r) based on the "List of Regulated Substances and Their Thresholds rule [59 FR 4478, (January 14, 1994)]. A RMP will be submitted when that requirement becomes applicable.

DOCUMENT II.D.13 & 14

COMPLIANCE REPORT, PLAN, AND STATEMENT

**COMPLIANCE REPORT, PLAN,
AND CERTIFICATION**

1. Compliance Report and Plan

Appendix A to this application identifies the requirements that are applicable to the emission units that comprise this Title V source. Each emissions unit is in compliance, and will continue to comply, with the respective applicable requirements.

The emission units that comprise this Title V source will comply with future-effective applicable requirements on a timely basis.

2. Proposed Schedule for the Submission of Periodic Compliance Statements Throughout the Permit Term

Periodic compliance statements are proposed to be submitted on an annual basis consistent with FDEP Rule 62-213.440(3)(b), F.A.C.

3. Compliance Certification

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Stanley Martin
Signature

June 5, 1996
Date

DOCUMENT III.I.2

FUEL ANALYSES

From: Tampa Electric Company
Central Testing Laboratory
P.O. Box 111
Tampa, Fl. 33601-0111
Ph. (813) 228-4111

August 22, 1994

To: File, Central Testing Lab
Martin Duff, CTL

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA18248 Location code: BB-STK-3
Location Description: Big Bend, Stack Test - Unit 3
Sample collector: BIG BEND Sample collection date: 08/04/94
Lab submittal date: 08/08/94 Time: 13:58
Sample Matrix: Coal

Parameter	Result	Units	MDL
Total Moisture	9.95	%	0.30
Pounds SO2 / Million BTU, Coal	4.37	Lbs. SO2/MMBTU	
Ash, as Received	7.80	%	0.4
Ash, Dry Basis	8.66	%	0.40
BTU, as Received	11941	BTU/Lb	100
BTU, Dry Basis	13260	BTU/Lb.	100
Sulfur, as Received	2.75	%	0.08
Sulfur, Dry Basis	3.05	%	0.08
BTU, Moisture-Ash Free, Calc.	14517	BTU/Lb.	100

Sample comments:

Sample I.D.: FLD 000654640
Load: 425 MW

Quality Control Values of Knowns

SULFUR

B.T.U.

Source: NIST 2684a
True Value: 2.95X
Avg. CTL Value: 2.96X

Source: NIST 1632b
True Value: 13715 BTU/Lbs. Dry +/- 103
CTL Value: 13758 BTU/Lbs. Dry

HP Skinn 8/22/94

Analyst / Date

R. Day 8-22-94

Approved by / Date

TAMPA ELECTRIC COMPANY
Big Bend Station

FUEL OIL ANALYSIS REPORT

DATE: 10-5-93

SAMPLE NUMBER: 466

DATE RECEIVED: 10-1-93

SAMPLE IDENTIFICATION: FUEL OIL CARGO 466

SUMMARY

FLASH POINT:	Cleveland open cup	_____	°F
FIRE POINT:	Cleveland open cup	_____	°F
VISCOSITY:	Saybolt fural @ 122°F	_____	Seconds
WATER:	By distillation	_____	% by volume
SEDIMENT:	By extraction	_____	% by weight
WATER & SEDIMENT:	By centrifuge	_____	% by volume
GRAVITY:			
	SPECIFIC @ 60/60°F	<u>0.8654</u>	
	POUNDS PER GALLON @ 60°F	<u>7.206</u>	
	°API	<u>32.0</u>	
HEATING VALUE:			
	BTU PER POUND	<u>19,359</u>	
	BTU PER GALLON @ 60°F	<u>139,501</u>	
SULFUR CONTENT:	Bomb method	<u>.32</u>	% by weight

LAB

PLANT RESULTS ENGR.

DOCUMENT III.1.3

DETAILED DESCRIPTION
OF CONTROL EQUIPMENT

ELECTROSTATIC PRECIPITATOR

Emission Unit:	Unit #1
Emission Point ID No.:	CS-001
Manufacturer:	Joy Western
Model No.:	N/A
Control Efficiency (%):	99.7
Pressure Drop (in H₂O), operating:	< 1.0
Temperature, operating (°F):	330
Temperature, design (°F):	298
Inlet Air Flow Rate (acfm):	1,408,000
Collection Plate Area (ft²):	394,600
Plate Cleaning Procedures:	Rappers (Magnetic Impact Type)

ELECTROSTATIC PRECIPITATOR

Emission Unit:	Unit #2
Emission Point ID No.:	CS-002
Manufacturer:	Joy Western
Model No.:	N/A
Control Efficiency (%):	99.7
Pressure Drop (in H₂O), operating:	< 1.0
Temperature, operating (°F):	330
Temperature, design (°F):	301
Inlet Air Flow Rate (acfm):	1,312,000
Collection Plate Area (ft²):	466,600
Plate Cleaning Procedures:	Rappers (Magnetic Impact Type)

ELECTROSTATIC PRECIPITATOR

Emission Unit:	Unit #3
Emission Point ID No.:	CS-003
Manufacturer:	Research Cottrell
Model No.:	N/A
Control Efficiency (%):	99.7
Pressure Drop (in H₂O), operating:	<1.0
Temperature, operating (°F):	330
Temperature, design (°F):	291
Inlet Air Flow Rate (acfm):	1,420,000
Collection Plate Area (ft²):	429,800
Plate Cleaning Procedures:	Rappers (Magnetic Impact Type)

ELECTROSTATIC PRECIPITATOR

Emission Unit:	Unit #4
Emission Point ID No.:	CS-004
Manufacturer:	Belco
Model No.:	N/A
Control Efficiency (%):	99.7
Pressure Drop (in H₂O), operating:	< 1.0
Temperature, operating (°F):	340
Temperature, design (°F):	340
Inlet Air Flow Rate (acfm):	2,200,000
Collection Plate Area (ft²):	1,096,934
Plate Cleaning Procedures:	Rappers (Flailing Hammer Type)

FABRIC FILTER

Emission Unit:	Limestone Handling Railcar/Truck Unloading
Emission Point ID No.:	LSH-001
Manufacturer:	Mikro-Pulsaire
Model No.:	400S12TR
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	33,600
Air to Cloth Ratio:	5.9:1
Filter Surface Area (ft²):	5,648
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Limestone Handling Conveyor LB to LC
Emission Point ID No.:	LSH-002
Manufacturer:	Sternvent
Model No.:	DKED18003
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	800
Air to Cloth Ratio:	4.4:1
Filter Surface Area (ft²):	180
Cleaning Procedures:	Automatic Shaker

FABRIC FILTER

Emission Unit:	Limestone Handling Conveyor LD to Conveyor LE
Emission Point ID No.:	LSH-003
Manufacturer:	Sternvent
Model No.:	DKED18003
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (acfm):	800
Air to Cloth Ratio:	4.4:1
Filter Surface Area (ft²):	180
Cleaning Procedures:	Automatic Shaker

FABRIC FILTER

Emission Unit:	Limestone Handling Conveyor LE to South Storage Silo
Emission Point ID Nos.:	LSH-004, 005
Manufacturer:	Flex Kleen
Model No.:	58-BVBC-36-IIG
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	552
Air to Cloth Ratio:	2.1:1
Filter Surface Area (ft²):	259
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Limestone Handling Conveyor LE to North Storage Silo
Emission Point ID Nos.:	LSH-006, 007
Manufacturer:	Flex Kleen
Model No.:	58-BVBC-36-IIG
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	552
Air to Cloth Ratio:	2.1:1
Filter Surface Area (ft²):	259
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Fly Ash Handling Silo #1
Emission Point ID No.:	FH-001
Manufacturer:	Flex Kleen
Model No.:	84UDTR-640
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	20,081
Air to Cloth Ratio:	2.4:1
Filter Surface Area (ft²):	8,367
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Fly Ash Handling Silo #2
Emission Point ID No.:	FH-004
Manufacturer:	Flex Kleen
Model No.:	84UDTR-640
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	20,081
Air to Cloth Ratio:	2.4:1
Filter Surface Area (ft²):	8,367
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Fly Ash Handling Silo #3
Emission Point ID No.:	FH-006
Manufacturer:	Flex Kleen
Model No.:	84-WRTC-80 II G
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	1,200
Air to Cloth Ratio:	1.4:1
Filter Surface Area (ft²):	840
Cleaning Procedures:	Pulse jet

FABRIC FILTER

Emission Unit:	Abrasive Blast Media Storage
Emission Point ID No.:	BM-001
Manufacturer:	
Model No.:	
Inlet Temp. (°F):	Ambient
Outlet Temp. (°F):	Ambient
Inlet Air Flow Rate (dscfm):	800
Air to Cloth Ratio:	
Filter Surface Area (ft²):	
Cleaning Procedures:	Pulse jet

FLUE GAS DESULFURIZATION (FGD)

Emission Unit No.:	Unit #4
Emission Point ID No.:	CS-004
Manufacturer:	Research-Cottrell
Description of Control Equipment:	Four absorber modules; 3 modules normally operating, 1 spare module
Inlet Temperature (°F):	300
Outlet Temperature (°F):	127
Inlet Air Flow Rate (acfm):	1,440,550
Superficial Gas Velocity (ft/sec):	9.0 (per tower)
Additive Liquid Scrubbing Medium:	Limestone Slurry
Total Liquid Injection Rate (gpm):	60 (per tower)

CYCLONE COLLECTORS

Emission Unit No.:	Fuel Blending Bins
Emission Point ID No.:	CH-032 through CH-035
Manufacturer:	American Air Filter
Model No.:	Type D Roto-Clone
Pressure Drop (in H₂O):	<2.0
Inlet Temperature (°F):	Ambient
Outlet Temperature (°F):	Ambient
Inlet Air Flow Rate (acfm):	9,400 (each unit)
Control Efficiency (% removal):	75

CYCLONE COLLECTORS

Emission Unit No.:	Fuel Crushers # 1, #2
Emission Point ID No.:	CH-048, CH-049
Manufacturer:	American Air Filter
Model No.:	Type D Roto-Clone
Pressure Drop (in H₂O):	<2.0
Inlet Temperature (°F):	Ambient
Outlet Temperature (°F):	Ambient
Inlet Air Flow Rate (acfm):	9,400 (each unit)
Control Efficiency (% removal):	75

CYCLONE COLLECTORS

Emission Unit No.:	Fuel Bunkers
Emission Point ID No.:	CH-059 through CH-062
Manufacturer:	American Air Filter
Model No.:	Type D Roto-Clone
Pressure Drop (in H₂O):	<2.0
Inlet Temperature (°F):	Ambient
Outlet Temperature (°F):	Ambient
Inlet Air Flow Rate (acfm):	9,400 (each unit)
Control Efficiency (% removal):	75

FABRIC FILTER

Emission Unit No.:	Abraslve Blast Booth
Emission Point ID No.:	GCS-002
Manufacturer:	Torit
Model No.:	DFT 4-16
Inlet Temperature (°F):	Ambient
Outlet Temperature (°F):	Ambient
Inlet Air Flow Rate (acfm):	7,500
Air to Cloth Ratio:	1.85 to 1
Filter Surface Area (ft²):	4,064 ft ²
Cleaning Procedures:	Pulse jet

DOCUMENT III.I.4

DESCRIPTION OF STACK SAMPLING FACILITIES

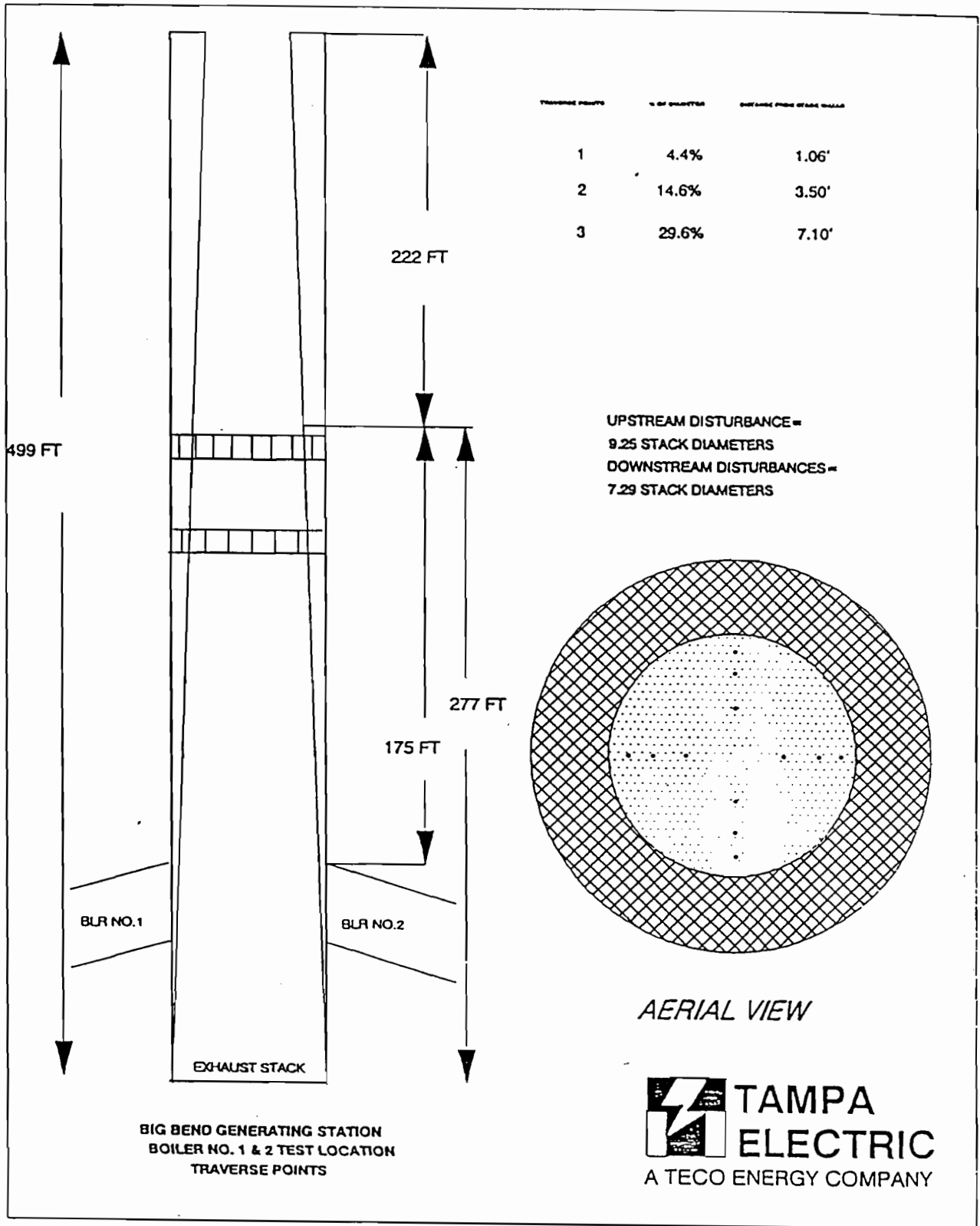
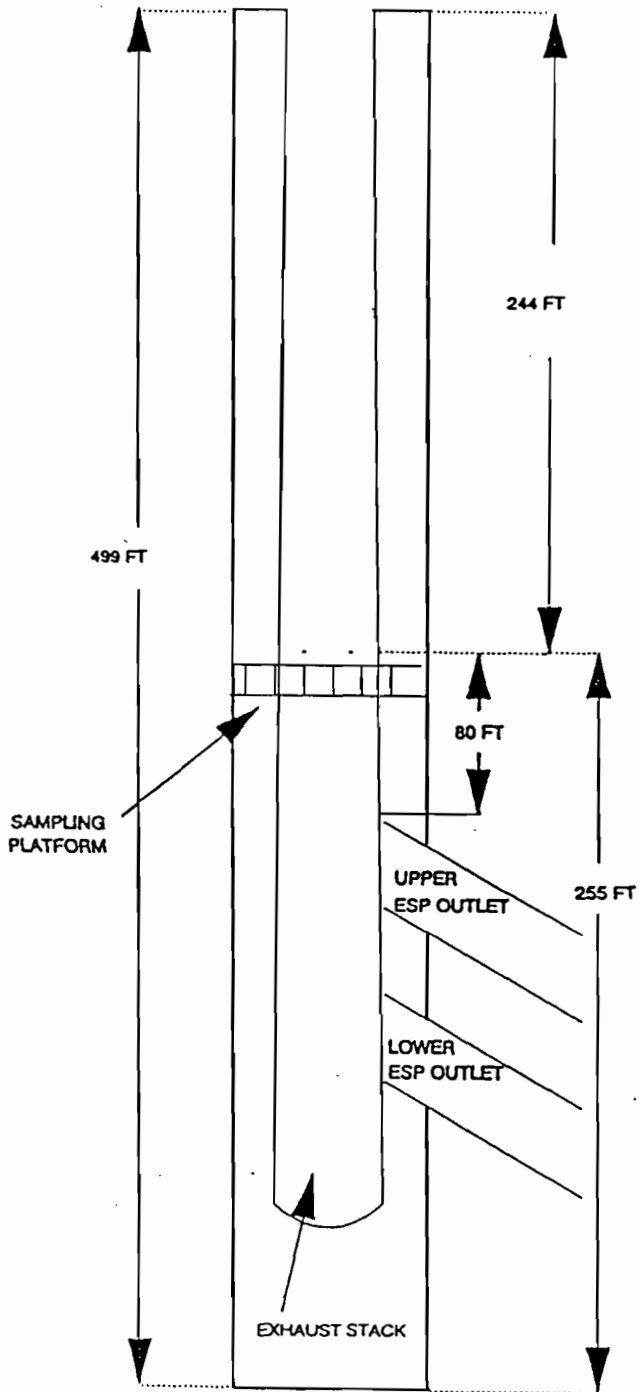


FIGURE 1

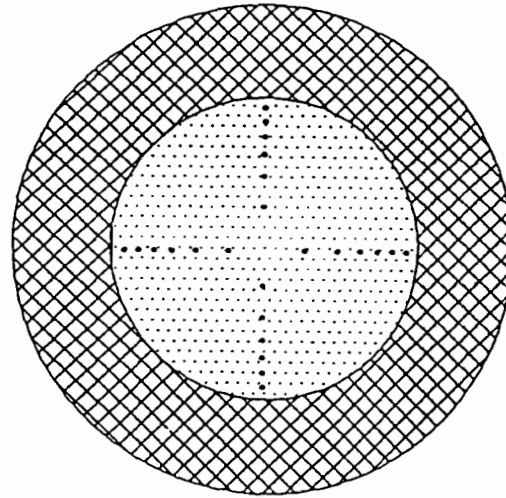


TRAVERSE POINT	PERCENTAGE OF DIAMETER	DISTANCE, INCHES FROM STACK WALL
1	2.1	6.05
2	6.7	18.30
3	11.8	33.98
4	17.7	50.98
5	25.0	72.00
6	35.6	102.53

UPSTREAM DISTURBANCE =
10.17 STACK DIAMETERS

DOWNSTREAM DISTURBANCES =
3.3 STACK DIAMETERS

PORT NIPPLE = 17 INCHES
PROBE LENGTH = 13 FT



AERIAL VIEW

BIG BEND GENERATING STATION
BOILER NO. 3 TEST LOCATION
TRAVERSE POINTS

**TAMPA
ELECTRIC**
A TECO ENERGY COMPANY

FIGURE 1

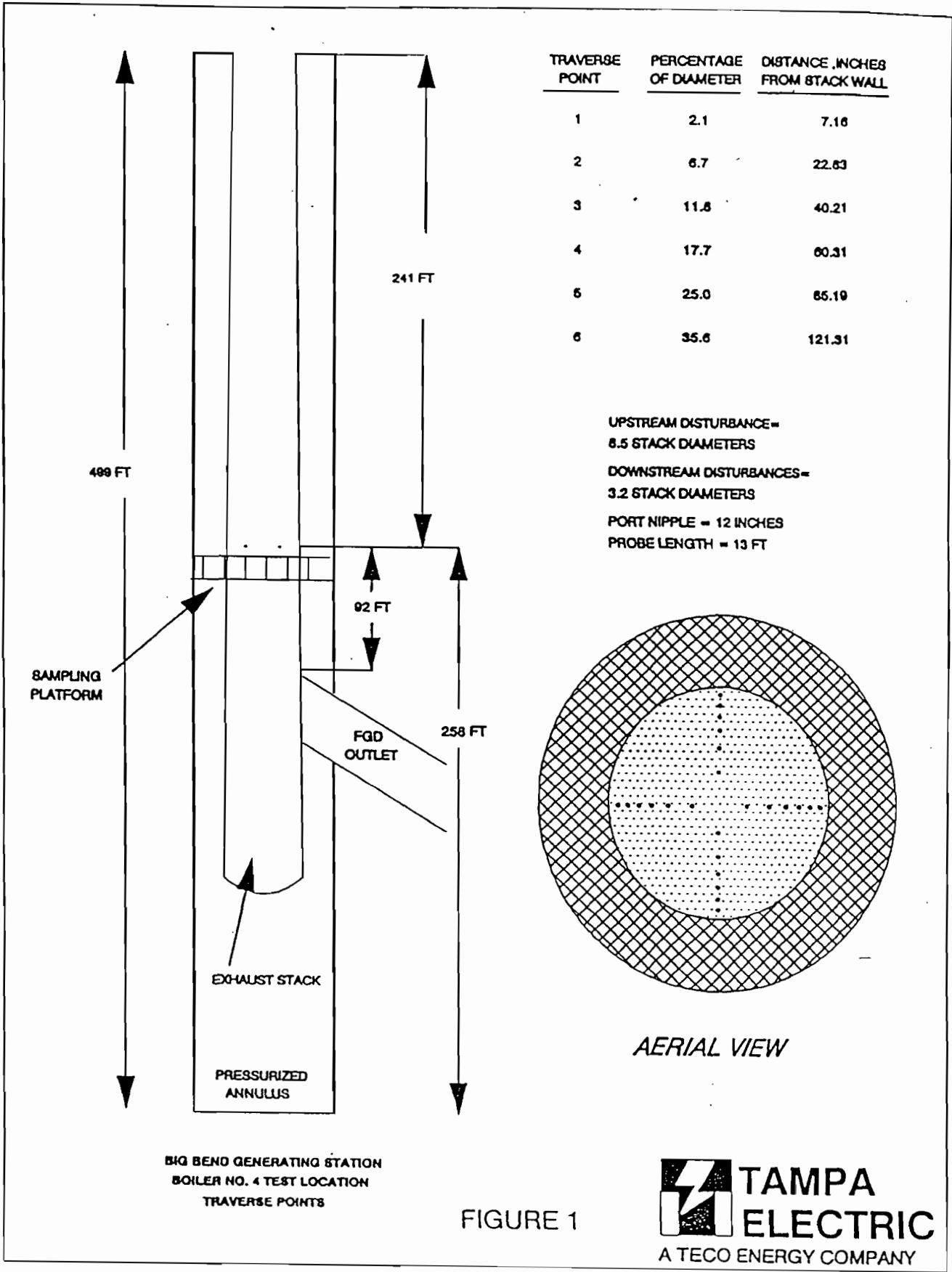
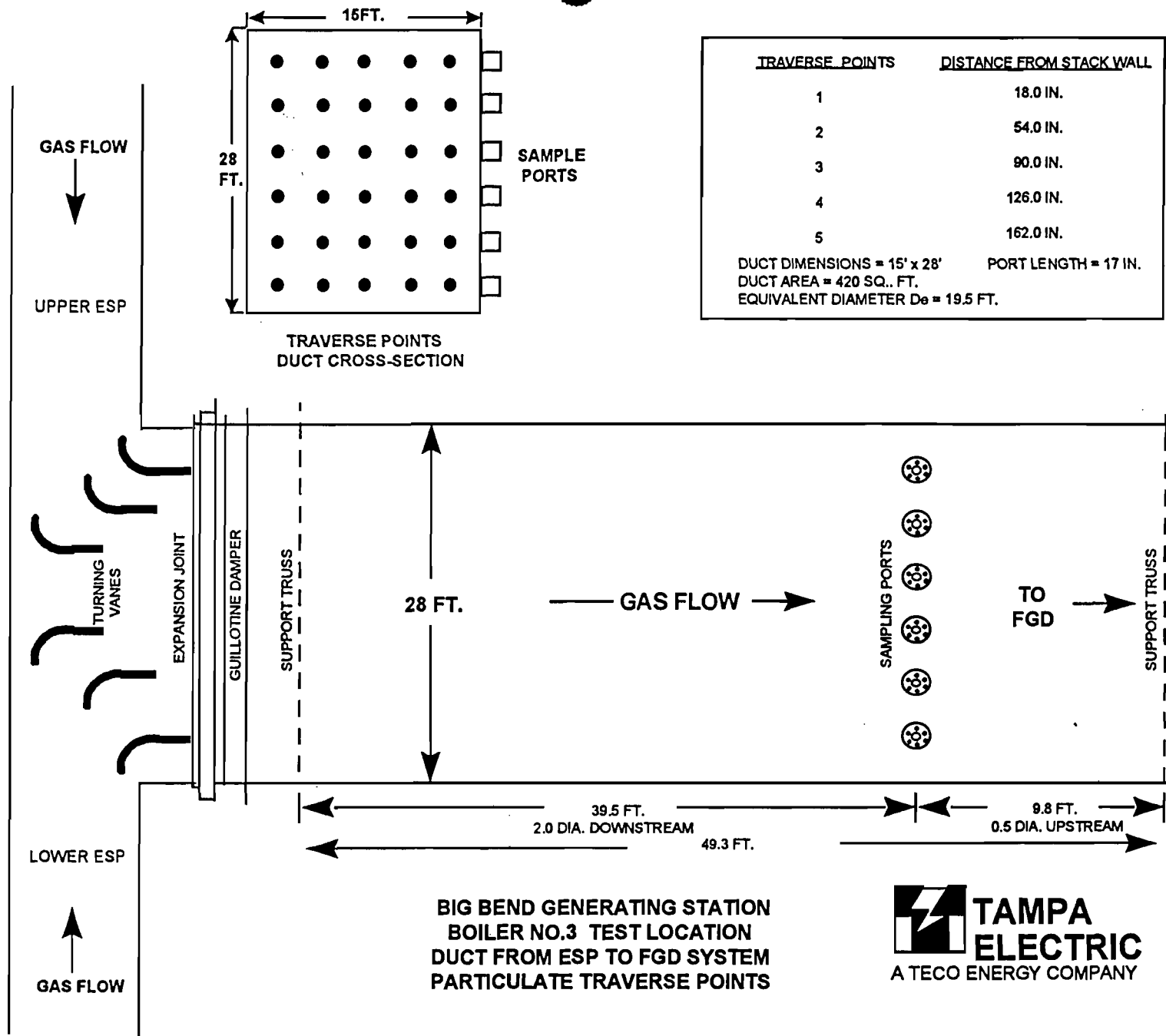
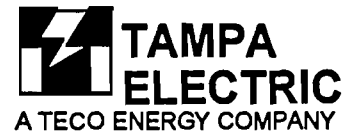


FIGURE 1

Revision 1, 07/18/97



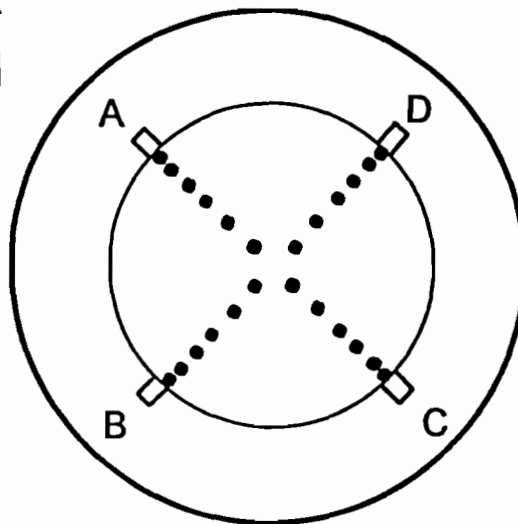
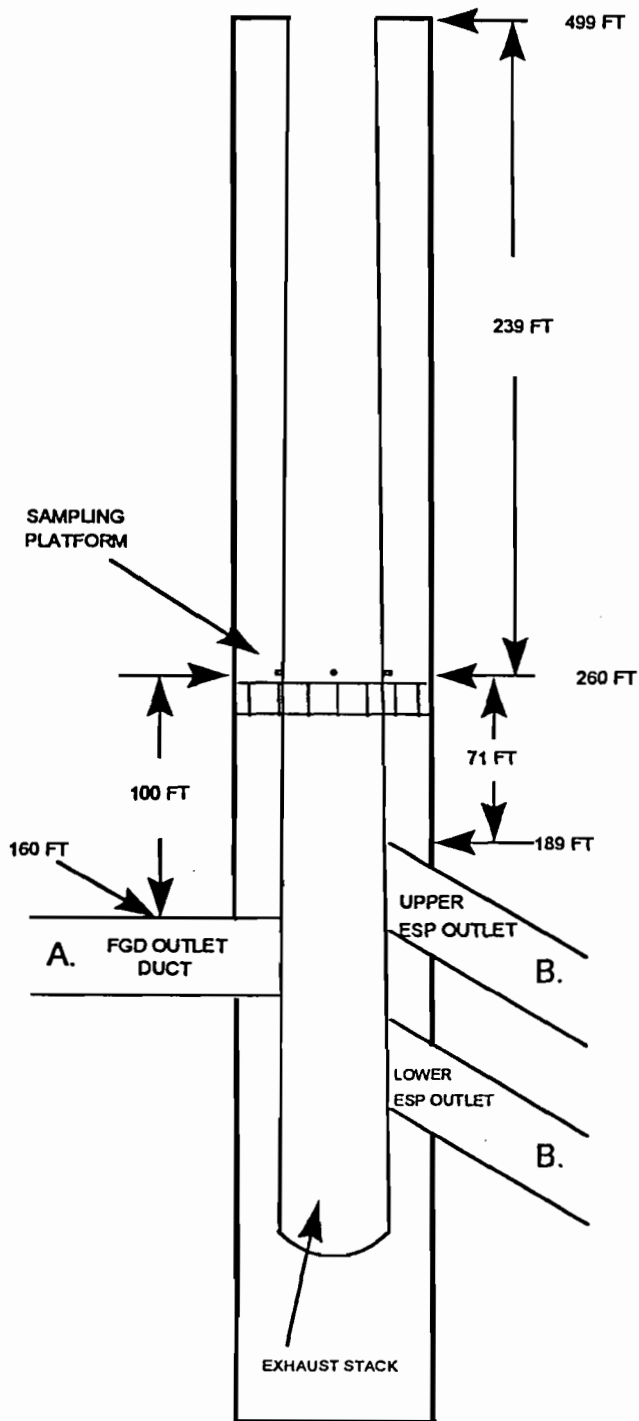
**BIG BEND GENERATING STATION
BOILER NO.3 TEST LOCATION
DUCT FROM ESP TO FGD SYSTEM
PARTICULATE TRAVERSE POINTS**



**BIG BEND GENERATING STATION
BOILER NO. 3 TEST LOCATION
PARTICULATE TRAVERSE POINTS**

TRAVERSE POINT	% OF STACK DIAMETER	IN. FROM STACK WALL
1	2.1%	6.05 IN.
2	6.7%	19.30 IN.
3	11.8%	33.98 IN.
4	17.7%	50.98 IN.
5	25.0%	72.00 IN.
6	35.6%	102.53 IN.

STACK DIAMETERS DOWNSTREAM FROM DISTURBANCE = 3.0
 STACK DIAMETERS UPSTREAM FROM DISTURBANCE = 10.0
 STACK DIAMETER = 24.0 FT. ID.
 STACK AREA = 452.389 SQ FT.
 PORT LENGTH'S = 17 IN.



PORT LOCATION PLAN

Notes: Flue gas enters the stack from one of the following two locations:

- A: When Unit 3 is integrated into the FGD system, flue gas enters the stack from the FGD Outlet Duct.
- B: When Unit 3 is not integrated into the FGD system, flue gas enters the stack from the Unit 3 ESP Outlet Ducts.



DOCUMENT III.1.6

PROCEDURES FOR STARTUP AND SHUTDOWN

PROCEDURES FOR STARTUP AND SHUTDOWN UNITS 1 - 4

Procedures for startup and shutdown of Units 1 through 4 are as follows:

A. STARTUP

1. Boilers are purged to expel all combustible gases.
2. Ignitors are placed in service to establish an oil fire.
3. Once the air leaving the air preheater reaches 180° F, a centrally located fuel pulverizer is activated.
4. Fuel feeders and ignitors are rotated in and out of service to establish an even fire.
5. As soon as fuel fire is established, electrostatic precipitator rectifiers are added as needed to control PM emissions.
6. Following boiler stabilization at minimum load, the oil ignitors are removed and the electrostatic precipitator is placed in full service.
7. Excess emissions during startup are minimized by the following activities:
 - Opacity is continuously monitored;
 - Ignitor burner tips are checked on a regular basis to ensure the ignitors remain lit and have even oil flow;
 - An adequate supply of combustion air is maintained;
 - Combustion air is manually and continuously controlled to maintain even combustion; and
 - Precipitators are placed in service prior to load stabilization.

B. SHUTDOWN

1. After the decision for boiler shutdown is made, load and steam header pressure are reduced.
2. Ignitors are placed in service as permissives for fuel feed removal.
3. Steam turbine is "punched out" when all fuel feeders are out of service and load and steam header pressure are approximately 5 MW and 500 lbs, respectively.
4. Exhaust fans are used to expedite boiler cooling.

**PROCEDURES FOR STARTUP AND SHUTDOWN
UNITS 1 - 4 (continued)**

5. Excess emissions during shutdown are minimized by the following activities:
- Opacity is continuously monitored;
 - Precipitators are removed from service only if precipitator maintenance is required; and
 - Air flow, dampers, etc., are manually adjusted.

Unit 4 FGD System

A. STARTUP

Startup of the FGD system begins with starting up the makeup water system to provide water to the pump seals and the tower demister spray headers. The next system placed in service is the limestone reagent feed system, which supplies limestone slurry to the towers for sulfur dioxide (SO₂) removal. Once an oil fired is established in the boiler, the tower absorber and quencher pumps are placed in service. Prior to the burning of coal, two towers are placed in service to scrub the flue gas. The other tower(s) are placed in service as the load increases. The gypsum handling system is started when the gypsum slurry tanks level increases due the production of gypsum in the towers from the interaction of SO₂ and calcium carbonate (limestone).

B. SHUTDOWN

Shutdown of the FGD system is less complicated than startup and begins with the removal of unneeded tower(s) as load decreases. When the unit is off-line, all towers can be removed from service and the makeup water, limestone reagent feed system, and gypsum handling systems are shutdown.

DOCUMENT III.I.7

OPERATION AND MAINTENANCE PLAN

E.U.1., UNIT NO. 1—SOLID FUEL-FIRED STEAM GENERATOR
OPERATION AND MAINTENANCE FOR PARTICULATE CONTROL

A. Process System Performance Parameters:

1. Design fuel consumption rate at maximum continuous rating: 183.5 tons fuel/hour at 11,000 Btu/lb
2. Operating pressure: 2,400 psi
3. Operating temperature: 1,000 °F
4. Maximum design steam capacity: 3,000,000 lbs/hr

B. Particulate Control Equipment Data:

1. Control equipment designator: electrostatic precipitator
2. Electrostatic precipitator manufacturer: Joy Western
3. Design flow rate: 1,408,000 ACFM
4. Primary voltage: 400 volts
5. Primary current: 245 amps
6. Secondary voltage: 55 kilovolts
7. Secondary current: 1,250 milliamps
8. Design efficiency: 99.7 percent
9. Pressure drop: < 1.0 inches H₂O (average)
10. Rapper frequency: 1/1.5 min. - 1/4.0 min. (average)
11. Rapper duration: impact
12. Gas temperature: 330± 55°F (average)

- C. The following observations, checks, and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions (continuous opacity monitor [COM])

Steam pressure

Steam temperature

Steam flow

Daily Recorded and Inspected

Electrostatic Precipitator

Primary current

Secondary voltage

Secondary current

Monthly Recorded and Inspected

Fuel input (recorded)

Inspect insulator compartment heaters/blowers. Service as needed.

Observe operation of all rapper and transformer/rectifier controls. Service as needed.

- D. Records of inspections, maintenance, and performance parameters shall be retained for a minimum of 2 years and shall be made available to the Florida Department of Environmental Protection or the Environmental Protection Commission of Hillsborough County upon request.

E.U.2., UNIT NO. 2—SOLID FUEL-FIRED STEAM GENERATOR
OPERATION AND MAINTENANCE FOR PARTICULATE CONTROL

A. Process System Performance Parameters:

1. Design fuel consumption rate at maximum continuous rating: 182.1 tons fuel/hour at 11,000 Btu/lb
2. Operating pressure: 2,400 psi
3. Operating temperature: 1,000 °F
4. Maximum design steam capacity: 3,000,000 lbs/hr.

B. Particulate Control Equipment Data:

1. Control equipment designer: electrostatic precipitator
2. Electrostatic precipitator manufacturer: Joy Western
3. Design flow rate: 1,312,000 ACFM
4. Primary voltage: 400 volts
5. Primary current: 257 amps
6. Secondary voltage: 45 kilovolts
7. Secondary current: 1,600 milliamps
8. Design efficiency: 99.7 percent
9. Pressure drop: < 1.0 inches H₂O (average)
10. Rapper frequency: 1/1.5 min. - 1/4.0 min. (average)
11. Rapper duration: impact
12. Gas temperature: 330± 55°F (average)

- C. The following observations, checks, and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions (COM)

Steam pressure

Steam temperature

Steam flow

Daily Recorded and Inspected

Electrostatic Precipitator

Primary current

Secondary voltage

Secondary current

Monthly Recorded or Inspection/Maintenance

Fuel input (recorded)

Inspect insulator compartment heaters/blowers. Service as needed.

Observe operation of all rapper and transformer/rectifier controls. Service as needed.

- D. Records of inspections, maintenance, and performance parameters shall be retained for a minimum of 2 years and shall be made available to the Florida Department of Environmental Protection or the Environmental Protection Commission of Hillsborough County upon request.

E.U.3., UNIT NO. 3—SOLID FUEL-FIRED STEAM GENERATOR
OPERATION AND MAINTENANCE FOR PARTICULATE CONTROL

A. Process System Performance Parameters:

1. Design fuel consumption rate at maximum continuous rating: 190.3 tons fuel/hour at 11,000 Btu/lb.
2. Operating pressure: 2,250 psi.
3. Operating temperature: 1,000 °F.
4. Maximum design steam capacity: 3,100,000 lbs/hr.

B. Particulate Control Equipment Data:

1. Control equipment designator: electrostatic precipitator
2. Electrostatic precipitator manufacturer: Research Cottrell
3. Design flow rate: 1,420,000 ACFM
4. Primary voltage: 400 volts
5. Primary current: 320 amps
6. Secondary voltage: 45 kilovolts
7. Secondary current: 2,000 milliamps
8. Design efficiency: 99.7 percent
9. Pressure drop: < 1.0 inches H₂O (average)
10. Rapper frequency: 1/1.5 min. - 1/4.0 min. (average)
11. Rapper duration: impact
12. Gas temperature: 330± 55°F (average)

- C. The following observations, checks, and operations apply to this source and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Visible emissions (COM)

Steam pressure

Steam temperature

Steam flow

Daily Recorded and Inspected

Electrostatic Precipitator

Primary current

Secondary voltage

Secondary current

Monthly Recorded or Inspection/Maintenance

Fuel input (recorded)

Inspect insulator compartment heaters/blowers. Service as needed.

Observe operation of all rapper and transformer/rectifier controls. Service as needed.

- D. Records of inspections, maintenance, and performance parameters shall be retained for a minimum of 2 years and shall be made available to the Florida Department of Environmental Protection or the Environmental Protection Commission of Hillsborough County upon request.

DOCUMENT III.I.10

ALTERNATE METHODS OF OPERATION

Tampa Electric Company
Big Bend Station
Emission Unit - Alternate Methods of Operation

1. Alternate Fuels

Units Affected: Units 1, 2, 3, and 4.

Discussion: Coal or a petcoke/coal blend will be used as fuels. The ratio of petcoke/coal blends will range from 0/100 to 20/80 percent by weight. The units will continue to meet current applicable requirements under all fuel blends.

2. Soot Blowing

Units Affected: Units 1, 2, 3, and 4.

Discussion: Soot blowing at the affected units will be conducted as necessary in accordance with all current applicable requirements including FDEP Rule 62-210.700(3).

3. Fly Ash Reinjection

Units Affected: Units 1, 2, 3, and 4.

Discussion: Flyash will be reinjected at levels of 0, 25, 50, 75, and 100 percent of fly ash generated. The units will meet current applicable requirements under all reinjection rates.

APPENDIX A

REGULATORY APPLICABILITY ANALYSIS

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 1 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 60 - Standards of Performance for New Stationary Sources.				
<i>Subpart A - General Provisions</i>				
Notification and Recordkeeping	§60.7(a)		CS-004	Notification requirements (historical)
Notification and Recordkeeping	§60.7(b) - (h)		CS-004	General recordkeeping and reporting requirements.
Performance Tests	§60.8		CS-004	Conduct initial performance tests (historical) and as required by EPA.
Compliance with Standards	§60.11		CS-004	General compliance requirements. Addresses requirements for visible emissions tests. (§60.11(e) is historical)
Circumvention	§60.12		CS-004	Cannot conceal an emission which would otherwise constitute a violation of an applicable standard.
<i>Subpart A - General Provisions</i>				
Monitoring Requirements	§60.13(a) - (f), (h) - (j)		CS-004	Requirements pertaining to continuous monitoring systems.
General notification and reporting requirements	§60.19		CS-004	General procedures regarding reporting deadlines.
<i>Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i>				
Standard for Particulate Matter	§60.42a(a)(1)		CS-004	Particulate matter emissions shall not exceed 0.03 lb/MMBtu heat input (all fuels).

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 2 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i>				
Standard for Particulate Matter	§60.42a(a)(2)		CS-004	Particulate matter emissions 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel.
Standard for Particulate Matter	§60.42a(a)(3)		CS-004	Particulate matter emissions shall not 30 percent of the potential combustion concentration (70 percent reduction) when combusting liquid fuel.
Standard for Particulate Matter	§60.42a(b)		CS-004	Opacity shall exceed 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
Standard for Sulfur Dioxide	§60.43a(a)(1)		CS-004	Sulfur dioxide emissions shall not exceed 1.20 lb/MMBtu heat input and 10 percent of the potential combustion concentration (90 percent reduction) for solid fuels.
Standard for Sulfur Dioxide	§60.43a(b)(1)		CS-004	Sulfur dioxide emissions shall not exceed 0.80 lb/MMBtu heat input and 10 percent of the potential combustion concentration (90 percent reduction) for liquid fuels.
Standard for Sulfur Dioxide	§60.43a(g)		CS-004	Compliance with sulfur dioxide emission limitation and percent reduction are determined on a 30-day rolling average basis.
Standard for Sulfur Dioxide	§60.43a(h)		CS-004	Sulfur dioxide emission limits are prorated if different fuels are combusted simultaneously.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 3 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i>				
Standard for Nitrogen Oxides	§60.44a(a)(1)		CS-004	Nitrogen oxide emissions shall not exceed 0.60 lb/MMBtu for bituminous coal and 0.30 for liquid fuels.
Standard for Nitrogen Oxides	§60.44a(a)(2)		CS-004	Nitrogen oxide emissions shall not exceed 65 percent of the potential combustion concentration (35 percent reduction) for solid fuels and 30 percent of the potential combustion concentration (70 percent reduction) for liquid fuels.
Standard for Nitrogen Oxides	§60.44a(c)		CS-004	Nitrogen oxide emission limits are prorated if different fuels are combusted simultaneously.
Compliance Provisions	§60.46a(a)		CS-004	Compliance with the 0.03 lb/MMBtu particulate matter standard constitutes compliance with the percent reduction requirements.
Compliance Provisions	§60.46a(b)		CS-004	Compliance with the lb/MMBtu nitrogen oxide standards constitutes compliance with the percent reduction requirements.
Compliance Provisions	§60.46a(c)		CS-004	The particulate matter and nitrogen oxide emission standards apply at all times except during periods of startup, shutdown, and malfunction. The sulfur dioxide emission standards apply at all times during periods of startup, shutdown, or when both emergency conditions exist and the procedures of §60.46(d) are implemented.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 4 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i>				
Compliance Provisions	§60.46a(d)		CS-004	Requirements for operating conditions under which a malfunctioning FGD system may be operated.
Compliance Provisions	§60.46a(e)		CS-004	After initial performance test, compliance with the sulfur dioxide emission and percentage reduction requirements and nitrogen oxides emission limitations is based on the average emission rate for 30 successive boiler days.
Compliance Provisions	§60.46a(f)		CS-004	Requirements for initial performance test procedures. (historical)
Compliance Provisions	§60.46a(g)		CS-004	Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO ₂ and NO _x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO _x only), or emergency conditions (SO ₂ only). Compliance with the percentage reduction requirement for SO ₂ is determined based on the average inlet and average outlet SO ₂ emission rates for the 30 successive boiler operating days.
Compliance Provisions	§60.46a(h)		CS-004	Requirements pertaining to compliance procedures if minimum quantity of emissions monitoring data required by §60.47a is not obtained.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 5 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</i>				
Emission Monitoring	§60.47a		CS-004	Requirements for continuous opacity, sulfur dioxide, nitrogen oxides, oxygen or carbon dioxide monitoring systems.
Compliance determination procedures and methods	§60.48a(a) - (e)		CS-004	Requirements for compliance determinations procedures.
Reporting Requirements	§60.49a(a)		CS-004	Requires submittal of initial performance test data and continuous monitor performance evaluations to EPA. (historical)
Reporting Requirements	§60.49a(b) - (l)		CS-004	Reporting requirements.
<i>Subpart Y - Standards of Performance for Coal Preparation Plants</i>				
Standards for Particulate Matter	§60.252(c)		CH-048 CH-049 CH-050 CH-051 CH-052 CH-055 CH-056	Opacity shall be less than 20 percent. Applies to: All coal processing and conveying equipment and coal storage systems (excluding open storage piles) at coal preparation plants.
Test Methods and Procedures	§60.254(b)		Same as above	Method 9 and the procedures in §60.11 shall be used to determine opacity.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 6 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.		X		Standard applies to storage of petroleum liquids greater than 40,000 gallons. Subpart Ka §60.11a(b) definition of petroleum liquids specifically excludes Nos. 2 through 6 fuel oils. Storage tanks STR-001 and STR-002 store No. 2 fuel oil and therefore are not subject to Subpart Ka. There are no other storage tanks located at the Big Bend Station which store petroleum liquids and have a capacity greater than 40,000 gallons.
40 CFR Part 60 Subpart Kb - Standards of Performance for Volatile Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.		X		Storage tanks STR-001 and STR-002 were constructed prior to 7/23/84 and therefore are not subject to Subpart Kb. There are no other storage tanks located at the Big Bend Station storing volatile organic liquids which were constructed after 7/23/84 and which have a capacity equal to or greater than 40 m ³ (10,567 gallons).
40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants		X		Subpart OOO applies to affected sources constructed after August 31, 1983. Non-metallic minerals include limestone and gypsum. Big Bend Station Unit #4 limestone and gypsum handling facilities commenced construction prior to 8/31/83 and therefore are not subject to Subpart OOO.
40 CFR Part 60 - Standards of Performance for New Stationary Sources: Subparts B, C, Cb, D, Db, Dc, E, Ea, Eb, F, G, H, I, J, K, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Z, AA, AAa, BB, CC, DD, EE, GG, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, AAA, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, PPP, QQQ, RRR, SSS, TTT, UUU, and VVV		X		None of the listed NSPS' contain requirements which are applicable to the Big Bend Station.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 7 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants				
<i>Subpart A - General Provisions</i>				
Prohibited Activities	§61.05		Facility-wide	Prohibits construction or modification without first obtaining written approval, operating a new source in violation of any standard after the effective date of the standard, operating an existing source in violation of a standard ninety days after the effective date of the standard, and failure to submit required source test results.
Source Reporting	§61.10		Facility-wide	Requires submittal of source information.
Compliance with Standards and Maintenance Requirements	§61.12		Facility-wide	Establishes emission test procedures, requires proper operation and maintenance of the source including control equipment.
Monitoring Requirements	§61.14		Facility-wide	General monitoring requirements.
Circumvention	§61.19		Facility-wide	Emissions which would constitute a violation of a standard cannot be concealed.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 8 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart M - National Emission Standards for Asbestos</i>				
Demolition and Renovation	§61.145		Facility-wide	Standards for demolition and renovation.
Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations	§61.150		Facility-wide	Standards for waste disposal.
Reporting	§61.153		Facility-wide	Specific reporting requirements.
Active Waste Disposal Sites	§61.154		Facility-wide	Standards for waste disposal sites.
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants: Subparts A, B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB, and FF		X		None of the listed NESHAPS' contain requirements which are applicable to the Big Bend Station.
40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories: Subparts A, B, C, D, E, F, G, H, I, L, M, N, O, Q, R, T, W, X, Y, CC, EE, GG, II, and JJ		X		None of the listed NESHAPS' contain requirements which are applicable to the Big Bend Station. In particular, Subpart Q is not an applicable requirement since cooling towers are not utilized.
40 CFR Part 72 - Acid Rain Program Permits				
<i>Subpart A - Acid Rain Program General Provisions</i>				
Standard Requirements	§72.9		CS-001 CS-002 CS-003 CS-004	General Acid Rain Program requirements. SO ₂ allowance program requirements start January 1, 1995.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 9 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart B - Designated Representative</i>				
Designated Representative	§72.20 - §72.25		Same as above	General requirements pertaining to the Designated Representative.
<i>Subpart C - Air Rain Application</i>				
Requirements to Apply	§72.30(a)		Same as above	Requirement to submit a complete Acid Rain permit application by the applicable deadline.
Requirements to Apply	§72.30(b)(1)(I)		Same as above	Deadline to submit a complete Acid Rain permit application was February 15, 1993. (historical)
Requirements to Apply	§72.30(c)		Same as above	Requirement to submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain permit governing the unit during Phase II or such longer time as may be approved under part 70 of this chapter that ensures that the term of the existing permit will not expire before the effective date of the permit for which the application is submitted.
Requirements to Apply	§72.30(d)		Same as above	Requirement to submit an original and three copies of all permit applications, to EPA. (historical)
Information Requirements for Acid Rain Permit Applications	§72.31		Same as above	General permit application requirements.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 10 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart D - Acid Rain Compliance Plan and Compliance Options</i>				
General	§72.40		Same as above	General compliance plan requirements.
<i>Subpart I - Compliance Certification</i>				
Annual Compliance Certification Report	§72.90		Same as above	Requirement to submit an annual compliance report.
40 CFR Part 75 - Continuous Emission Monitoring				
<i>Subpart A - General</i>				
Compliance Dates	§75.4(a)(1)		Same as above	Requirement to complete all certification tests for CEMS and COMS by 11/51/93. (historical)
Prohibitions	§75.5		Same as above	General monitoring prohibitions.
<i>Subpart B - Monitoring Provisions</i>				
General Operating Requirements	§75.10		Same as above	General monitoring requirements.
Specific Provisions for Monitoring SO ₂ Emissions	§75.11(a)		Same as above	SO ₂ continuous monitoring requirements for coal-fired units.
Specific Provisions for Monitoring NO _x Emissions	§75.12(a),(b)		Same as above	NO _x continuous monitoring requirements for coal-fired units.
Specific Provisions for Monitoring CO ₂ Emissions	§75.13(a)		Same as above	CO ₂ continuous monitoring requirements.
Specific Provisions for Monitoring Opacity	§75.14(a)		Same as above	Opacity continuous monitoring requirements for coal-fired units.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 11 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart C - Operation and Maintenance Requirements</i>				
Certification and Recertification Procedures	§75.20(a)		Same as above	Requires that monitoring systems meet initial certification requirements by the deadlines stipulated by §75.4. (historical)
Certification and Recertification Procedures	§75.20(a)(1)		Same as above	Requires notification of certification test or retest dates at least 45 days prior to certification testing.
Certification and Recertification Procedures	§75.20(a)(2)		Same as above	Requires submittal of certification application in accordance with §75.60.
Certification and Recertification Procedures	§75.20(a)(5)		Same as above	Procedures to be used in the event of agency issues a disapproval of certification application or certification status.
Certification and Recertification Procedures	§75.20(c)(1) - (7), (9)		Same as above	Certification procedure requirements.
Quality Assurance and Quality Control Requirements	§75.21		Same as above	General QA/QC requirements.
Reference Test Methods	§75.22		Same as above	Specifies required test methods to be used for certification or recertification testing.
Out-Of-Control Periods	§75.24		Same as above	Specifies out-of-control periods and required actions to be taken when out-of-control periods occur.
<i>Subpart D - Missing Data Substitution Procedures</i>				
General Provisions	§75.30		Same as above	General missing data requirements.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 12 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart D - Missing Data Substitution Procedures</i>				
Initial Missing Data Procedures	§75.31		Same as above	Missing data procedure requirements during the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively. (historical)
Determination of Monitor Data Availability for Standard Missing Data Procedures	§75.32		Same as above	Monitor data availability procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively.
Standard Missing Data Procedures	§75.33		Same as above	Missing data substitution procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively.
Initial Missing Data Procedures	§75.34(a),(b),(d)		CS-004	Optional missing data substitution requirements for units with add-on emission controls.
<i>Subpart E - Alternative Monitoring Systems</i>				
Alternative Monitoring Systems	§75.40 - 75.48		CS-001 CS-002 CS-003 CS-004	Optional requirements for alternative monitoring systems.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 13 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<i>Subpart F - Recordkeeping Requirements</i>				
General Recordkeeping Provisions	§75.50		Same as above	General recordkeeping requirements.
General Recordkeeping Provisions for Specific Situations	§75.51(b)		Same as above	Recordkeeping requirements for units with add-on controls that choose to use parametric monitoring procedures for missing data substitution pursuant to §75.34
Certification, Quality Assurance, and Quality Control Record Provisions	§75.52		Same as above	General QA/QC recordkeeping requirements.
Monitoring Plan	§75.53(a) - (c)		Same as above	Requirement to prepare and maintain a Monitoring Plan.
<i>Subpart G - Reporting Requirements</i>				
General Provisions	§75.60		Same as above	General reporting requirements.
Notification of Certification and Recertification Test Dates	§75.61		Same as above	Requires written submittal of certification tests, recertification tests, and revised test dates for CEMS. Notice of certification testing shall be submitted at least 45 days prior to the first day of certification or recertification testing. Notification of any proposed adjustment to certification testing dates must be provided at least 7 business days prior to the proposed date change.
Monitoring Plan	§75.62		Same as above	Monitoring Plan required to be submitted no later than 45 days prior to the certification test. (historical)
<i>Subpart G - Reporting Requirements</i>				

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 14 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Certification or Recertification Application	§75.63		Same as above	Requires submittal of a certification application within 30 days after completing the certification test.
Quarterly Reports	§75.64(a)(1) - (5)		Same as above	Requirement to submit quarterly data report.
Quarterly Reports	§75.64(b), (c), (d)		Same as above	Requirement to submit compliance certification in support of each quarterly data report. Requirement to submit quarterly reports in an electronic format to be specified by EPA.
Opacity Reports	§75.65		Same as above	Requirement to reports of excess opacity emissions to the applicable State (FDEP) agency in the format specified by the State agency.
40 CFR Part 76 - Acid Rain Nitrogen Oxides Emission Reduction Program				
NO _x Emission Limitations for Group 1, Phase I Boilers	§76.5(g)		CS-004	Beginning January 1, 1995, NO _x emissions shall not exceed 0.45 lb/MMBtu on an annual average basis for tangentially fired boilers.
NO _x Emission Limitations for Group 2, Phase I Boilers	§76.6		CS-001 CS-002 CS-003	Future rulemaking.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 15 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 76 - Acid Rain Nitrogen Oxides Emission Reduction Program				
Permit Application and Compliance Plans	§76.9(a), (b)		CS-001 CS-002 CS-003 CS-004	Requirement to submit a complete Acid Rain permit application and compliance plan (original and three copies) to the permitting authority no later than May 6, 1994 (CS-004) and January 1, 1998 (CS-001, CS-002, CS-003). Early election units shall also submit an application by January 1, 1997.
Permit Application and Compliance Plans	§76.9(c)		Same as above	Required contents of NO _x compliance plans.
Permit Application and Compliance Plans	§76.9(d)		Same as above	Requirement to submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain permit governing the unit during Phase II or such longer time as may be approved under part 70 of this chapter that ensures that the term of the existing permit will not expire before the effective date of the permit for which the application is submitted.
Alternative Emission Limitations	§76.10		Same as above	Alternative requirements for units that cannot meet §76.5 NO _x emission standards using low NO _x burner technology (including separated overfire air).
Emissions Averaging	§76.11		Same as above	Optional requirements for sources which elect to implement a NO _x averaging plan.
40 CFR Part 76 - Acid Rain Nitrogen Oxides Emission Reduction Program				

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 16 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Compliance and Excess Emissions	§76.13		Same as above	Required procedures for determining excess emissions.
Monitoring, Recordkeeping, and Reporting	§76.14(a), (b)		Same as above	Petition content requirements for alternative emission limitation demonstration period and alternative emission limitation.
Test Methods and Procedures	§76.15(a)		Same as above	Required test procedures for alternative emission limitation report specified in §76.10(e)(7).
Test Methods and Procedures	§76.15		Same as above	Required test procedures for alternative emission limitation report specified in §76.10(e)(7).
40 CFR Part 77 - Excess Emissions				
Offset Plans for Excess Emissions of Sulfur Dioxide	§77.3		Same as above	Requirement to submit offset plans for excess SO ₂ emissions not later than 60 days after the end of any calendar year during which an affected unit has excess SO ₂ emissions. Required contents of offset plans are specified.
Deduction of Allowances to Offset Excess Emissions of Sulfur Dioxide	§77.5(b)		Same as above	Requirement for the Designated Representative to hold enough allowances in the appropriate compliance subaccount to cover deductions to be made by EPA if a timely and complete offset plan is not submitted or if EPA disapproves a proposed offset plan.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 17 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 77 - Excess Emissions				
Penalties for Excess Emissions of Sulfur Dioxide and Nitrogen Oxides	§77.6		Same as above	Requirement to pay a penalty if excess emissions of SO ₂ or NO _x occur at any affected unit during any year.
40 CFR Part 78 - Appeal Procedures for Acid Rain Program				
Appeal Procedures	§78.1 - 78.20		Same as above	Optional appeal procedures for EPA Acid Rain program decisions.
40 CFR Part 82 - Protection of Stratospheric Ozone				
<i>Subpart B - Production and Consumption Controls</i>				
Prohibitions	§82.34	X	Vehicle Maintenance Shop	The facility must use equipment properly approved when performing maintenance on motor vehicles which involves refrigerant in the motor vehicle air conditioner. All such servicing must be conducted by persons trained and certified in accordance with 40 CFR §82.40.
Approved Refrigerant Recycling Equipment	§82.36		Same as above	The facility must use certified refrigerant recycling equipment.
Certification, recordkeeping, and public notification requirements	§82.42(a) and (b)		Same as above	Specific certification and recordkeeping requirements must be followed.
Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Subpart C	X		Big Bend Station does not sell or distribute any banned nonessential substances.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 18 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 82 - Protection of Stratospheric Ozone				
The Labeling of Products Using Ozone-Depleting Substances	Subpart E	X		Big Bend Station does not produce any products containing ozone depleting substances.
<i>Subpart F - Recycling and Emissions Reduction</i>				
Prohibitions	§82.154		Appliances as defined by §82.152 - any device which contains and uses a Class I or II substance as a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer	Class I and II substances cannot be released from appliances due to maintenance, service, repair, or disposal.
Required Practices	§82.156		Same as above	Class I and II substances must be recovered or recycled prior to opening an appliance for maintenance, service, repair, or disposal. Leaking appliances normally containing more than 50 pounds of refrigerant must be repaired, retrofitted, or retired if the leakage rate exceeds specific criteria.
<i>Subpart F - Recycling and Emissions Reduction</i>				

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 19 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Technician Certification	§82.161		Same as above	Technicians who maintain, service, repair, or dispose of any appliances must be certified.
Certification By Owners of Recovery and Recycling Equipment	§82.162		Same as above	Certified equipment must be used to maintain, service, repair, or dispose of any appliances.
Reporting and Recordkeeping Requirements	§82.166(b), (l), (j), (k), (l), and (m)		Appliances as defined by §82.152	<p>To purchase refrigerant, evidence must be presented that the employer has at least one certified technician.</p> <p>Disposers must maintain small appliance verification records.</p> <p>Persons servicing appliances containing 50 or more pounds of refrigerant must provide documentation indicating the amount of refrigerant added to the appliance.</p> <p>Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the data and type of service, as well as the quantity of refrigerant added.</p> <p>All records must be retained for at least 3 years.</p>

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for Big Bend Station (Page 20 of 20)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 51 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 52 - Approval and Promulgation of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 62 - Approval and Promulgation of State Plans for Designated Facilities and Pollutants		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 70 - State Operating Permit Programs		X		State agency requirements - not applicable to individual emission sources.
40 CFR Parts 53, 54, 55, 56, 57, 58, 62, 66, 67, 68, 69, 71, 74, 79, 80, 81, 85, 86, 87, 88, 89, and 90		X		The listed regulations do not contain any requirements which are applicable to the Big Bend Station.

Source: ECT, 1996.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 1 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-4, F.A.C. - Permits: Part I General					
Scope of Part I	62-4.011, F.A.C.	X			Contains no applicable requirements.
Definitions	62-4.020, .021, F.A.C.	X			Contains no applicable requirements.
General Prohibition	62-4.030, F.A.C. ¹		X		All stationary air pollution sources must be permitted, unless otherwise exempted.
Exemptions	62-4.040, F.A.C		X		Certain structural changes exempt from permitting. Other stationary sources exempt from permitting upon FDEP insignificance determination.
Procedure to Obtain Permits; Application	62-4.050(1), (2), (3), and (4).2.a, F.A.C.		X		All permit applications must be submitted on FDEP forms, in quadruplicate, and signed by a Professional Engineer. No application fee is required.
Permit Processing	62-4.055, F.A.C.	X			Contains no applicable requirements.
Consultation	62-4.060, F.A.C.	X			Consultation is encouraged, not required.
Standards for Issuing or Denying Permits; Issuance; Denial	62-4.070, F.A.C	X			Establishes standard procedures for FDEP. Requirement is not applicable to the facility.
Modification of Permit Conditions	62-4.080, F.A.C	X			Application is for initial Title V operating permit. A Title V permit condition modification is not requested.
Renewals	62-4.090, F.A.C.		X		Establishes permit renewal criteria. Additional criteria are cited at 62-213.-430(3), F.A.C.
Suspension and Revocation	62-4.100, F.A.C. ¹		X		Establishes permit suspension and revocation criteria.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 2 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Financial Responsibility	62-4.110, F.A.C.		X		Proof of financial responsibility may be required.
Transfer of Permits	62-4.120, F.A.C.	X			Application is for initial Title V operating permit. A sale or legal transfer of a permitted facility is not included in this application.
Plant Operation - Problems	62-4.130, F.A.C. ¹		X		Immediate notification is required whenever the permittee is temporarily unable to comply with any permit condition. Notification content is specified.
Permit Conditions	62-4.160, F.A.C.		X		Specifies general conditions that must be included in all permits.
Construction Permits	62-4.210, F.A.C.	X			General requirements for construction permits
Operation Permits for New Sources	62-4.220, F.A.C.	X			General requirements for initial new source operation permits.
Chapter 62-103, F.A.C. - Rules of Administrative Procedure - Final Agency Action (Non-Rulemaking) and Appeal					
Public Notice of Application and Proposed Agency Action	62-103.150, F.A.C.		X		Applicant may be required to publish Notice of Application
Chapter 62-150, F.A.C. - Hazardous Substance Release Notification					
Notification Requirements	62-150.300, F.A.C.		X		Emissions of a hazardous substance (as defined in 40 CFR § 302.4) above the reportable quantity (as set forth in Table 302.4 at 40 CFR § 302.4) in any 24-hour period must be reported to the FDEP within one working day of discovery of the release.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 3 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-204, F.A.C. - State Implementation Plan					
State Implementation Plan	62-204.100, .200, .220(1)-(3), .240, .260, .320, .340, .360, .400, and .500, F.A.C.	X			Contains no applicable requirements.
State Implementation Plan	62-204.800(7)(a), (b)2., and (b)29., F.A.C. ¹			CS-004 CH-048 CH-049 CH-050 CH-051 CH-052 CH-055 CH-056	NSPS Subparts Da and Y; see Table A-1 for detailed federal regulatory citations.
State Implementation Plan	62-204.800(8)(a), (b)8., F.A.C. ¹		X		NESHAPS Subparts M; see Table A-1 for detailed federal regulatory citations.
State Implementation Plan	62-204.800(12), (13), (14), (15), (16), and (17), F.A.C. ¹			CS-001 CS-002 CS-003 CS-004	Acid Rain Program; see Table A-1 for detailed federal regulatory citations.
State Implementation Plan	62-204.800(19), F.A.C. ¹		X		Protection of Stratospheric Ozone; see Table A-1 for detailed federal regulatory citations.
Ambient Air Quality Protection	62-204.220(4), F.A.C.	X			Assessments of ambient air pollutant impacts must be made using applicable air quality models, data bases, and other requirements approved by FDEP and specified in 40 CFR Part 51, Appendix W. Air quality modeling is not required for Title V permit applications.
Chapter 62-210, F.A.C. - Stationary Sources - General Requirements					

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 4 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Purpose and Scope	62-210.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-210.200, F.A.C.	X			Contains no applicable requirements.
Permits Required	62-210.300, F.A.C., except 62-210.300(1), F.A.C.		X		Air operation permit required, with the exception of certain facilities and sources. Startup notification required if a permitted source has been shut down for more than 1 year.
Air Construction Permits	62-210.300(1), F.A.C.	X			Application is for initial Title V operating permit. A construction permit is not requested in this application.
Public Notice and Comment					
Public Notice of Proposed Agency Action	62-210.350(1), F.A.C.		X		All permit applicants required to publish notice of proposed agency action.
Additional Notice Requirements for Sources Subject to Prevention of Significant Deterioration or Nonattainment Area New Source Review	62-210.350(2), F.A.C.	X			PSD and nonattainment area NSR application not included in this application package.
Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources	62-210.350(3), F.A.C.		X		Notice requirements for Title V operating permit applicants.
Public Notice and Hearing Requirements for State Implementation Plan Revisions	62-210.350(4), F.A.C.	X			Defines requirements applicable to FDEP, only.
Administrative Permit Corrections	62-210.360, F.A.C.	X			Application is for initial Title V operating permit. An administrative permit correction is not requested in this application.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 5 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
<p>Reports</p> <p>Notification of Intent to Relocate Air Pollutant Emitting Facility</p> <p>Annual Operating Report for Air Pollutant Emitting Facility</p>	<p>62-210.370(1), F.A.C.</p> <p>62-210.370(2), F.A.C.</p>	X		<p>CH-059 through CH-062, CS-001 through CS-007, FH-001 through FH-008</p>	<p>Facility does not have any relocatable emission units.</p> <p>Specifies annual reporting requirements</p>
Stack Height Policy	62-210.550, F.A.C.	X All except those listed as applicable.		<p>CS-004 FH-001 FH-004 FH-006</p>	Nonapplicable stacks were constructed prior to December 31, 1970, and have not been subject to an applicable modification since that date; applicable stacks have been constructed or modified since December 31, 1970.
Circumvention	62-210.650, F.A.C.			<p>CS-001 through CS-004; CH-032 through CH-035; CH-059 through CH-062, LSH-001 through LSH-007, FH-001, FH-004, and FH-006</p>	An applicable air pollution control device cannot be circumvented and must be operated whenever the emission unit is operating.
Excess Emissions	62-210.700, F.A.C.		X		Excess emissions due to startup, shut down, and malfunction are limited. Excess emissions due to malfunction must be reported. Excess emissions due to certain other causes are prohibited.
Forms and Instructions	62-210.900, F.A.C.	X			Contains no applicable requirements.
Notification Forms for Air General Permits	62-210.920, F.A.C.	X			Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 6 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-212, F.A.C. - Stationary Sources - Preconstruction Review					
Purpose and Scope	62-212.100, F.A.C.	X			Contains no applicable requirements.
General Preconstruction Review Requirements	62-212.300, F.A.C.	X			Air construction permit requirements, not applicable to Title V operating permit applications.
Prevention of Significant Deterioration	62-212.400, F.A.C.	X			PSD permit required prior to construction of facility, not applicable to Title V operating permit applications.
New Source Review for Nonattainment Areas	62-212.500, F.A.C.	X			Facility not located in any nonattainment area or nonattainment area of influence.
Sulfur Storage and Handling Facilities	62-212.600, F.A.C.	X			Applicable only to sulfur storage and handling facilities.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution					
Purpose and Scope	62-213.100, F.A.C.	X			Contains no applicable requirements.
Annual Licensing Fee	62-213.205(1) and (4), F.A.C.		X		Operating license fee and documentation requirements.
Annual Licensing Fee	62-213.205(2), (3), and (5), F.A.C.	X			Contains no applicable requirements.
Title V Air General Permits	62-213.300, F.A.C.	X			No eligible facilities
Permits and Permit Revisions Required	62-213.400, F.A.C.		X		Title V operation permit required.
Changes Without Permit Revision	62-213.410, F.A.C.		X		Certain changes may be made if specific notice and recordkeeping requirements are met.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 7 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Immediate Implementation Pending Revision Process	62-213.412, F.A.C.		X		Certain modifications can be implemented pending permit revision if specific criteria are met.
Fast-Track Revisions of Acid Rain Parts	62-213.413, F.A.C.			CS-001, CS-002, CS-003, CS-004	Optional provisions for Acid Rain permit revisions.
Trading of Emissions within a Source	62-213.415, F.A.C.	X			Applies only to facilities with a federally enforceable emissions cap.
Permit Applications	62-213.420, F.A.C.		X		Title V operating permit application required.
Permit Issuance, Renewal, and Revision					
Action on Application	62-213.430(1), F.A.C.	X			Contains no applicable requirements.
Permit Denial	62-213.430(2), F.A.C.	X			Contains no applicable requirements.
Permit Renewal and Expiration	62-213.430(3), F.A.C.		X		Defines permit renewal application contents.
Permit Revision	62-213.430(4), F.A.C.		X		Defines permit revision application contents.
EPA Recommended Actions	62-213.430(5), F.A.C.	X			Contains no applicable requirements.
Permit Content	62-213.440, F.A.C.		X		Defines permit content.
Permit Review by EPA and Affected States	62-213.450, F.A.C.	X			Contains no applicable requirements.
Permit Shield	62-213.460, F.A.C.		X		Provides permit shield for facilities in compliance with permit terms and conditions.
Forms and Instructions	62-213.900, F.A.C.	X			Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 8 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-214—Requirements for Sources Subject to the Federal Acid Rain Program					
Purpose and Scope	§62-214.100, F.A.C.	X			Contains no applicable requirements.
Applicability	§62-214.300, F.A.C.		X		Facility includes Acid Rain units, therefore facility compliance with §62-213 and §62-214, F.A.C., is required.
Applications	§62-214.320, F.A.C.			CS-001 through CS-004	An Acid Rain Part application for each Acid Rain unit must be included in the Title V operating permit application.
Acid Rain Compliance Plan and Compliance Options	§62-214.330, F.A.C.			CS-001 through CS-004	A complete Acid Rain compliance plan for each Acid Rain unit must be included in the Acid Rain Part application.
Exemptions	§62-214.340, F.A.C.			CS-001 through CS-004	An application may submitted for certain exemptions.
Certification	§62-214.350, F.A.C.			CS-001 through CS-004	The designated representative must certify all Acid Rain submissions.
Department Action on Applications	§62-214.360, F.A.C.	X			Contains no applicable requirements.
Revisions and Administrative Corrections	§62-214.370, F.A.C.			CS-001 through CS-004	Defines revision procedures and automatic amendments.
Acid Rain Part Content	§62-214.420, F.A.C.			CS-001 through CS-004	Defines the contents of any draft, proposed, or final Acid Rain Part.
Implementation and Termination of Compliance Options	§62-214.430, F.A.C.			CS-001 through CS-004	Defines permit activation and termination procedures.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 9 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-252 - Gasoline Vapor Control	62-252, F.A.C.	X			Facility has a gasoline throughput of less than 20,000 gal/month.
Chapter 62-256 - Open Burning and Frost Protection Fires					
Declaration and Intent	62-256.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-256.200, F.A.C.	X			Contains no applicable requirements.
Prohibitions	62-256.300, F.A.C. ¹		X		Defines prohibited open burning.
Burning for Cold and Frost Protection	62-256.450, F.A.C.	X			Limited to agricultural protection.
Land Clearing	62-256.500, F.A.C. ¹		X		Defines allowed open burning for non-rural land clearing and structure demolition.
Industrial, Commercial, Municipal, and Research Open Burning	62-256.600, F.A.C.		X		Industrial open burning is not conducted.
Open Burning allowed	62-256.700, F.A.C.	X			Contains no applicable requirements.
Effective Date	62-256.800, F.A.C.	X			Contains no applicable requirements.
Chapter 62-257 - Asbestos Fee	62-257, F.A.C. ¹		X		Requires notice and payment of fee for asbestos removal projects.
Chapter 62-281 - Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling	62-281, F.A.C.	X			Facility does not install or service motor vehicle air conditioners and does not perform vehicle maintenance that may release refrigerants.
Chapter 62-296 - Stationary Source - Emission Standards					
Purpose and Scope	62-296.100, F.A.C.	X			Contains no applicable requirements

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 10 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
General Pollutant Emission Limiting Standard, Volatile Organic Compounds Emissions	62-296.320(1), F.A.C.		X		Known and existing vapor control devices must be applied as required by the Department.
General Pollutant Emission Limiting Standard, Objectional Odor Prohibited	62-296.320(2), F.A.C.		X		Objectionable odor release is not allowed.
General Pollutant Emission Limiting Standard, Industrial, Commercial, and Municipal Open Burning Prohibited	62-296.320(3), F.A.C. ¹		X		Open burning in connection with industrial, commercial, or municipal operations is prohibited.
General Particulate Emission Limiting Standard, Process Weight Table	62-296.320(4)(a), F.A.C.	X			Facility does not have any applicable emission units. Combustion emission units are exempt per 62-320(4)(a)1a.
General Particulate Emission Limiting Standard, General Visible Emission Standard	62-296.320(4)(b), F.A.C.		X		Opacity limited to 20 percent, unless otherwise permitted.
General Particulate Emission Limiting Standard, Unconfined Emission of Particulate Matter	62-296.320(4)(c), F.A.C.		X		Reasonable precautions must be taken to prevent unconfined particulate matter emission.
Specific Emission Limiting and Performance Standards	62-296.405, F.A.C.			CS-001 through CS-004	Defines specific emission limitations for the applicable emission units.
Specific Emission Limiting and Performance Standards	62-296.401 through 62-296.404 and 62-296.406 through 62-296.417, F.A.C.	X			No applicable unit at facility.
Reasonably Available Control Technology (RACT) Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO _x) Emitting Facilities	62-296.500 through 62-296.512, F.A.C.; 62-296.514 through 62-296.516, F.A.C.	X			Facility does not include any regulated emission units.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 11 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Surface Coating of Miscellaneous Metal Parts and Products	62-296.513, F.A.C.			GCS-001	Defines specific coating VOC content for applicable emission unit.
Reasonably Available Control Technology (RACT) - Requirements for Major VOC- and NO _x -Emitting Facilities	62-296.570, F.A.C.	X			Facility is not located in a specified VOC nonattainment area or a specified VOC air quality maintenance area (Broward, Dade and Palm Beach Counties).
Reasonably Available Control Technology (RACT) - Lead	62-296.600 through 62-296.605, F.A.C.	X			Facility not located in a lead nonattainment area or a lead air quality maintenance area.
Reasonably Available Control Technology (RACT)—Particulate Matter	62-296.700, F.A.C.			CS-001 through CS-004, CH-032 through CH-035, CH-059 through CH-062, LSH-001 through LSH-007, FH-001, FH-004, and FH-006	Requires compliance with specific, applicable emission limiting standards.
Fossil Fuel Steam Generators	62-296.702, F.A.C.			CS-001 through CS-004	Defines specific emission limitations for the applicable emission units.
Materials Handling, Sizing, Screening, Crushing, and Grinding Operations	62-296.711, F.A.C.			CH-032 through CH-035, CH-059 through CH-062, LSH-001 through LSH-007, FH-001, FH-004, and FH-006	Defines specific emission limitations for the applicable emission units.
Reasonably Available Control Technology (RACT) - Particulate Matter	62-296.701 and 62-296.703 through 62-296.710, F.A.C.	X			Facility does not include any regulated emission units.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 12 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Miscellaneous Manufacturing Process Operations	62-296.712, F.A.C.			GCS-002	Defines specific emission limitations for the applicable emission units.
Chapter 62-297 - Stationary Sources - Emissions Monitoring					
Purpose and Scope	62-297.100, F.A.C.	X			Contains no applicable requirements.
General Test Requirements	62-297.310, F.A.C.			CS-001 through CS-007, FH-001, FH-002, FH-004, FH-005, FH-006, FH-007, CH-059 through CH-062	Specifies general compliance test requirements.
Compliance Test Methods	62-297.401, F.A.C.	X			Contains no applicable requirements.
Supplementary Test Procedures	62-297.440, F.A.C.	X			Contains no applicable requirements.
EPA VOC Capture Efficiency Test Procedures	62-297.450, F.A.C.	X			Contains no applicable requirements.
CEMS Performance Specifications	62-297.520, F.A.C.	X			Contains no applicable requirements.
Exceptions and Approval of Alternate Procedures and Requirements	62-297.620, F.A.C.	X			Exceptions or alternate procedures have not been requested.
Operating Permits					
	AO29-219924			CS-001	See Appendix D for permit text and conditions.
	AO29-179912			CS-002	See Appendix D for permit text and conditions.
	AO29-279911			CS-003	See Appendix D for permit text and conditions.
	PSD-FL-040 PA 79-12			CS-004	See Appendix D for permit text and conditions.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements (Page 13 of 13)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
	AO29-160257			CS-005	See Appendix D for permit text and conditions.
	AO29-174596			CS-006	See Appendix D for permit text and conditions.
	AO29-174611			CS-007	See Appendix D for permit text and conditions.
	AO29-160255			FH-001, FH-002, FH-003	See Appendix D for permit text and conditions.
	AO29-161082			FH-004, FH-005	See Appendix D for permit text and conditions.
	AO29-163788			CH-059 through CH-062	See Appendix D for permit text and conditions.
	Final Phase I Acid Rain Permit - Docket/ORIS Code Number 0645			CS-001 through CS-004	See Appendix D for permit text and conditions.

¹State requirement only; not federally enforceable.

Source: ECT, 1996.

APPENDIX B

POTENTIAL EMISSION RATE SUMMARIES

Note: Only criteria pollutant emission rate summary included in submittal to FDEP. Summary submitted to FDEP includes "FDEP" in the footer.

Tampa Electric Company
 Big Bend Station – Emission Limited Pollutant Summary

Criteria Pollutants

Emissions Unit	Emission Rates (ton/yr)			
	SO ₂	NO _x	PM	CO
Unit 1	114,933.4	N/A	2,210.3	N/A
Unit 2	113,766.1	N/A	2,187.8	N/A
Unit 3	117,154.1	12,616.6	2,253.0	N/A
Unit 4	15,551.6	11,379.2	569.0	550.0
Limestone Handling	N/A	N/A	0.5	N/A
Fly Ash Handling	N/A	N/A	46.1	N/A
Totals	361,405.2	23,995.8	7,266.7	550.0

APPENDIX C
EMISSION INVENTORY WORKSHEETS

EMISSION INVENTORY WORKSHEET

Tampa Electric Company - Big Bend Station

FH-001

EMISSION SOURCE TYPE

MATERIAL TRANSFER - CONTROLLED EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fly Ash Handling - From Units 1 and 2 or Trucks to Silo #1

Emission Control Method(s)/ID No.(s): Baghouse/ DC-8

Emission Point ID: FH-001 Transfer Point ID(s): FA-T1, FA-T2

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr)

Emission (tpy) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr) * hrs/yr * (1 ton/2000 lb)

Source: ECT, 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Transfer Points Controlled By Common Control Device	Transfer Point ID No.	Exhaust Flow Rate (scfm)	Exit Grain Loading (gr/scf)	Potential PM Emission Rates	
				(lb/hr)	(tpy)
Units 1 and 2 or Trucks to Silo #1	FA-T1	20,081	0.03	5.16	22.62
Dry Transfer from Silo #1 to Trucks	FA-T2				

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	Estimated: TEC, 1995.
Exhaust Flow Rate	TEC, 1995.
Exit Grain Loading	Typical baghouse exit loading: ECT, 1995.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by: T. Davis Date: 10/18/94

Evaluated by: T. Davis Date: 12/9/94

Data Entered by: T. Davis Date: 8/28/95

Reviewed by: Date:

EMISSION INVENTORY WORKSHEET

Tampa Electric Company – Big Bend Station

FH-004

EMISSION SOURCE TYPE

MATERIAL TRANSFER – CONTROLLED EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fly Ash Handling – From Units 1,2, and 3 to Silo #2

Emission Control Method(s)/ID No.(s): Baghouse/ DC-9

Emission Point ID: FH-004

Transfer Point ID(s): FA-T4, FA-T5

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr)

Emission (tpy) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr) * hrs/yr * (1 ton/2000 lb)

Source: ECT, 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Transfer Points Controlled By Common Control Device	Transfer Point ID No.	Exhaust Flow Rate (scfm)	Exit Grain Loading (gr/scf)	Potential PM Emission Rates	
				(lb/hr)	(tpy)
Units 1,2, and 3 to Silo #2	FA-T4	20,081	0.03	5.16	22.62
Dry Transfer from Silo #2 to Trucks	FA-T5				

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	Estimated: TEC, 1995.
Exhaust Flow Rate	TEC, 1995.
Exit Grain Loading	Typical baghouse exit loading: ECT, 1995.

NOTES AND OBSERVATIONS

Silo #2 will receive fly ash from a maximum of two units at one time.

DATA CONTROL

Data Collected by:	T. Davis	Date:	10/18/94
Evaluated by:	T. Davis	Date:	12/9/94
Data Entered by:	T. Davis	Date:	8/28/95
Reviewed by:		Date:	

EMISSION INVENTORY WORKSHEET

Tampa Electric Company – Big Bend Station

FH-006

EMISSION SOURCE TYPE

MATERIAL TRANSFER – CONTROLLED EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fly Ash Handling – From Unit 4 to Silo #3

Emission Control Method(s)/ID No.(s): Baghouse/ DC-10

Emission Point ID: FH-006 Transfer Point ID(s): FA-T6, FA-T7

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr)

Emission (tpy) = Flow Rate (scfm) * (grain/scf) * (1 lb/7,000 grain) * (60 min/hr) * hrs/yr * (1 ton/2000 lb)

Source: ECT, 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Transfer Points Controlled By Common Control Device	Transfer Point ID No.	Exhaust Flow Rate (scfm)	Exit Grain Loading (gr/scf)	Potential PM Emission Rates	
				(lb/hr)	(tpy)
Unit 4 to Silo #3	FA-T6	1,200	0.02	0.21	0.90
Dry Transfer from Silo #3 to Trucks	FA-T7				

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	Estimated: TEC, 1995.
Exhaust Flow Rate	TEC, 1995.
Exit Grain Loading	Typical baghouse exit loading: ECT, 1995.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by:	T. Davis	Date:	10/18/94
Evaluated by:	T. Davis	Date:	12/9/94
Data Entered by:	T. Davis	Date:	8/28/95
Reviewed by:		Date:	

EMISSION INVENTORY WORKSHEET

Tampa Electric Company – Big Bend Station

CS-001

EMISSION SOURCE TYPE

COAL COMBUSTION – CRITERIA POLLUTANTS

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Unit No. 1, Pulverized Fuel – Wet Bottom

Emission Control Method(s)/ID No.(s): Electrostatic Precipitator (ESP)

Emission Point ID: CS-001

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Heat Input (MMBtu/hr) x Pollutant Emission Rate (lb/MMBtu)

Emission (ton/yr) = Heat Input (MMBtu/hr) x Pollutant Emission Rate (lb/MMBtu) x Operating Period (hrs/yr) * (1ton/ 2,000 lb)

Source: ECT, 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Criteria Pollutant	Maximum Heat Input (MMBtu/hr)	Pollutant Emission Factor (lb/MMBtu)	Potential Emission Rates	
			(lb/hr)	(tpy)
SO ₂	4,037	6.500	26,240.5	114,933.4
PM ¹	4,037	0.300	1,211.1	2,210.3

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	TEC, 1995.
Maximum Heat Input	TEC, 1995.
Emission Factors; SO ₂ and PM	Allowable emission rates.

NOTES AND OBSERVATIONS

¹ Annual PM emission rate based on 0.3 lb/MMBtu for 3 hrs/day (soot blowing) and 0.1 lb/MMBtu for 21 hrs/day.

DATA CONTROL

Data Collected by:	T. Davis	Date:	10/18/94
Evaluated by:	T. Davis	Date:	12/12/94
Data Entered by:	T. Davis	Date:	8/28/95
Reviewed by:		Date:	

EMISSION INVENTORY WORKSHEET

Tampa Electric Company – Big Bend Station

CS – 003

EMISSION SOURCE TYPE

COAL COMBUSTION – CRITERIA POLLUTANTS

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Unit No. 3, Pulverized Fuel – Wet Bottom

Emission Control Method(s)/ID No.(s): Electrostatic Precipitator (ESP)

Emission Point ID: CS-003

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Heat Input (mmBtu/hr) x Pollutant Emission Rate (lb/MMBtu)

Emission (ton/yr) = Heat Input (mmBtu/hr) x Pollutant Emission Rate (lb/MMBtu) x Operating Period (hrs/yr) * (1ton/ 2,000 lb)

Source: ECT, 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Criteria Pollutant	Maximum Heat Input (mmBTU/hr)	Pollutant Emission Factor (lb/mmBtu)	Potential Emission Rates	
			(lb/hr)	(tpy)
SO ₂	4,115	6.500	26,747.5	117,154.1
PM ¹	4,115	0.300	1,234.5	2,253.0
NO _x	4,115	0.700	2,880.5	12,616.6

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	TEC, 1995.
Maximum Heat Input	TEC, 1995.
Emission Factors; SO ₂ , PM, and NO _x	Allowable emission rates.

NOTES AND OBSERVATIONS

¹ Annual PM emission rate based on 0.3 lb/MMBtu for 3 hrs/day (soot blowing) and 0.1 lb/MMBtu for 21 hrs/day.

DATA CONTROL

Data Collected by:	T. Davis	Date:	10/18/94
Evaluated by:	T. Davis	Date:	12/12/94
Data Entered by:	T. Davis	Date:	8/28/95
Reviewed by:		Date:	

EMISSION INVENTORY WORKSHEET

GC Service

GCS-002

EMISSION SOURCE TYPE

ABRASIVE BLAST BOOTH – CONTROLLED EMISSION SOURCE

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Abrasive Blast Booth

Emission Control Method(s)/ID No.(s): Baghouse

Emission Point ID: GCS-002

EMISSION ESTIMATION EQUATIONS

$$\text{Emission (lb/hr)} = \text{Flow Rate (scfm)} * (\text{grain/scf}) * (1 \text{ lb}/7,000 \text{ grain}) * (60 \text{ min/hr})$$

$$\text{Emission (tpy)} = \text{Flow Rate (scfm)} * (\text{grain/scf}) * (1 \text{ lb}/7,000 \text{ grain}) * (60 \text{ min/hr}) * \text{hrs/yr} * (1 \text{ ton}/2000 \text{ lb})$$

Source: ECT, 1997.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 8,760 Hrs/Yr

Emission Units Controlled By Common Control Device	Transfer Point ID No.	Exhaust Flow Rate (scfm)	Exit Grain Loading (gr/scf)	Potential PM ₁₀ Emission Rates	
				(lb/hr)	(tpy)
Abrasive Blast Booth	GCS-005	7,500	0.02	1.29	5.63

SOURCES OF INPUT DATA

Variable	Data Source
Operating Hours	GCS, 1997.
Exhaust Flow Rate	GCS, 1997.
Exit Grain Loading	Typical baghouse exit loading: ECT, 1997.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by:	A. Trbovich	Date:	03/25/97
Evaluated by:	A. Trbovich	Date:	03/25/97
Data Entered by:	A. Trbovich	Date:	03/25/97
Reviewed by:		Date:	

APPENDIX D

CURRENT PERMITS



Florida Department of Environmental Regulation

Southwest District
Lawton Chiles, Governor

3804 Coconut Palm
813-744-6100

Tampa, Florida 33619
Carol M. Browner, Secretary

RECEIVED

DEC 28 1992

ENVIRONMENTAL
PLANNING

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL

Mr. Lynn F. Robinson
Environmental Planning
Tampa Electric Company
Post Office Box 111
Tampa, FL 33601

DER File No.: AO29-219924
County: Hillsborough

Enclosed is Permit Number AO29-219924 to operate a 4037 MMBTU/hr. coal-fired steam generator designated as Big Bend Station Unit No. 1, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 32399-2400, within fourteen (14) days of receipt of this permit. 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, Florida Statutes.

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;

enclosed paper

(f) A statement of which rules or statutes petitioner contends required 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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted 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, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.


When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Tampa Electric Company
Tampa, FL 33601

Page Three

Executed in Tampa, Florida

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

JHK/BK/bm

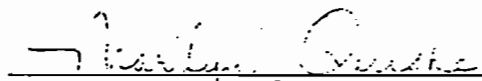
Attachment:

cc: Environmental Protection Commission
of Hillsborough County

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on DEC 23 1992 to the listed persons.

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



Clerk

DEC 23 1992
Date



Florida Department of Environmental Regulation

Southwest District

3804 Coconut Palm

Tampa, Florida 33619

Lawton Chiles, Governor

813-744-6100

Carol M. Browner, Secretary

PERMITTEE:

Tampa Electric Company
Post Office Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-219924
County: Hillsborough
Expiration Date: 12/01/97
Project: Big Bend Station
Unit No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part of hereof and specifically described as follows:

For the operation of a 4037 MMBTU/hr. coal-fired steam generator designated as Big Bend Station Unit No. 1. This "wet" bottom boiler was manufactured by Riley Stoker Corporation and is an opposed-fired turbo boiler. It shares a common stack with Big Bend Station Unit No. 2. The generator nameplate capacity is 445.5 MW.

Particulate emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator manufactured by Western Precipitator Division, Joy Manufacturing Corporation.

Location: Big Bend Road, Ruskin

UTM: 17-361.9 E 3074.0 N NEDS NO: 0039 Point ID: 01

Replaces Permit No.: A029-140721

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-219924
PROJECT: Big Bend Station Unit No. 1

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Except as provided in Specific Condition No. 5, the particulate matter emission rate for this source shall not exceed 0.1 pounds per million Btu heat input, over a two hour average. [Rule 17-2.600(5)(a)2., F.A.C.]
3. Except as provided in Specific Condition No. 5, visible emissions from this source shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 17-2.600(5)(a)1., F.A.C.]
4. Big Bend Station Units 1, 2, and 3, in total, shall not emit more than 31.5 tons per hour of sulfur dioxide on a three-hour average, but in no case to exceed a two-hour average emission of 6.5 pounds of sulfur dioxide per million Btu heat input. Units 1, 2, and 3, in total, shall not emit more than 25 tons per hour of sulfur dioxide on a 24 hour average. [Rule 17-2.600(5)(a)3.b.(ii), F.A.C.]
5. Excess Emissions:
 - A) Excess emissions from existing fossil fuel steam generators resulting from startup or shut down are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. [Rule 17-2.250(2), F.A.C.]
 - B) Excess emissions resulting from boiler cleaning (soot blowing) and load change are permitted provided that the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of the excess emissions are minimized. Visible emissions above 60% opacity are allowed for not more than four, six-minute periods, during the 3-hour period of excess emissions allowed by part B. of this specific condition. Particulate matter emissions shall not exceed an average of 0.3 pounds per million Btu heat input during the 3-hour period of excess emissions allowed by part B. of this specific condition. [Rule 17-2.250(3), F.A.C.]
 - C) Excess emissions resulting from malfunctions* are permitted providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions are minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department of Environmental Regulation for a longer duration. [Rule 17-2.250(1), F.A.C.]

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-219924
PROJECT: Big Bend Station Unit No. 1

SPECIFIC CONDITIONS: (continued)

- D) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shut down, or malfunction are prohibited. [Rule 17-2.250(4), F.A.C.]

* In case of excess emissions resulting from malfunctions, Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested. [Rule 17-2.250(6), F.A.C.]

6. This source shall be stack tested for particulate matter and visible emissions, under both sootblowing and non-sootblowing operation conditions, at intervals of 12 months from the date of December 21, 1991, or within a 90-day period prior to that annual date. A test under sootblowing conditions which demonstrates compliance with a non-sootblowing emission limitation will be accepted as proof of compliance with that non-sootblowing emission limitation. The visible emissions DER Method No. 9 test period for this source shall be at least 60 minutes in duration. Visible emissions testing shall be conducted simultaneously with particulate matter testing unless visible emissions testing is not required. In situations where DER Method No. 9 visible emissions testing is not possible during particulate matter testing such as under overcast days, independent visible emissions testing may be performed at a later date within but not more than 5 days after particulate testing. Reasons for non-simultaneous testing must be provided in the test report. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

7. This source shall be stack tested for sulfur dioxide at intervals of 12 months from the date of December 21, 1991, or within a 90-day period prior to that annual date. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

8. Compliance testing for particulate matter emissions and visible emissions may be conducted either: (a) without fly ash re-injection occurring, or (b) while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate. If the most recent particulate and visible emissions compliance tests were conducted without fly ash re-injection occurring, and fly ash re-injection occurs for any reason other than a malfunction, then the results from particulate and visible emissions compliance tests conducted while ash collected by the precipitator is being re-injected into the boiler

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-219924
PROJECT: Big Bend Station Unit No. 1

SPECIFIC CONDITIONS: (continued)

at a rate which is representative of the maximum anticipated fly ash re-injection rate shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 60 days of the date that such fly ash re-injection occurred. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60-day time limit on a case by case basis.

9. Compliance with the SO₂ emission standards set forth by Specific Condition No. 4 shall be demonstrated by:

- A) Conducting an annual stack test, using an approved DER Method, with a fuel analysis for the coal burned to show compliance with the two hour standard (two hour average emissions) of 6.5 pounds of sulfur dioxide per million Btu heat input.
- B) Not charging the fuel bunkers of units 1 through 3 with any coal with a composite sulfur content that would produce emissions greater than 6.5 pounds of sulfur dioxide per million Btu heat input to show continuing compliance with the two hour standard. This can be accomplished in part by blending various grades of coal on-site prior to charging into the fuel bunkers located in the tripper room.
- C) Daily composite fuel sampling and analysis to show compliance with the emission cap for units 1 through 3 of 25 tons of sulfur dioxide per hour on a 24-hour average. The following equation shall be used:

$$SO_2 = \frac{\#S}{MMBTU} \times \frac{2 \#SO_2}{\#S} \times \frac{MMBTU}{MWH} \times .95 \times \frac{MWH}{\text{day}} \times \frac{\text{tons } SO_2}{2000 \text{ lbs. } SO_2}$$

- Where:
- (i) - comes from the daily fuel analysis
 - (ii) - conversion factor
 - (iii) - heat rate from the previous month's heat rate calculation
 - (iv) - conversion factor describing percent S in the coal that is converted to gaseous SO₂
 - (v) - daily generation from station logs
 - (vi) - conversion factor

This equation shall be used and the calculations completed for each of the units 1 through 3. This information shall be submitted to the Environmental Protection Commission of Hillsborough County on a quarterly basis no later than 45 days following the calendar quarter. If an exceedance of this

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-219924
PROJECT: Big Bend Station Unit No. 1

SPECIFIC CONDITIONS: (continued)

standard occurs, then the permittee shall report this event to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 24 hours of the determination.

- D) Adhering to the study, previously submitted, that demonstrates by a statistical analysis, that the 31.5 tons of SO₂ per hour on a three-hour average is being met. This study provides reasonable assurance that a daily sample can be used to demonstrate compliance with the 3 hour emission cap.

10. The maximum permitted heat input rate for this source is 4037 million Btu per hour. Approved compliance testing of emissions shall be conducted within $\pm 10\%$ of the maximum permitted heat input rate, when practicable. Testing may be conducted at less than 90% of the maximum permitted heat input rate; however, if so, the maximum permitted heat input rate is automatically amended to be equal to the test heat input rate. If the maximum permitted heat input rate for this source is exceeded by more than 10%, compliance testing shall be performed within 60 days of initiation of the higher rate and the results of the tests shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60 day time limit on a case by case basis. Acceptance of said test will automatically amend the maximum permitted heat input rate to be equal to the test heat input rate. Emission limitations are not automatically adjusted above the allowable levels established by the permit and/or the design process rate. The actual heat input rate shall be specified in each test report. Failure to submit the actual heat input rate, or operation at conditions during testing which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.]

11. Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. The Environmental Protection Commission of Hillsborough County may waive the 15 day notice requirement on a case by case basis. [Rule 17-2.700(2)(a)9., F.A.C.]

12. A continuous monitoring system to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Rule 17-2.710(1), F.A.C.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-219924
PROJECT: Big Bend Station Unit No. 1

SPECIFIC CONDITIONS: (continued)

13. Tampa Electric Company shall submit to both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County a written report of emissions in excess of the emission limiting standards as set forth in Rule 17-2.600(5) for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve Tampa Electric Company of the legal liability for violations. All recorded data shall be maintained on file for a period of at least 2 years. The information supplied in this report shall be consistent with the reporting requirements of 40 CFR 51, Appendix P. The report shall be submitted within 30 days following each calendar quarter. [Rules 17-2.710(1), 17-2.710(2), and 17-4.070(3), F.A.C.]

14. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

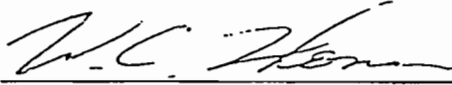
- A) Annual amount of materials and/or fuels utilized.
- B) Annual emissions (note calculation basis).
- C) Any changes in the information contained in the permit application.

The report shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

15. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.]

16. To renew this operating permit, a completed application, in quadruplicate, shall be submitted to the Environmental Protection Commission of Hillsborough County by October 1, 1997. [Rules 17-4.050(2) and 17-4.090(1), F.A.C.]

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION


For Richard Garrity, Ph.D.
Director of District Management

7 ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title of household interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit;
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

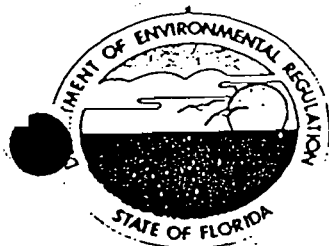
This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standard

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 1. the date, exact place, and time of sampling or measurements;
 2. the person responsible for performing the sampling or measurements;
 3. the dates analyses were performed;
 4. the person responsible for performing the analyses;
 5. the analytical techniques or methods used;
 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garnry, Deputy Assistant Secretary

RECEIVED

NOTICE OF PERMIT

NOV 20

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT ISSUANCE

ENVIRO
PLA:

November 19, 1990

In the Matter of an Application **DER File No. A029-179912**
for Permit by: **Hillsborough County**
Mr. Jerry L. Williams
Director - Environmental
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

Enclosed is Permit Number A029-179912 to Operate Big Bend Station, No. 2 Boiler, issued pursuant to Section 403, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 receipt of this permit. 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, Florida Statutes.

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;

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(e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action;

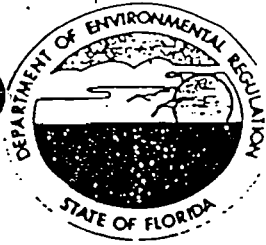
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt 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, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5201

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garity, Deputy Assistant Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-179912
County: Hillsborough
Expiration Date: 11/21/95
Project: Big Bend Station
Unit No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of a 3,996 MM Btu/hr. coal fired steam generator designated as Unit No. 2 at the Big Bend Station. This "wet" bottom boiler was manufactured by Riley-Stoker and is an opposed-fired turbo boiler. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator, manufactured by Western Precipitator, Division, Joy Manufacturing Corporation.

Location: Big Bend Road, Ruskin

UTM: 17-361.9 E 3075.0 N NEDS NO: 0039 Point ID: 02

Replaces Permit No.: A029-66329

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Gary A. Maier

Gary A. Maier, BS ChE, JD

cc: Environmental Protection Commission
of Hillsborough County
Mr. Robert Glover
at 306 Noonan Branch Rd.
Apollo Beach, FL. 33572

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all
copies were mailed before the close of business on
NOV 19 1990 to the listed persons.

FILED AND ACKNOWLEDGEMENT

FILED, on this date, pursuant
to Section 120.52(9), Florida
Statutes, with the designated
Department Clerk, receipt of
which is hereby acknowledged.

Narilyn Quispe
Clerk

NOV 19 1990
Date

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: AO29-179912
County: Hillsborough
Expiration Date: 11/21/95
Project: Big Bend Station
Unit No. 2

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Except as provided in specific condition #5; the particulate matter emission rate for this source shall not exceed 0.1 pound per million Btu heat input, over a two hour average. [Rule 17-2.600(5)(a)2., F.A.C.]
3. Except as provided in specific condition #5; visible emissions from this source shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 17-2.600(5)(a)1., F.A.C.]
4. Big Bend Station Units 1, 2, and 3, in total, shall not emit more than 31.5 tons per hour of sulfur dioxide on a three hour average, but in no case to exceed a two hour average emission of 6.5 pounds of sulfur dioxide per million Btu heat input. Units 1, 2, and 3, in total, shall not emit more than 25 tons per hour of sulfur dioxide on a 24 hour average. [Rule 17-2.600(5)(a)3.b.(ii), F.A.C.]
5. Excess Emissions:
 - A. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. [Rule 17-2.250(2), F.A.C.]
 - B. Excess emissions resulting from boiler cleaning (soot blowing) and load change are permitted provided that the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of the excess emissions are minimized. Visible emissions above 60% opacity are allowed for not more than 4, six-minute periods, during the 3-hour period of excess emissions allowed by part B. of this specific condition. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hour period of excess emissions allowed by part B. of this specific condition. [Rule 17-2.250(3), F.A.C.]

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PERMITTEE:
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Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: A029-179912
County: Hillsborough
Expiration Date: 11/21/95
Project: Big Bend Station
Unit No. 2

SPECIFIC CONDITIONS:

- C. Excess emissions resulting from malfunctions* are permitted providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions are minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department of Environmental Regulation for longer duration. [Rule 17-2.250(1), F.A.C.]
- D. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction is prohibited. [Rule 17-2.250(4), F.A.C.]

* In case of excess emissions resulting from malfunctions, Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested. [Rule 17-2.250(6), F.A.C.]

6. This source shall be stack tested for particulate matter and visible emissions, under both sootblowing and non-sootblowing operation conditions, at intervals of 12 months from the date of December 31, 1990, or within a 90-day period prior to that annual date. A test under sootblowing conditions which demonstrates compliance with a non-sootblowing emission limitation will be accepted as proof of compliance with that non-sootblowing emission limitation. The visible emissions DER Method No. 9 test period for this source shall be at least 60 minutes in duration. Visible emissions testing shall be conducted simultaneously with particulate matter testing unless visible emissions testing is not required. In situations where DER Method No. 9 visible emissions testing is not possible during particulate matter testing, such as under overcast days, independent visible emissions testing may be performed at a later date within but not more than 5 days. Reasons for non-simultaneous testing must be provided in the test report. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

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PERMITTEE:
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PERMIT/CERTIFICATION
Permit No: AO29-179912
County: Hillsborough
Expiration Date: 11/21/95
Project: Big Bend Station
Unit No. 2

SPECIFIC CONDITIONS:

7. This source shall be stack tested for sulfur dioxide at intervals of 12 months from the date of December 31, 1990, or within a 90 day period prior to that annual date. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

8. Compliance testing for particulate matter emissions and visible emissions may be conducted either: (a) without fly ash re-injection occurring, or (b) while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate. If the most recent particulate and visible emissions compliance tests were conducted without fly ash re-injection occurring, and fly ash re-injection occurs for any reason other than a malfunction, then the results from new particulate and visible emissions compliance tests conducted while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 60 days of the date that such fly ash re-injection occurred. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60 day time limit on a case by case basis.
[Rule 17-4.070(3), F.A.C.]

9. Compliance with the SO₂ emission standards set forth by Specific Condition #4 shall be demonstrated by:

- A. Conducting an annual stack test, using an approved DER Method, with a fuel analysis for the coal burned to show compliance with the two hour standard of 6.5 pounds of sulfur dioxide per million Btu heat input.
- B. Not charging the fuel bunkers of units 1 through 3 with any coal with a composite sulfur content that would produce emissions greater than 6.5 pounds of sulfur dioxide per million Btu heat input to show continuing compliance with the two hour standard. This can be accomplished in part by blending various grades of coal on-site prior to charging into the fuel bunkers located in the tripper room.

PERMITTEE:
 Tampa Electric Company
 P.O. Box 111
 Tampa, FL 33601

PERMIT/CERTIFICATION
 Permit No: A029-179912
 County: Hillsborough
 Expiration Date: 11/21/95
 Project: Big Bend Station
 Unit No. 2

SPECIFIC CONDITIONS:

C. Daily composite fuel sampling and analysis to show compliance with the emission cap for units 1 through 3 of 25 tons of sulfur dioxide per hour on a 24 hour average. The following equation shall be used:

$$SO_2 = \frac{\#S}{MMBTU} \times 2 \times \frac{\#SO_2}{\#S} \times \frac{MMBTU}{MWH} \times .95 \times \frac{MWH}{day} \times \frac{tons\ SO_2}{2000\ lbs.\ SO_2}$$

- Where:
- (i) - comes from the daily fuel analysis
 - (ii) - conversion factor
 - (iii) - heat rate from the previous month heat rate calculation
 - (iv) - conversion factor describing percent S in the coal that is converted to gaseous SO2 (reference 6/25/76 DER-TECO stipulation)
 - (v) - daily generation from station logs
 - (vi) - conversion factor

This equation shall be used and the calculations completed for each of the units 1 through 3. This information shall be submitted to the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation on a quarterly basis no later than 45 days following the calendar quarter. If an exceedance of this standard occurs, then the permittee shall report this event to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 24 hours of the determination.

D. Adhering to the study, previously submitted, that demonstrates by statistical analysis, that the 31.5 tons of SO2 per hour on a three hour average is being met. This study provides reasonable assurance that a daily sample can be used to demonstrate compliance with the 3 hour emission cap.

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: AO29-179912
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Project: Big Bend Station
Unit No. 2

SPECIFIC CONDITIONS:

10. The maximum permitted heat input rate for this source is 3,996 million Btu per hour. Approved compliance testing of emissions shall be conducted within $\pm 10\%$ of the maximum permitted heat input rate, when practicable. Testing may be conducted at less than 90% of the maximum permitted heat input rate; however, if so, the maximum permitted heat input rate is automatically amended to be equal to the test heat input rate. If the maximum permitted heat input rate for this source is exceeded by more than 10%, compliance testing shall be performed within 60 days of initiation of the higher rate and the results of the tests shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County. The Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60 day time limit on a case by case basis. Acceptance of said test will automatically amend the maximum permitted heat input rate to be equal to the test heat input rate. Emission limitations are not automatically adjusted above the allowable levels established by the permit and/or the design process rate. The actual heat input rate shall be specified in each test report. Failure to submit the actual heat input rate, or operation at conditions during testing which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.]

11. Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. The Environmental Protection Commission of Hillsborough County may waive the 15 day notice requirement on a case by case basis. [Rule 17-2.700(2)(a)9., F.A.C.]

12. A continuous monitoring system to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Rule 17-2.710(1), F.A.C.

BEST AVAILABLE COPY

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: A029-179912
County: Hillsborough
Expiration Date: 11/21/95
Project: Big Bend Station
Unit No. 2

SPECIFIC CONDITIONS:

13. Tampa Electric Company shall submit to both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County a written report of emissions in excess of the emission limiting standards as set forth in Rule 17-2.600(5) for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve Tampa Electric Company of the legal liability for violations. All recorded data shall be maintained on file for a period of at least 2 years. The information supplied in this report shall be consistent with the reporting requirements of 40 CFR 51 Appendix P. The report shall be submitted within 30 days following each calendar quarter. [Rules 17-2.710(1), 17-2.710(2), and 17-4.070(3), F.A.C.]

14. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

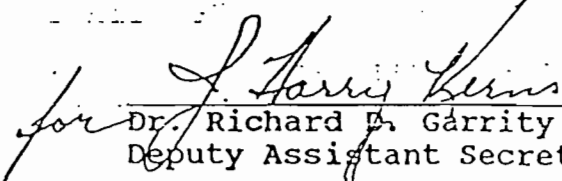
- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation shall each receive a copy of this report.

15. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.]

16. Four applications to renew this operating permit shall be submitted to the Environmental Protection Commission of Hillsborough County by September 22, 1995. [Rules 17-4.050(2) and 17-4.090(1), F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

for 
Dr. Richard A. Garrity
Deputy Assistant Secretary

ATTACHMENT - GENERAL CONDITIONS:

The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.173, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Department of
Environmental Protection

RECEIVED

AUG 1 1994



Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
ENVIRONMENTAL
7/31
Secretary

NOTICE OF PERMIT AMENDMENT

Mr. Patrick A. Ho, P.E.
Manager, Environmental Permitting
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111

Dear Mr. Ho:

Re: Hillsborough County - AP
A029-279911, PATS Processing No. 254096

On July 5, 1994, the Department received your request to amend air pollution permit A029-179911 which is for Big Bend Station Unit No. 3. Specifically, the request related to the recent legislation involving nitrogen oxide compliance limits pursuant to 40 CFR 75. Therefore, as requested permit A029-179911 is hereby amended as follows:

Specific Condition No. 5

From: The nitrogen oxides emission rate (expressed as NO₂) from this source shall not exceed 0.70 pound per million Btu heat input. [Rule 17-2.600(5)(a)4.d., F.A.C.].

To: The nitrogen oxides emission rate (expressed as NO₂) from this source shall not exceed 0.70 pounds per million Btu heat input based upon a 30-day rolling average. [Rule 17-296.405(1)(d)4., F.A.C.]

Specific Condition No. 10

From: This source shall be stack tested for nitrogen oxides (expressed as NO₂) at intervals of 12 months from the date of August 14, 1989, or within a 90 day period prior to that annual date. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

To: This source shall demonstrate compliance for nitrogen oxides (expressed as NO₂) based upon a 30-day rolling average. The methodology to be used will follow the criteria set forth in 40 CFR 60, Subpart Da. the calculations shall be consistent with the equations in 40 CFR 60, Appendix A, Reference Method 19, Section 4.2. (July 1, 1993). Data collected during boiler operating days will be used to calculate the 30-day rolling average except during periods of start-up, shut down, or malfunction, consistent with the provisions of Rule 17-210.700, F.A.C.

For the purpose of calculating a 30-day rolling average, a boiler operating day is defined as a 24-hour period (between 12:01 a.m. and 12:00 midnight) during which fossil fuel is combusted in a steam operating unit for the entire 24-hours.

The continuous emission monitor shall meet the quality assurance requirements and performance specifications contained 40 CFR 75.

A report shall be submitted to both the Florida Department of Environmental Protection and the Environmental Protection Commission of Hillsborough County within 30 days following each calendar quarter. This report shall contain the 30-day rolling average, all time periods of boiler operation as well as a statement of CEM and/or boiler malfunction, start-up or shutdown.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 receipt of this permit amendment. 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, Florida Statutes.

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
- (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 permit amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt 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, F.A.C.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further Order of the Department.

When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate procedure, with the Clerk of the Department in the Office of


Tampa Electric Company
A029-179911

Page 3 of 4

General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

This letter must be attached to and becomes a part of permit A029-179911. If you have any questions, please call Mr. Jim McDonald of my staff at (813)744-6100 extension 421.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Richard D. Garrity, Ph.D.
Director of District Management

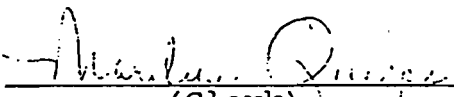
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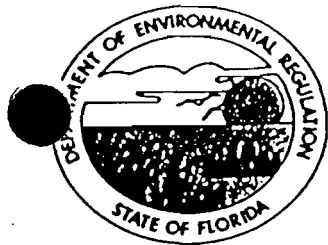
CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed by certified mail before the close of business on JUL 29 1994 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGEMENT FILED,
on this date, pursuant to Section
120.52(11), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby acknowledge.


(Clerk) JUL 29 1994
(Date)



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garrity, Deputy Assistant Secretary

NOTICE OF PERMIT

RECEIVED

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

AUG 30 1990

ENVIRONMENTAL
PLANNING

August 30, 1990

In the Matter of an Application
for Permit by:

Mr. Jerry L. Williams
Director - Environmental
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

DER File No. A029-179911
Hillsborough County

Enclosed is Permit Number A029-179911 to Operate Big Bend Station, No. 3 Boiler, issued pursuant to Section 403, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 receipt of this permit. 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, Florida Statutes.

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 warrants 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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt 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, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Gary A. Maier

Gary A. Maier, BS ChE, JD

cc: Environmental Protection Commission
of Hillsborough County

CERTIFICATE OF SERVICE

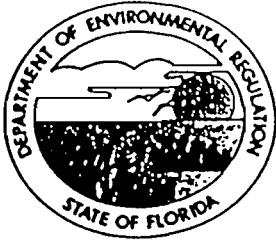
This is to certify that this NOTICE OF PERMIT and all
copies were mailed before the close of business on
AUG 30 1990 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant
to Section 120.52(9), Florida
Statutes, with the designated
Department Clerk, receipt of
which is hereby acknowledged.

Marilyn Quispe

Clerk

AUG 30 1990
Date



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of a 4115 MMBTU/hr. coal fired steam generator designated as Unit No. 3 at the Big Bend Station. This "wet" bottom boiler was manufactured by Riley-Stoker and is an opposed-fired turbo boiler. The generator has a nameplate capacity of 445.5 MW. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator manufactured by Research-Cottrell, Inc.

Location: Big Bend Road, Ruskin

UTM: 17-361.9 E 3075.0 N NEDS NO: 0039 Point ID: 03

Replaces Permit No.: A029-93937

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: A029-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Except as provided in Specific Condition #6; the particulate matter emission rate for this source shall not exceed 0.1 pound per million Btu heat input, over a two hour average.
[Rule 17-2.600(5)(a)2., F.A.C.]
3. Except as provided in Specific Condition #6; Visible Emissions from this source shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%.
[Rule 17-2.600(5)(a)1., F.A.C.]
4. Big Bend Station Units 1, 2, and 3, in total, shall not emit more than 31.5 tons per hour of sulfur dioxide on a three hour average, but in no case to exceed a two hour average emission of 6.5 pounds of sulfur dioxide per million Btu heat input. Units 1, 2, and 3, in total, shall not emit more than 25 tons per hour of sulfur dioxide on a 24 hour average. [Rule 17-2.600(5)(a)3.b.(ii), F.A.C.]
5. The nitrogen oxides emission rate (expressed as NO₂) from this source shall not exceed 0.70 pound per million Btu heat input.
[Rule 17-2.600(5)(a)4.d., F.A.C.]
6. A. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. [Rule 17-2.250(2), F.A.C.]
B. Excess emissions resulting from boiler cleaning (soot blowing) and load change are permitted provided that the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of the excess emissions are minimized. Visible emissions above 60% opacity are allowed for not more than 4, six-minute periods, during the 3-hour period of excess emissions allowed by part B. of this specific condition. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hour period of excess emissions allowed by part B. of this specific condition. [Rule 17-2.250(3), F.A.C.]

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: A029-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

SPECIFIC CONDITIONS:

7. Excess emissions resulting from malfunctions are permitted providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions are minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department of Environmental Regulation for longer duration. [Rule 17-2.250(1), F.A.C.]. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction is prohibited. [Rule 17-2.250(4), F.A.C.]. In case of excess emissions resulting from malfunctions, Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested. [Rule 17-2.250(6), F.A.C.].

8. This source shall be stack tested for particulate matter and visible emissions, under both sootblowing and non-sootblowing operation conditions, at intervals of 12 months from the date of August 14, 1989, or within a 90 day period prior to that annual date. A test under sootblowing conditions which demonstrates compliance with a non-sootblowing emission limitation will be accepted as proof of compliance with that non-sootblowing emission limitation. The visible emissions DER Method No. 9 test period for this source shall be at least 60 minutes in duration. Visible emissions testing shall be conducted simultaneously with particulate matter testing unless visible emissions testing is not required. In situations where DER Method 9 visible emissions testing is not possible during particulate matter testing, such as under overcast days, independent visible emissions testing may be performed at a later date within 5 days. Reasons for non-simultaneous testing must be provided in the test report. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

9. This source shall be stack tested for sulfur dioxide at intervals of 12 months from the date of August 14, 1989, or within a 90 day period prior to that annual date. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

SPECIFIC CONDITIONS:

10. This source shall be stack tested for nitrogen oxides (expressed as NO₂) at intervals of 12 months from the date of August 14, 1989, or within a 90 day period prior to that annual date. Testing procedures shall be consistent with the requirements of Rule 17-2.700, F.A.C. A copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within 45 days of such testing.

11. Compliance testing for particulate matter emissions and visible emissions may be conducted either: (a) without fly ash re-injection occurring, or (b) while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate. If the most recent particulate and visible emissions compliance tests were conducted without fly ash re-injection occurring, and fly ash re-injection occurs for any reason other than a malfunction, then the results from new particulate and visible emissions compliance tests conducted while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 60 days of the date that such fly ash re-injection occurred. The Department of Environmental Regulation or the Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60 day time limit on a case by case basis. [Rule 17-4.070(3), F.A.C.].

12. Compliance with the SO₂ emission standards set forth by Specific Condition #4 shall be demonstrated by:

A. Conducting an annual stack test, using an approved DER Method, with a fuel analysis for the coal burned to show compliance with the two hour standard of 6.5 pounds of sulfur dioxide per million Btu heat input.

B. Not charging the fuel bunkers of units 1 through 3 with any coal with a composite sulfur content that would produce emissions greater than 6.5 pounds of sulfur dioxide per million Btu heat input to show continuing compliance with the two hour standard. This can be accomplished in part by blending various grades of coal on-site prior to charging into the fuel bunkers located in the tripper room.

PERMITTEE:
 Tampa Electric Company
 P.O. Box 111
 Tampa, FL 33601

PERMIT/CERTIFICATION
 Permit No: A029-179911
 County: Hillsborough
 Expiration Date: 08/30/95
 Project: Big Bend Station
 Unit No. 3

SPECIFIC CONDITIONS:

C. Daily composite fuel sampling and analysis to show compliance with the emission cap for units 1 through 3 of 25 tons of sulfur dioxide per hour on a 24 hour average. The following equation shall be used:

$$SO_2 = \frac{\#S}{MMBTU} \times \frac{2 \#SO_2}{\#S} \times \frac{MMBTU}{MWH} \times .95 \times \frac{MWH}{day} \times \frac{tons \ SO_2}{2000 \ lbs. \ SO_2}$$

- Where:
- (i) - comes from the daily fuel analysis
 - (ii) - conversion factor
 - (iii) - heat rate from the previous month heat rate calculation
 - (iv) - Conversion factor describing percent S in the coal that is converted to gaseous SO2 (reference 6/25/76 DER-TECO Stipulation)
 - (v) - daily generation from station logs
 - (vi) - conversion factor

This equation shall be used and the calculations completed for each of the units 1 through 3. This information shall be submitted to the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation on a quarterly basis no later than 45 days following the calendar quarter. If an exceedance of this standard occurs, then the permittee shall report this event to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 24 hours of the determination.

D. Adhering to the study, previously submitted, that demonstrates by statistical analysis, that the 31.5 tons of SO2 per hour on a three hour average is being met. This study provides reasonable assurance that a daily sample can be used to demonstrate compliance with the 3 hour emission cap.

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: AO29-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

SPECIFIC CONDITIONS:

13. The maximum permitted heat input rate for this source is 4,115 million Btu per hour. Approved compliance testing of emissions shall be conducted within $\pm 10\%$ of the maximum permitted heat input rate, when practicable. Testing may be conducted at less than 90% of the maximum permitted heat input rate; however, if so, the maximum permitted heat input rate is automatically amended to be equal to the test heat input rate. If the maximum permitted heat input rate for this source is exceeded by more than 10%, compliance testing shall be performed within 60 days of initiation of the higher rate and the results of the tests shall be submitted to the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County. The Department of Environmental Regulation or the Environmental Protection Commission of Hillsborough County may, for good cause shown, grant an extension of the 60 day time limit on a case by case basis. Acceptance of said test will automatically amend the maximum permitted heat input rate to be equal to the test heat input rate. Emission limitations are not automatically adjusted above the allowable levels established by the permit and/or the design process rate. The actual heat input rate shall be specified in each test report. Failure to submit the actual heat input rate, or operation at conditions during testing which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.].

14. Tampa Electric Company shall notify the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. The Environmental Protection Commission of Hillsborough County may waive the 15 day notice requirement on a case by case basis. [Rule 17-2.700(2)(a)9., F.A.C.].

15. A continuous monitoring system to determine in-stack opacity from this source shall be calibrated, operated and maintained in accordance with Rule 17-2.710(1), F.A.C.

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: AO29-179911
County: Hillsborough
Expiration Date: 08/30/95
Project: Big Bend Station
Unit No. 3

SPECIFIC CONDITIONS:

16. A report shall be submitted to both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County within 30 days following each calendar quarter detailing excess opacity readings recorded during the three month period. For the purpose of this report, excess emissions shall be defined as all six minute averages of opacity which exceed the limitations of specific conditions #3 and #6. The information supplied in this report shall be consistent with the reporting requirements of 40 CFR 51 Appendix P [Rule 17-2.710(1), F.A.C.].

17. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

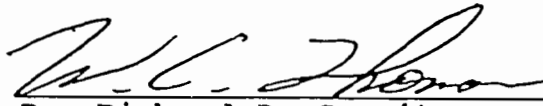
The Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation shall each receive a copy of this report.

18. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.]

19. Four applications to renew this operating permit shall be submitted to the Environmental Protection Commission of Hillsborough County by July 1, 1995. [Rules 17-4.050(2) and 17-4.090(1), F.A.C.].

Issued this 29 day of
August, 1990.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

For 
Dr. Richard D. Garrity
Deputy Assistant Secretary

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 3.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

BEST AVAILABLE COPY

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Tampa Electric Company)
Big Bend Station Unit 4)
Modification of Conditions)
of Certification PA 79-12)
Hillsborough County, Florida)

DER Case No. PA 79-12C&D
OGC Case No. 94-0914

FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION

On August 17, 1981, the Governor and Cabinet, sitting as the Sitting Board, issued a final order approving certification for Tampa Electric Company's (TECO's) Big Bend Station Unit 4. That certification order approved the construction and operation of a 486 MW (gross) coal-fired facility and associated facilities located in Hillsborough County, Florida.

On January 13, 1995, TECO filed a request to amend the conditions of certification pursuant to Section 403.516(1)(h), Florida Statutes. TECO requested that the condition be modified to approve several changes in the project design and operation of the coal yard.

Copies of TECO's proposed modification were distributed to all parties to the certification proceeding and made available for public review in June, 1995. On June 30, 1995, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. As of June 27, 1995, all parties to the original proceeding had received copies of the notice. The notice specified that a hearing would be held if a party to the original certification hearing objected within 45 days from receipt of the proposed notice of modification or if a person whose substantial interests would be affected by the proposed modification objected in

Post-It brand fax transmittal memo 7871	
# of pages	65
From	E. Benton
To	Tom Davis
Co.	ECT
Phone #	ex 48322
Fax #	(904) 332-6722 (228-1504)

writing within 30 days after issuance of the public notice. One objection to the proposed modifications as noticed was received by the Department, but it was denied as untimely. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to TECO Big Bend Station as described in the January 13, 1995, requests for modification are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the TECO Big Bend Station are MODIFIED as follows:

Condition I.A.

1. Based on a maximum heat input of 4,330 million BTU per hour, stack emissions from Big Bend Unit 4 shall not exceed the following when burning coal or a coal/petroleum coke blend:

a. - d. no change.

2. no change

3.

a. ~~The permittee shall not cause to be discharged into the atmosphere~~ Pursuant to Chapter 1-3.62 Rules of the Environmental Protection Commission of Hillsborough County, visible emissions shall not exceed 20% opacity for any unconfined emission unit in the fuel yard. Unconfined emissions as defined by Rule 62-296.200, F.A.C., shall include the static fuel piles, etc. coal-fuel processing or conveying equipment, coal-fuel storage system, coal-fuel transfer and loading system processing coal, visible emissions which exceed 20 percent opacity.

Pursuant to Rule 62.296.711(2), F.A.C., visible emissions shall not exceed 5 percent opacity for the remaining emission units in the fuel yard. Initial and subsequent visible emissions compliance tests shall be demonstrated using EPA Reference Method 9, 40 CFR Part 60, Appendix A. Visual

Determination of Fugitive Emissions from Material Sources (July 1, 1993 version). All testing shall be done within 90 days of completing reconfiguration of the fuel yard, and prior notification of testing shall be submitted in writing at least 15 days beforehand to the BPC of Hillsborough County.

Particulate emissions shall be controlled by use of control devices.

b. (No change)

c. The coal fuel pile operations are subject to Rule 6217-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter. Reasonable precautions to minimize unconfined particulate matter shall be in accordance with Rule 6217-296.310(3)(p), F.A.C.; and, may include, but shall not be limited to, the coating of roads and construction sites used by contractors and regrassing or watering areas of disturbed coal fuel.

d. From each coal fuel transloading of source/emission point (i.e., off-loading and loading of coal fuel), the maximum annual transloading transfer of coal fuel shall not exceed 4,000 tons, 24-hour rolling average.

e. From each coal fuel transloading source/emissions point (i.e., off-loading and loading of coal fuel), the maximum annual transloading transfer of coal fuel shall not exceed 1,428,030 tons.

f. The number of railcars and trucks and the quantity of coal fuel loaded by each coal fuel transloading source/emission point (i.e., off-loading and loading of coal fuel) shall be recorded, maintained, and kept on file for a minimum of two years. The annual quantity of coal fuel loaded by each coal fuel transloading source/emission shall be submitted in Annual Operation Report (AOR) to the Environmental Protection Commission of Hillsborough County by March 1 of each year for the previous year's operation.

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4. - 11. no change

12. Fuels fired shall consist of coal or a coal/petroleum coke blend containing a maximum of 20.0 percent petroleum coke by weight. The sulfur content of the petroleum coke shall not exceed 6.0 percent by weight (dry basis). Vanadium content of the mineral ash from the petroleum coke fired shall not exceed 35.0 percent by weight (ignited basis).

13. Gravimetric instrument data verifying that the 20.0 percent maximum petroleum coke by weight basis has not been exceeded shall be maintained and submitted to the Department's Southwest District Office and the Environmental Protection Commission of Hillsborough County (EPCHC) with each annual operating report.

14. Pursuant to Rule 62-212.200(2)(d), F.A.C., the actual emissions of the No. 4 Unit shall equal the representative actual emissions as defined in 40 CFR 52.21(b)(33). The Permittee shall maintain and submit to the Department and EPCHC on an annual basis for a period of five years from the date the unit begins firing petroleum coke, data demonstrating that the operational change did not result in an emissions increase.

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Any party to this Notice has the right to seek judicial review of the Order Pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General, 3900 Commonwealth Blvd., Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 10th day of September, 1995 in Tallahassee,
Florida.

STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Jh. Virginia B. Wetherell
VIRGINIA B. WETHERELL
SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

RECEIVED

JUL 11 1988

JUL 15 1988

4APT/APB-aes

ENVIRONMENTAL
PLANNING

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Jerry L. Williams, Environmental Director
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

Re: Tampa Electric Company, Big Bend Unit No. 4 (PSD-FL-040)

Dear Mr. Williams:

This is in response to your May 27, 1988, letter regarding the generating capacity restrictions contained in your federal PSD permit PSD-FL-040. We have reviewed your request to remove these restrictions and find that the changes will not in any way reduce the enforceability of the permit or affect the level of emissions generated. We hereby modify your federal PSD permit PSD-FL-040 as follows:

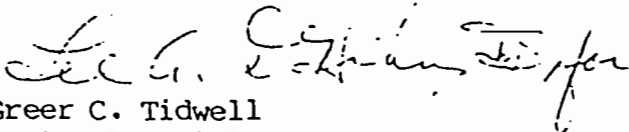
Part I: Specific Conditions

1. The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application, and the heat input to the No. 4 boiler shall not exceed 4330 mmBtu/hr.

Please be advised that the modification to your PSD permit herein described shall become a binding part of permit PSD-FL-040. This permit modification shall become effective upon receipt of this letter.

If you have any questions or comments regarding this permit modification, please contact me at (404) 347-4727 or Mr. Bruce P. Miller of my staff at (404) 347-2864.

Sincerely yours,


Greer C. Tidwell
Regional Administrator

cc: Steve Smallwood, Chief
Bureau of Air Quality
Florida Department of Environmental Regulation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OCT 9 1985

RECEIVED

REF: 4APT-AP

OCT 14 1985

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

ENVIRONMENTAL
PLANNING

Mr. A. Spencer Autry, Manager
Environmental Planning
Tampa Electrical Company
P. O. Box 111
Tampa, Florida 33601

Re: PSD-FL-040, Permit Modification for TECO Big Bend Unit 4

Dear Mr. Autry:

On October 15, 1981, EPA issued a Prevention of Significant Deterioration (PSD) construction permit to the Tampa Electrical Company (TECO) for the construction of a coal-fired utility boiler (Big Bend Unit 4) near Ruskin, Florida. In the determinations for the permit to construct, a conservative, yet erroneous emission factor for carbon monoxide was provided by your company which EPA relied upon in issuing the final permit for this source. By letter dated January 30, 1985, TECO informed the Florida Department of Environmental Regulation (DER) that an error had been identified in the PSD application emissions estimate for carbon monoxide. Subsequently, the Florida DER recommended to EPA that the federal PSD permit be modified to correct the carbon monoxide emissions limit in the permit from 0.014 lb/MMBTU, 61 lbs/hr to 0.029 lb/MMBTU, 124 lbs/hr. On March 12, 1985, EPA responded to the DER recommendation by requesting that a public notice be published prior to modifying the federal PSD permit. The public notice was published in the Tampa Tribune on April 20, 1985, and the comment period expired thirty days later on May 20, 1985. No comments were received regarding the proposed permit modifications.

EPA has, in conjunction with the DER, determined that the proposed increase in carbon monoxide emissions will not affect the ambient air quality analysis, or the Best Available Control Technology (BACT) determination made during the initial review of the proposed coal-fired utility.

EPA hereby modifies Table 1-Allowable Emission Limits of the federal PSD construction permit PSD-FL-040 as follows:

FACILITY	POLLUTANT - CO			
	FROM:	lb/MMBTU	lb/hr	TO: lb/MMBTU lb/hr
1. Unit 4 Boiler (4330 MMBTU/hr) Continuous Limit	0.014	61	0.029	124

Please note that this modification is effective upon receipt of this letter and does not alter other conditions of this permit as stipulated in General Condition 10 of your permit. A Federal Register notice will be published in the near future announcing this permit modification.

If you have any questions or comments regarding this modification, please contact me.

Sincerely yours,

John A. Little, Deputy for
Jack E. Ravan
Regional Administrator

cc: Mr. Clair Fancy, P. E.
Deputy Director
Bureau of Air Quality Management
Florida Dept. of Environmental Regulation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

File PA 17

Big Bend 4

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE
PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 U.S.C. § 7470 et seq., and the regulations promulgated thereunder at 40 C.F.R. § 52.21, as amended at 45 Fed. Reg. 52676, 52735-41 (August 7, 1980),

Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601

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ENVIRONMENTAL
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is hereby authorized to construct/modify a stationary source at the following location:

Big Bend Station, Unit 4
Tampa Electric Company
Ruskin, Florida

UTM Coordinates: 361.6 East / 3075.0 North

Upon completion of this authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II).

This permit shall become effective on November 14, 1981.

If construction does not commence within 18 months after the effective date of this permit, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and Local law.

12/15/81

Date Signed

Howard D. Zeller
Acting Director
Enforcement Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OCT 15 1981

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Heywood A. Turner
Senior Vice President Production
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601

Re: PSD-FL-040 / Tampa Electric Company
Big Bend Station, Unit 4

Dear Mr. Turner:

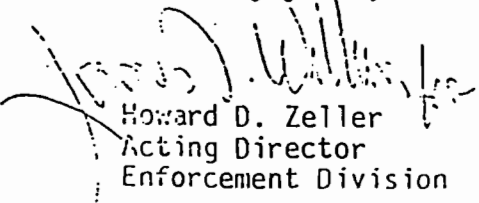
The review of your March 1980 application to construct a coal-fired steam electric generating unit (Unit 4) located at Big Bend Station near Ruskin, Florida, has been completed. The construction is subject to rules for the Prevention of Significant Air Deterioration (PSD) contained in 40 C.F.R. §52.21.

We have determined that the construction as described in the application meets all applicable requirements of the PSD regulations. Accordingly, enclosed with this letter is your permit package including a Permit to Construct, Part I: Specific Conditions, and Part II: General Conditions. This authorization to construct is based solely on the requirements of 40 C.F.R. §52.21 and does not apply to other permits issued by this or any other agency.

This final permit decision is subject to appeal under 40 C.F.R. §124.19 by petitioning the Administrator of the EPA within 30 days after receipt of this notice of the final permit decision. The petitioner must submit a statement of reasons for the appeal and the Administrator must decide on the petition within a reasonable time period. If the petition is denied, the permit becomes immediately effective. The petitioner may then seek judicial review.

Authority to construct this facility will take effect on the date specified in the permit. The complete analysis which justifies this approval has been fully documented for future reference is necessary. Any questions concerning this approval may be directed to Mr. Richard Schutt, Chief, Permit Processing Section, at 404/881-2017.

Sincerely yours,


Howard D. Zeller
Acting Director
Enforcement Division

cc: Mr. Steve Smallwood, FL DER

REC-1

OCT 19 1981

ENVIRONMENTAL

PART I: SPECIFIC CONDITIONS

Modification 7/15/88

1. ~~The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application including the 417 megawatt net generating capacity and the 4330 MMBtu/hr heat input rate.~~ 419 (1982)
2. Emissions shall not exceed the allowable emission limits listed in Table 1 for SO₂, NO_x, PM, and CO.
3. Compliance with the boiler allowable emission limits required in Condition 2 will be demonstrated with performance tests conducted in accordance with the provisions of 40 CFR 60.46a, 48a and 49a, including applicable test methods, sampling procedures, sample volumes, sampling periods, etc. Compliance with opacity limits on the limestone and flyash handling system baghouse, the limestone day silos and the flyash silos will be determined with EPA reference method 9 (Appendix A, 40 CFR 60). These facilities are exempted from mass emission rate compliance tests unless opacity limits are exceeded or the Administrator (or his representative) otherwise determines that such performance testing is required. All facilities will operate within 10 percent of maximum operating capacity during performance tests.
4. The applicant will install and maintain continuous monitoring and recording opacity meter, sulfur dioxide and nitrogen oxide analyzers, oxygen and/or CO₂ analyzer in accordance with the provisions of 40 CFR 60.47a.

5. The following requirements will be met to minimize fugitive emissions of particulate from the coal storage and handling facilities, the limestone storage and handling facilities, haul roads and general plant operations:
 - a. All conveyors and conveyor transfer points will be enclosed to preclude PM emissions excepting the coal handling stacker reclaimer, the tail end conveyor feeding the tripper and the barge unloading belt which are exempted for feasibility considerations;
 - b. Coal storage piles will be shaped, compacted and oriented to minimize wind erosion;
 - c. Water sprays for storage piles, handling equipment etc., including the handling equipment exempted from the conveyor enclosure requirement, will be applied during dry periods and as necessary to all facilities to maintain opacity (determined with reference Method 9) below 20 percent;
 - d. The limestone handling receiving hopper, conveyor transfer points and day silos will be maintained at negative pressures with the exhaust vented to a control system(s); and
 - e. The flyash handling system (including transfer and silo storage) will be maintained at negative pressures and vented to a control system.

6. The applicant will perform post-construction continuous ambient monitoring of sulfur dioxide emissions in accordance with EPA Region IV policies and procedures and the guidance offered in "Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), EPA-450/2-72-019, May 1978 and the quality

assurance procedures of 40 CFR 58 Appendix B. Such monitoring will be continued for a period of at least 1 year and until determined by the Administrator (or his representative) that the effects of the modification on ambient air quality have been quantified.

7. The applicant will comply with all requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da). In addition, the applicant must comply with the provisions and the requirements of the attached General Conditions.
8. While Tampa Electric Company has complied with the regulations entitling them to this PSD permit (40 CFR 52.21), this does not constitute an environmental endorsement of this permit nor does it in any way prejudge or predetermine the ongoing EIS review.
9. If it is determined through the NPDES permitting process or related EIS review, that cooling towers would be required for the construction and operation of the facility at this location, this permit would be revoked and a complete new application would be required addressing all new emissions and subsequent requirements for this new plant configuration.
10. The applicant must submit to EPA Region IV's Consolidated Permits Branch within five (5) working days after it becomes available, copies of all technical data pertaining to the selected control devices, including formal bids from vendors, guaranteed efficiencies or emission rates. Although the type of control equipment described in the application has been determined by EPA to be adequate, EPA may, upon review of the data, disapprove the application if EPA determines the selected devices to be inadequate to meet the emission limits specified in this conditional approval.
11. The applicant shall maintain records of all coal washing and preparation activities for any coal which is to be fired in Big Bend Unit No. 4. These reports shall be submitted to EPA on a quarterly basis.

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PART II: GENERAL CONDITIONS

PSD-FL-040

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:
 - (a) Qualitative and quantitative description of noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
 - (d) steps taken by the permittee to reduce and eliminate the non-complying emission,and
 - (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

PART II: GENERAL CONDITIONS

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority. Such notification must be given prior to transfer of ownership.
8. The permittee shall allow representatives of the State environmental control agency and/or representatives (including contractors) of the Environmental Protection Agency, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - (b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - (d) to sample at reasonable times any emission of pollutants;and
 - (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.
9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to the:

Chief, Compliance Branch
Enforcement Division, EPA Region IV
345 Courtland Street, NE
Atlanta, Georgia 30365
10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

TABLE 1
ALLOWABLE EMISSION LIMITS

Facility	POLLUTANTS								
	SO ₂		NO _x		PM		CO		Opacity
	lb/MMBtu	lb/hour	lb/MMBtu	lb/hr	lb/MMBtu	lb/hr	lb/MMBtu	lb/hr	
Unit 4 Boiler (4330 MMBtu/hr) Continuous Limit					0.03	130	0.014 ^a	61 ^b	20% ^a
30 Day Rolling Average	0.82	3576	0.6	2598					
Limestone and Handling System Baghouse						0.65 ^b			5%
Limestone Day Silo						0.05 ^b			5%
Flyash Silos and Handling System						0.2 ^b			5%

See Permit
Modification
dated Oct. 9,
1985

not to be exceeded for more than one six minute period per hour and never to exceed 27 percent opacity.

except from compliance testing provided opacity limit is maintained.

6-23-81

PRESENTED @
HEARING

File PA 17

APPENDIX I

Conditions of Certification

State of Florida Department of Environmental Regulation
 Tampa Electric Company
 Big Bend Unit 4
 PA 79-12
 CONDITIONS OF CERTIFICATION (Revised 6-2-81)

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State of Florida Department of Environmental Regulation
Tampa Electric Company
Big Bend Unit 4
PA 79-12

CONDITIONS OF CERTIFICATION (Revised 6-2-81)

I. Air

The construction and operation of Big Bend Unit 4 at the Tampa steam electric power plant site shall be in accordance with all applicable provisions of Chapters 17-2, 17-4, 17-5 and 17-7, Florida Administrative Code. In addition to the foregoing, the permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. Based on a maximum heat input of 4,330 million BTU per hour, stack emissions from Big Bend Unit 4 shall not exceed the following when burning coal:
 - a. SO₂ - 1.2 lb. per million BTU heat input, maximum two hour average, 0.84 lb/MMBtu on a 30-day rolling average.
 - b. NO_x - 0.60 lb. per million BTU heat input.
 - c. Particulates - 0.03 lb. per million BTU heat input.
 - d. Visible emissions - 20% (6-minute average), except one 6-minute period per hour of not more than 27% opacity.
2. The height of the boiler exhaust stack for Unit 4 shall not be less than 490 ft. above grade.
3. Particulate emissions from the coal handling facilities:
 - a. The permittee shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system or coal transfer and loading system processing coal, visible emissions which exceed 20 percent opacity. Particulate emissions shall be controlled by use of control devices.
 - b. The permittee must submit to the Department within ten (10) working days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling facility. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth

ratio and flow rate. The Department may, upon review of these data, disapprove the use of such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in 3(a) above. Such disapproval shall be issued within 30 days of receipt of the technical data.

4. Particulate emissions from limestone and flyash handling shall not exceed the following:
 - a. Limestone silos - 0.05 lb/hr.
 - b. Limestone hopper/transfer conveyors - 0.65 lb/hr.
 - c. Flyash handling system - 0.2 lb/hr.
5. Visible emissions from the following facilities shall be limited to 5% opacity: (a) limestone and flyash handling system, (b) limestone day silos and (c) flyash silos.
6. Compliance with opacity limits of the facilities listed in Condition 5 will be determined by EPA reference method 9 (Appendix A, 40 CFR 60).
7. Construction shall reasonably conform to the plans and schedule given in the application.
8. The permittee shall report any delays in construction and completion of the project to the Department's Southwest District Office.
9. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, will be taken by the permittee.
10. Coal should not be burned in the unit unless both electrostatic precipitator and limestone scrubber are operating properly.
11. Coal burned in the unit should be washed before it is transported to the plant site.

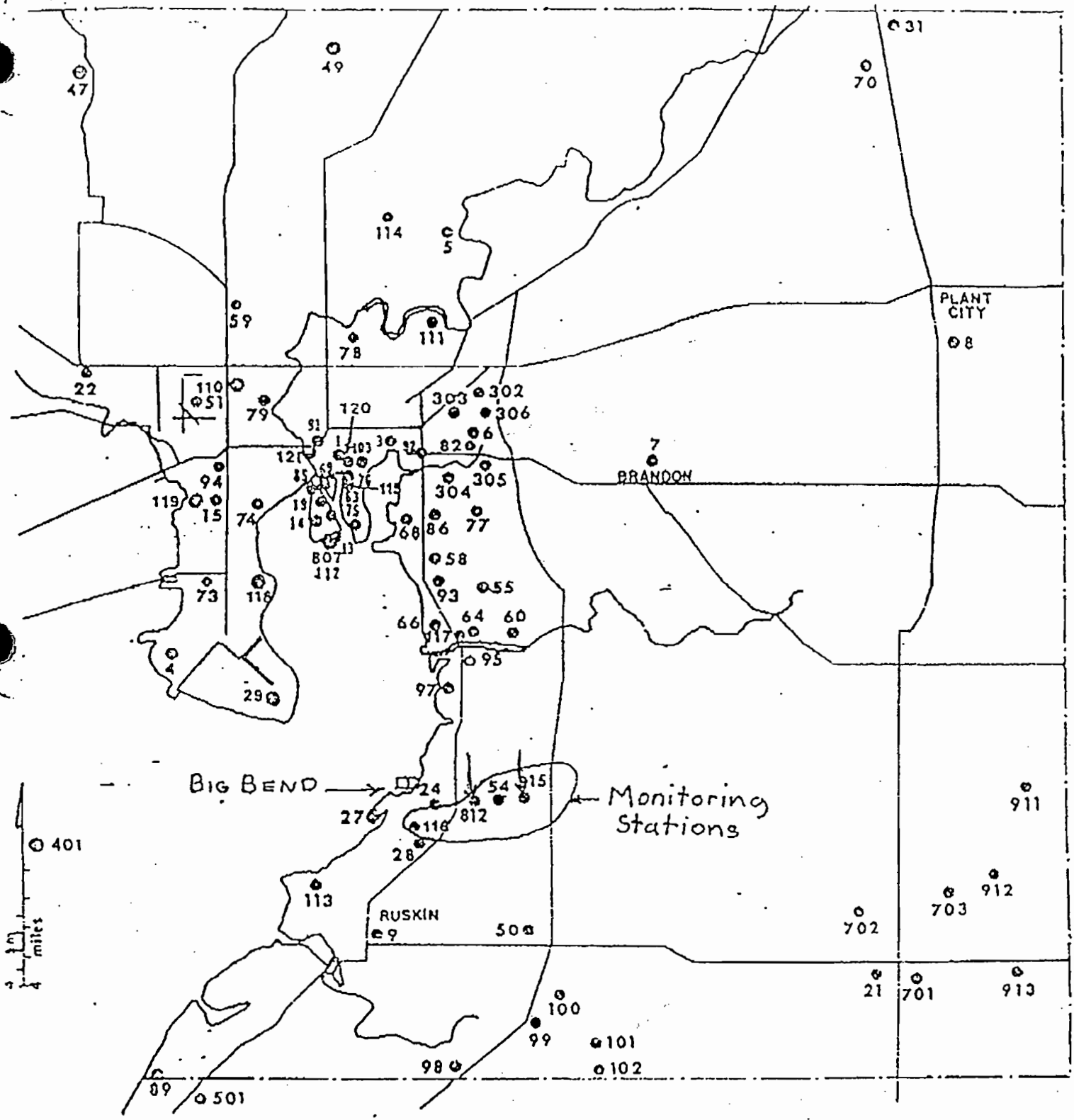
B. Air Monitoring Program

1. The permittee shall install and operate continuously monitoring devices for the Unit 4 boiler exhausts for sulfur dioxide, nitrogen dioxide, oxygen and opacity. The monitoring devices shall meet the applicable requirements of Section 17-2.08, FAC, and 40 CFR 60.47a. The opacity monitor may be placed in the duct work between the electrostatic precipitator and the FGD scrubber.

2. The permittee or Hillsborough county shall operate the two ambient monitoring devices for sulfur dioxide in accordance with EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates. The monitoring devices shall be specifically located at a location approved by the Department. The frequency of operation shall be every six days commencing as specified by the Department.
3. The permittee shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values.
4. The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports, in accordance with DER publication, Standard Sampling Techniques and Methods of Analysis for the Determination of Air Pollutants from Point Source, July, 1975.
5. The ambient monitoring program may be reviewed by the Department and the permittee annually beginning two years after start-up of Unit 4.
6. Prior to operation of the source, the permittee shall submit to the Department a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

C. Stack Testing:

1. Within 60 calendar days after achieving the maximum capacity at which each unit will be operated, but no later than 180 operating days after initial start-up, the permittee shall conduct performance tests for particulates SO_2 , NO_x and visible emissions during normal operations near 4,330 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 30 days. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a, 48a, and 49a.
2. Performance tests shall be conducted and data reduced in accordance with methods and procedures in accordance with DER's Standard Sampling Techniques and Methods of Analysis for Determination on Air Pollutants from Point Sources, July, 1975.



AIR SAMPLING STATIONS
 HILLSBOROUGH COUNTY, FLORIDA
 1979

Figure 1

3. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.
4. The permittee shall provide 30 days prior notice of the performance tests to afford the Department the opportunity to have an observer present.
5. Stack tests for particulates and SO₂ shall be performed annually in accordance with conditions C. 2, 3, and 4 above.

D. Reporting

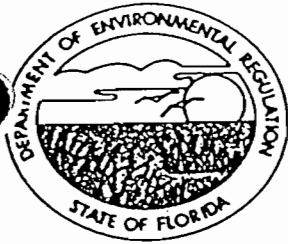
1. For Unit 4, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southwest District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7., and in accordance with Section 17-2.08, FAC.
2. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Quality Management of the Department quarterly. Commencing on the date of certification, such reports shall be due by the last day of the month following the quarterly reporting period.
3. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of equipment (including control equipment). All reports and information required to be submitted under this condition shall be submitted to the Administrator of Power Plant Siting, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

II. Water Discharges

Any discharges into any waters of the State during construction and operation of Big Bend Unit 4 shall be in accordance with all applicable provisions of Chapter 17-3, Florida Administrative Code, and 40 CFR, 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, except as provided herein. Also, the permittee shall comply with the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions shall apply:



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

January 19, 1990

RECEIVED

NOTICE OF PERMIT

JAN 22 1990

ENVIRONMENTAL
PLANNING

Mr. Jerry Williams
Director - Environmental
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

Dear Mr. Williams:

RE: Hillsborough County - AP
Big Bend Station Combustion
Turbine No. 1

Enclosed is Permit Number A029-160257 for the operation of the Big Bend Station Combustion Turbine No. 1, issued pursuant to Section 403.087, Florida Statutes.

Persons whose substantial interests are affected by this permit have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, F.A.C., and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399, within fourteen (14) days of receipt of this notice. Failure to file a petition within fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes. This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with this paragraph or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time, this permit will not be effective until further Order of the Department.

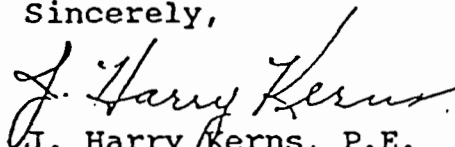
Tampa Electric Company
Tampa, FL 33601

Page Two

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

JHK/WEG/bb

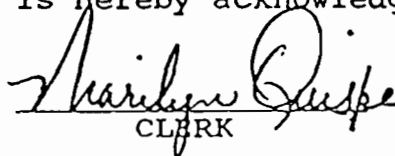
Attachment:

cc: Environmental Protection Commission
of Hillsborough County

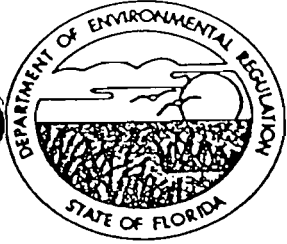
CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on JAN 19 1990 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Subsection 120.52(10), Florida
Statutes, with the designated
Department Clerk, receipt of which
is hereby acknowledged.


CLERK

JAN 19 1990
DATE



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION
Permit No: A029-160257
County: Hillsborough
Issued Date: 07/24/89
Amendment Date: 01/18/90
Expiration Date: 07/07/94
Project: Big Bend Station
Combustion Turbine
No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made in part hereof and specifically described as follows:

For the operation of the Big Bend Station self-contained combustion turbine generating unit. The unit is predesigned integrated simple cycle, single shaft, three-bearing machine with load connected at the exhaust end of the unit. The turbine is fired on No. 2 fuel oil.

Location: Big Bend Road, Ruskin

UTM: 17-361.5 E 3075.0 N NEDS NO: 0039 Point ID: 07

Replaces Permit No.: A029-85100

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-160257
PROJECT: Big Bend Station Combustion
Turbine No. 1

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Visible emissions shall not be equal to or greater than 20% opacity in accordance with Subsection 17-2.610(2)(a), F.A.C.
3. Test the emissions for the following pollutant(s) at intervals of 12 months from the date March 19, 1990 or within a ninety (90) day period prior to this date, and submit 2 copies of test data to both the Florida Department of Environmental Regulation and Environmental Protection Commission of Hillsborough County within forty five days of such testing.

<input type="checkbox"/> Particulates	<input type="checkbox"/> Sulfur Oxides*
<input type="checkbox"/> Fluorides	<input type="checkbox"/> Nitrogen Oxides
<input checked="" type="checkbox"/> Opacity	<input type="checkbox"/> Hydrocarbons
	<input type="checkbox"/> Total Reduced Sulfur

* Fuel analysis may be submitted for required sulfur dioxide emission test.

4. Compliance with the emission limitations of Specific Condition No. 2 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Section 17-2.700, F.A.C. The Method 9 test interval on this source shall be for thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Section 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

5. The permitted capacity of this source is 16 MW based on the load at which the December 14, 1988, visible emissions test was conducted. Approved compliance testing of emissions shall be conducted within approximately 10% of the permitted capacity when practical. A compliance test submitted at operating levels less than 90% of the permitted capacity will automatically constitute an amended permit at the lesser rate plus 10% until another test (showing compliance) at 90% of a higher capacity is submitted. If the permitted capacity of this source is exceeded by at least 10%, a compliance test shall be performed within thirty (30) days of initiation of the higher rate and the results of the test shall be submitted to the Department and the Environmental Protection Commission of Hillsborough County. Acceptance of said test will automatically constitute an amended permit at the greater rate plus 10%. Emission limitations are not automatically adjusted above the allowable levels established by this permit and/or the design process rate. The actual fuel consumption rate and power output of the unit shall be specified in each test report. Failure to submit the input rates or operation at conditions during testing which do not reflect actual operating conditions may invalidate the data (Subsection 403.161(1)(c), Florida Statutes).

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-160257
PROJECT: Big Bend Station Combustion
Turbine No. 1

SPECIFIC CONDITIONS: (continued)

6. The Environmental Protection Commission of Hillsborough County shall be notified 15 days prior to compliance testing.

7. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Section 10, Chapter 84-446, Laws of Florida.

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The emission report shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

8. This unit must be fired on No. 2 fuel oil.

9. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Section 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

10. Pursuant to Section 17-4.09, F.A.C., four applications for renewal of permit to operate this source shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to its expiration date.

Issued July 24, 1989

Amended this 18 day of Jan
1990.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



Richard Garrity, Ph.D.
Deputy Assistant Secretary

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to the authority of Section 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life or property caused by the construction or operation of this permitted source or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as maybe required by law and at reasonable times, access to the premises, where the permitted activity is located or conducted:

GENERAL CONDITIONS (con't):

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

RULES OF THE ADMINISTRATION COMMISSION, MODEL RULES OF PROCEDURE
CHAPTER 28-5, DECISIONS DETERMINING SUBSTANTIAL INTERESTS
PART II, FORMAL HEARINGS
A) PREHEARING PROCEDURES

28-5.201 Initiation of Formal Proceedings.

(1) Initiation of formal proceedings shall be made by petition to the Agency responsible for rendering final Agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced and indented.

(2) - All petitions filed under these rules should contain:

(a) The name and address of each Agency affected and each Agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the Agency determination;

(c) A statement of when and how petitioner received notice of the Agency decision of intent to render a decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A demand for relief to which the petitioner deems himself entitled; and

(g) Other information which the petitioner contends is material.

(3) Upon receipt of a petition for formal proceedings, the Agency shall either accept or deny the petition, and if accepted shall elect either to conduct the hearing itself through the Agency head, or member thereof, assign a person authorized by Subsection 120.57(1)(a) or other authority, or request that a Hearing Officer from the Division of Administrative Hearings be assigned to conduct the hearing.

(a) A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the Agency determination, or if the petition is untimely.

(b) The Agency shall promptly give written notice to all parties of the action taken on the petition, and shall state with particularity its reasons therefor.

(4) If the Agency elects to request that a Hearing Officer of the Division of Administrative Hearings be assigned to conduct the hearing, the Agency shall forward the petition, and all materials filed with the Agency, to the Division of Administrative hearings, and shall notify all parties of its action.

Specific Authority: 120.53(1), 120.54(10), F.S.
Law Implemented: 120.57, F.S.
History: New 3-23-80



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garrity, Deputy Assistant Secretary

March 15, 1990

RECEIVED

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

MAR 16 1990

ENVIRONMENTAL
PLANNING

Mr. Jerry L. Williams
Director - Environmental
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601

DER File No.: A029-174596
County: Hillsborough

Enclosed is Permit Number A029-174596 to operate the Big Bend Station Combustion Turbine No. 2, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 32399-2400, within fourteen (14) days of receipt of this permit. 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, Florida Statutes.

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 subsequent interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by petitioner, if any;

Mr. Jerry L. Williams
Tampa, Florida 33601

Page Two

(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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted 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, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

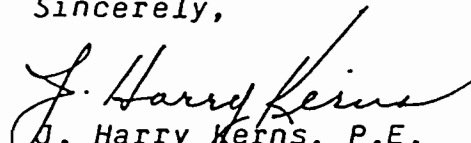
When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Mr. Jerry L. Williams
Tampa, Florida 33601

Page Three

Executed in Tampa, Florida

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

JHK/SKB/bb

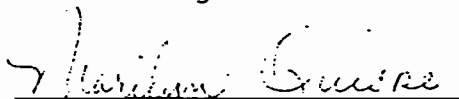
Attachment:

cc: Environmental Protection Commission
of Hillsborough County

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on MAR 15 1990 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(10), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.


Clerk

MAR 15 1990
Date



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-174596
County: Hillsborough
Expiration Date: 03/09/95
Project: Big Bend Station
Combustion Turbine
No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made in part hereof and specifically described as follows:

For the operation of the Big Bend Station self-contained Westinghouse combustion turbine generating unit designated as No. 2. The unit is a predesigned integrated simple-cycle, single-shaft, three-bearing machine with the load connected at the exhaust end of the unit. The turbine is fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only.

Location: Big Bend Road, Ruskin

UTM: 17-361.5 E 3075.0 N NEDS NO: 0039 Point ID: 05

Replaces Permit No.: A029-100797

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-174596
PROJECT: Big Bend Station Combustion
Turbine No. 2

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Visible emissions shall not be equal to or greater than 20% opacity in accordance with Subsection 17-2.610(2)(a), F.A.C.
3. Test the emissions for the following pollutant(s) at intervals of 12 months from the date March 19, 1990 or within a ninety (90) day period prior to this date, and submit 2 copies of test data to both the Florida Department of Environmental Regulation and Environmental Protection Commission of Hillsborough County within forty five days of such testing.

<input type="checkbox"/> Particulates	<input type="checkbox"/> Sulfur Oxides*
<input type="checkbox"/> Fluorides	<input type="checkbox"/> Nitrogen Oxides
<input checked="" type="checkbox"/> Opacity	<input type="checkbox"/> Hydrocarbons
	<input type="checkbox"/> Total Reduced Sulfur

* Fuel analysis may be submitted for required sulfur dioxide emission test.

4. Compliance with the emission limitations of Specific Condition No. 2 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Section 17-2.700, F.A.C. The Method 9 test interval on this source shall be for thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Section 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

5. The permitted capacity of this source is 77 MW based on the load at which the December 5, 1989, visible emissions test was conducted. Approved compliance testing of emissions shall be conducted within approximately 10% of the permitted capacity when practical. A compliance test submitted at operating levels less than 90% of the permitted capacity will automatically constitute an amended permit at the lesser rate plus 10% until another test (showing compliance) at 90% of a higher capacity is submitted. If the permitted capacity of this source is exceeded by at least 10%, a compliance test shall be performed within thirty (30) days of initiation of the higher rate and the results of the test shall be submitted to the Department and the Environmental Protection Commission of Hillsborough County.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-174596
PROJECT: Big Bend Station Combustion
Turbine No. 2

SPECIFIC CONDITIONS: (continued)

Acceptance of said test will automatically constitute an amended permit at the greater rate plus 10%. Emission limitations are not automatically adjusted above the allowable levels established by this permit and/or the design process rate. The actual fuel consumption rate and power output of the unit shall be specified in each test report. Failure to submit the input rates or operation at conditions during testing which do not reflect actual operating conditions may invalidate the data (Subsection 403.161(1)(c), Florida Statutes).

6. The Environmental Protection Commission of Hillsborough County shall be notified 15 days prior to compliance testing.

7. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Section 10, Chapter 84-446, Laws of Florida.

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The emission report shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

8. This unit must be fired on No. 2 fuel oil.

9. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Section 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

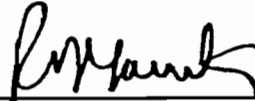
10. Pursuant to Section 17-4.09, F.A.C., four applications for renewal of permit to operate this source shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to its expiration date.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-174596
PROJECT: Big Bend Station Combustion
Turbine No. 2

Issued this 17 day of March
1982.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



Richard Garrity, Ph.D.
Deputy Assistant Secretary

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to the authority of Section 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life or property caused by the construction or operation of this permitted source or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as maybe required by law and at reasonable times, access to the premises, where the permitted activity is located or conducted:

GENERAL CONDITIONS (con't):

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

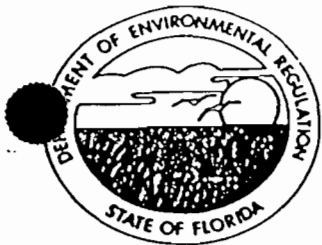
a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garry, Deputy Assistant Secretary

May 9, 1990

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

Mr. Jerry L. Williams
Director - Environmental
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111

DER File No.: AO29-174611
County: Hillsborough

Enclosed is Permit Number AO29-174611 to operate the Big Bend Station Combustion Turbine No. 3, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 32399-2400, within fourteen (14) days of receipt of this permit. 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, Florida Statutes.

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 subsequent 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 required 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 permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted 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, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Tampa Electric Company
Tampa, FL 33601-0111

Page Two

Executed in Tampa, Florida

Sincerely,

J. Harry Kerns
J. Harry Kerns, P.E.
District Air Engineer

JHK/CCG/bb

Attachment:

cc: Environmental Protection Commission
of Hillsborough County

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on MAY 9 1990 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Section 120.52(10), Florida Statutes,
with the designated Department Clerk,
receipt of which is hereby acknowledged.

Marilyn Quispe
Clerk

MAY 9 1990
Date



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:

Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

PERMIT/CERTIFICATION

Permit No.: A029-174611
County: Hillsborough
Expiration Date: 04/27/95
Project: Big Bend Station
Combustion Turbine
No. 3

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the operation of the Big Bend Station self-contained Westinghouse combustion turbine generating unit designated as No. 3, the unit is a predesigned integrated simple-cycle, single-shaft, multi-bearing machine with the load connected at the exhaust end of the unit. The turbine is fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only. This unit is rated at 78 MW.

Location: Big Bend Road, Ruskin

UTM: 17-361.5 E 3075.6 N Neds No.: 0039 Point ID: 06

Replaces Permit No.: A029-100795

PERMITTEE:
Tampa Electric Company

Permit/Certification No.: A029-174611
Project: Big Bend Station Combustion
Turbine No. 3

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Visible emissions shall not be equal to or greater than 20% opacity in accordance with Subsection 17-2.610(2)(a), F.A.C.
3. Test the emissions for opacity at intervals of 12 months from February 22, 1990 or within a ninety (90) day period prior to this date, and submit one copy of the test data to the Florida Department of Environmental Regulation and one copy to the Environmental Protection Commission of Hillsborough County within 45 days of such testing.
4. Compliance with the emission limitations of Specific Condition No. 2 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Section 17-2.700, F.A.C. The Method 9 test interval on this source shall be thirty (30) minutes in duration. The minimum requirements for source sampling and reporting, shall be in accordance with Section 17-2.700, F.A.C. and 40 CFR 60, Appendix A.
5. The permitted operating capacity of this source is 70.4 MW based on the load at which the February 22, 1990 visible emission compliance stack test was conducted. Testing of emissions to show compliance shall be conducted within +10% of the permitted capacity. A compliance test submitted at operating levels less than 90% of the permitted capacity will automatically constitute an amended permit at the lesser rate until another test, showing compliance at a higher capacity is submitted. Any time the permitted operating capacity of the plant is exceeded by more than 10%, a compliance test shall be performed within 30 days of initiation of the higher rate and the results submitted to the Department and the Environmental Protection Commission of Hillsborough County.

Acceptance of the test by the Department will automatically constitute an amended permit at the higher rate. Emission limitations are not automatically adjusted above the allowable levels established by this permit. The actual fuel consumption rate and power output of the unit shall be specified in each test report. Failure to submit the input rates and actual operating conditions may invalidate the test data (Subsection 17-4.070(3), F.A.C.).

PERMITTEE:
Tampa Electric Company

Permit/Certification No.: A029-17461
Project: Egg Bend Station Combustion
Turbine No. 3

SPECIFIC CONDITIONS: (continued)

6. The Environmental Protection Commission of Hillsborough County shall be notified 15 days prior to any compliance test conducted on this source.

7. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information per Section 17-4.140, F.A.C./Specific Authority: 403.061, Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The emission report shall be submitted to the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

8. This unit must be fired on No. 2 fuel oil.

9. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Section 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

10. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-2, F.A.C., or any other requirements under federal, state, or local law. Section 17-2.210, F.A.C.

11. Pursuant to Section 17-4.090, F.A.C., an application for renewal of permit to operate this source, completed in quadruplicate, shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to its expiration date.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-174611
PROJECT: Big Bend Station Combustion
Turbine No. 3

Issued this 8 day of May
1970.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Richard Garrity

Richard Garrity, Ph.D.
Deputy Assistant Secretary

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to the authority of Section 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life or property caused by the construction or operation of this permitted source or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as maybe required by law and at reasonable times, access to the premises, where the permitted activity is located or conducted:

GENERAL CONDITIONS (con't):

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

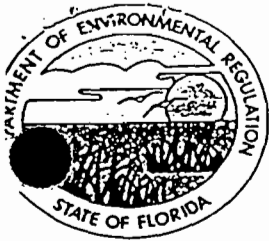
a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347
Lawton Chiles, Governor 813-620-6100 Carol M. Browner, Secretary

RECEIVED

MAR 13 1992

ENVIRONMENTAL
PLANNING

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT AMENDMENT

CERTIFIED MAIL

Mr. Lynn F. Robinson
Manager, Environmental Planning
Tampa Electric Company
Post Office Box 111
Tampa, FL 33601-0111

DER File No.: A029-160255
County: Hillsborough

Enclosed is amended Permit Number A029-160255 to operate the Big Bend Station Fly Ash Silo #1 which handles fly ash from Steam Boilers #1 and #2, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 32399-2400, within fourteen (14) days of receipt of this amended permit. 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, Florida Statutes.

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 required 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 amended permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted 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, F.A.C.

This amended permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (amended Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.



Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-620-6100

Carol M. Browner, Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111

PERMIT/CERTIFICATION

Permit No: A029-160255
County: Hillsborough
Issued Date: 12/21/89
Amendment Date: 03/12/92
Expiration Date: 12/22/94
Project: Big Bend Fly Ash
Silo #1 (Serving
Big Bend Steam
Boilers #1 and #2)

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part of hereof and specifically described as follows:

For the operation of the Big Bend Station Fly Ash Silo #1 which handles fly ash from Big Bend Steam Boilers #1 and #2. Fly ash is pneumatically conveyed from the individual electrostatic precipitators to Silo #1. Also, the fly ash may be pneumatically conveyed from tanker trucks to Silo #1. The sum total loading rate to the silo for all the processes combined is 44.5 tons per hour. Fly ash from Silo #1 is discharged in either a wet or dry state. The dry fly ash is gravity fed by tubing into totally enclosed tanker trucks. The wet fly ash is processed through a pugmill and then unloaded into a dump truck.

Particulate matter emissions generated by silo loading and unloading to a tanker truck are controlled by a 27,136 ACFM, Flex-Kleen #84 UDTR-640 baghouse as well as reasonable precautions specified in the specific conditions.

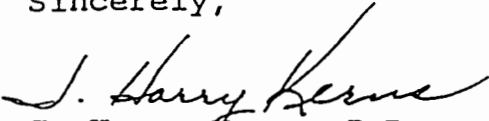
Location: Big Bend Road, Ruskin

UTM: 17-361.5 E 3075.0 N NEDS NO: 0039 Point ID: 08 - Baghouse
18 - Truck
Loadout

Replaces Permit No.: A029-90129 and AC29-194516

Executed in Tampa, Florida

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

JHK/BK/bm

Attachment:

cc: Environmental Protection Commission
of Hillsborough County
Ralph J. Mitchell, P.E., Tampa Electric Company

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT AMENDMENT and all copies were mailed by certified mail before the close of business on MAR 12 1992 to the listed persons.

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



Clerk

MAR 12 1992
Date

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-160255
PROJECT: Big Bend Fly Ash Silo #1
(Serving Big Bend Steam
Boilers #1 and #2)

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Total maximum allowable emissions of particulate matter from the silo baghouse shall not exceed .03 grains/DSCF, 5.16 lbs./hr. and 22.62 tons/yr. based on a design flow rate of 20,081 DSCFM. [Construction Application]
3. Visible emissions from the baghouse exhaust shall not exceed five (5) percent opacity. This limit is an alternate standard in lieu of a particulate emission test requirement. [Rule 17-2.700(3)(d), F.A.C.]
4. Visible emissions from the silo unloading point shall not be equal to or greater than 20 percent opacity. [Rule 17-2.610(2)(a), F.A.C.]
5. The following reasonable precautions shall be taken to control unconfined particulate matter emissions associated with the silo operations: [Rule 17-2.610(3)(c), F.A.C.]
 - A) Fly ash transported by dump truck shall be adequately wetted and processed through the pugmill.
 - B) Dump trucks used to transport fly ash shall utilize tarps at all times except when loading/unloading.
 - C) Fly ash transported in a dry state shall be accomplished utilizing an enclosed tanker truck.
 - D) Fly ash spilled and/or leaked on plant grounds shall be adequately wetted and disposed of daily.
 - E) Fly ash collected from spills and/or leaks must be adequately wetted at all times.
 - F) Ensure the proper seating of the unloader chute onto the tanker inlet prior to loading.
 - G) Keep the dust extractor operational during loading.
 - H) Close the tanker's inlet as soon as practical after the loading process.
 - I) Extend the tubing from the silo into the closed tanker type trucks during loadout.
6. The following restrictions and limitations shall apply to the operation of the silo: [Construction Application]
 - A) Maximum Loading Rate: 44.5 TPH - All Processes
 - B) Hours of Operation: 8,760 hours per year
7. Test the baghouse exhaust and the truck loadout for visible emissions at intervals of twelve (12) months and within 90 days prior to December 27, 1991. Submit 2 copies of the test data to the Air Section of the Environmental Protection Commission of Hillsborough County within 45 days of testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 17-2.700(2), F.A.C.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-160255
PROJECT: Big Bend Fly Ash Silo #1
(Serving Big Bend Steam
Boilers #1 and #2)

SPECIFIC CONDITIONS: (continued)

8. Compliance with the emission limitations of Specific Condition Nos. 3 and 4 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-2.700, F.A.C. The Method 9 observation period shall be at least thirty (30) minutes. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

9. Approved compliance stack testing of emissions must be conducted within approximately 10% of the permitted capacity (silo loading rate 44.5 TPH). A compliance test submitted at operating levels less than 90% of permitted capacities will automatically constitute an amended permit at the lesser rate plus 10% until another test (showing compliance) at 90% of a higher capacity is submitted. Failure to submit the operating rates for the boilers or operating at conditions during testing which do not reflect normal operating conditions may invalidate the data. [Rule 17-4.070(3), F.A.C.]

10. The Environmental Protection Commission of Hillsborough County shall be notified 15 days in advance of any compliance test to be conducted on this source.

11. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The emission report shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

12. Should the Department have reason to believe the particulate emission standard is not being met, the Department may require that compliance with the particulate emission standards be demonstrated by testing. [Rule 17-2.700, F.A.C.]


13. An application for renewal of permit to operate this source, completed in quadruplicate shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to its expiration date. [Rule 17-4.090, F.A.C.]

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-160255
PROJECT: Big Bend Fly Ash Silo #1
(Serving Big Bend Steam
Boilers #1 and #2)

SPECIFIC CONDITIONS: (continued)

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION


Richard Garrity, Ph.D.
Director of District Management

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

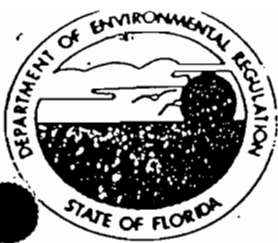
13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

NOTICE OF PERMIT AMENDMENT

CERTIFIED

October 16, 1991

In the Matter of an Application
for Permit Amendment by:

DER File No. A029-161082
Hillsborough County

RECEIVED

Mr. Lynn F. Robinson, P.E.
Manager, Environmental Planning
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

OCT 17 1991

**ENVIRONMENTAL
PLANNING**

Enclosed is amended permit number A029-161082 to operate the Big Bend Station Fly Ash Silo No. 2, issued pursuant to Section 403, Florida Statutes.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. 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 receipt of this permit amendment. 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, Florida Statutes.

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 permit amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt 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, F.A.C.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further Order of the Department.

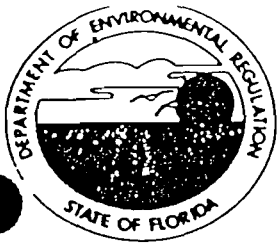
When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Gary A. Maier

Gary A. Maier, P.E., Esquire



Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7347

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601-0111

PERMIT/CERTIFICATION

Permit No: A029-161082
County: Hillsborough
Originally Issued: 07/24/89
First Amendment: 01/18/90
Second Amendment: 02/07/90
Third (last) Amendment: 10/16/91
Expiration Date: 07/07/94
Project: Big Bend Station Fly
Ash Silo No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part of hereof and specifically described as follows:

For the operation of the Big Bend Station Fly Ash Silo No. 2. Fly ash is pneumatically conveyed in a series of pipes from the individual unit precipitators (Units 1, 2 and/or 3, only two (2) units at any time) to the silo for temporary storage. From the silo, the fly ash is gravity fed by tubing into closed tanker trucks and transported to an off site consumer. Particulate emissions generated during silo loading operation and from the tanker truck loadout chutes are controlled by a 20,080 DSCFM Flex Kleen, Model No. 84 UDTR-60 baghouse.

Location: Big Bend Road, Ruskin

UTM: 17-361.7 E 3075.0 N NEDS No: 0039 Point ID: 09 - Baghouse
19 - Truck
Loadout

Replaces Permit No.: A029-90128

Copy Furnished to:

Environmental Protection Commission
of Hillsborough County

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT AMENDMENT and all copies were mailed by certified mail before the close of business on OCT 16 1991 to the listed persons.

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

Barbara Ginski
Clerk

OCT 16 1991
Date

BEST AVAILABLE COPY

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-161082
PROJECT: Big Bend Station Fly Ash
Silo No. 2

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Total maximum allowable particulate matter emissions from the silo shall not be greater than 5.16 pounds per hour and 22.62 tons per year.
[Rules 17-2.520, 17-2.100(127) and 17-2.100(3), F.A.C.].
3. Visible emissions generated from the silo baghouse exhaust shall not be equal to or greater than 20% opacity.
[Rule 17-2.610(2)(a), F.A.C.].
4. Test the emissions from the silo baghouse exhaust and truck loadout transfer point for the following pollutant(s) at intervals of 12 months from the date of May 3, 1991 or within a ninety (90) day period prior to this date. One copy of the test data shall be submitted to both the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation within forty-five days of such testing:

- (X) Particulates*
- (X) Opacity

* In lieu of a stack test, an EPA Method 9 test showing no visible emissions (5% opacity or less) from the silo baghouse exhaust may be submitted. Truck loadout transfer point requires only opacity testing.

5. Compliance testing for the silo and tanker truck loading operations shall be conducted under the following conditions:
 - a. All conveyance hoppers will be operated during the test.
 - b. All fly ash will be directed to the silo, no reinjection of fly ash to the boiler systems will occur during the test.
 - c. The boilers shall operate at the maximum capability of this unit under normal operating conditions during the test.
 - d. Two tanker trucks shall be loaded during the test. The loading valve shall be completely open during filling.
 - e. The visible emission test shall be at least 30 minutes in duration and the period of time during which truck loading occurred indicated on the test report.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-161082
PROJECT: Big Bend Station Fly Ash
Silo No. 2

SPECIFIC CONDITIONS:

6. Compliance with the emission limitations of Specific Condition Nos. 2 and 3 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-2.700, F.A.C. The Method 9 observation period for the silo and tanker truck loading operations shall be at least thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

7. All compliance tests shall be conducted while loading the silo at approximately the maximum feed rate (24 hour average). Failure to submit the feed rate or operating at conditions during testing which do not reflect normal operating conditions may invalidate the data. [Rule 17-4.070(3), F.A.C.]

8. The Environmental Protection Commission of Hillsborough County shall be notified 15 days in advance of any compliance test to be conducted on this source.

9. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

The emission report shall be submitted to the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Regulation.

10. Should the Department have reason to believe the particulate emission standard is not being met, the Department may require that compliance with the particulate emission standards be demonstrated by testing. [Rule 17-2.700, F.A.C.]

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-161082
PROJECT: Big Bend Station Fly Ash
Silo No. 2

SPECIFIC CONDITIONS:

11. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. During truck loading of ash, reasonable precautions shall include, but not limited to:

- a. Ensuring the proper seating of the unloader chute onto the tanker inlet prior to loading.
- b. Keeping the dust extractor operational during loading.
- c. Closing the tanker's inlet as soon as practical after the loading process.
- d. Removal of fugitive fly ash emissions from the grounds adjacent to the loadout area on an as-needed basis.
- e. Extending the tubing from the silo into the closed tanker type trucks during loadout.

12. Issuance of this permit does not relieve Tampa Electric Company from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.]

13. Four applications for renewal of this operating permit shall be submitted to the Environmental Protection Commission of Hillsborough County by May 8, 1994. [Rule 17-4.090, F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Dr. Richard D. Garrity
Director of District Management
4520 Oak Fair Boulevard
Tampa, Florida 33610-7347
Phone (813) 623-5561

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Richard Garrity, Deputy Assistant Secretary

October 6, 1989

RECEIVED

NOTICE OF PERMIT

OCT 10 1989

ENVIRONMENTAL
PLANNING

Mr. Jerry L. Williams
Director Environmental
Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

Dear Mr. Williams:

RE: Hillsborough County - AP
Big Bend Station
Units 1-3 Coal Bunkers with
Three Roto-Clones

Enclosed is Permit Number A029-163788 to operate Units 1-3 Coal Bunkers with Three Roto-Clones, issued pursuant to Section 403.087, Florida Statutes.

Persons whose substantial interests are affected by this permit have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, F.A.C., and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399, within fourteen (14) days of receipt of this notice. Failure to file a petition within fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes. This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with this paragraph or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time, this permit will not be effective until further Order of the Department.

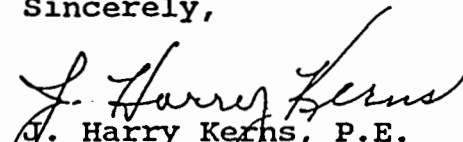
Tampa Electric Company
Tampa, FL 33601

Page Two

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

Sincerely,


J. Harry Kerns, P.E.
District Air Engineer

JHK/AJW/bb

Attachment:

cc: Environmental Protection Commission
of Hillsborough County
Thomas W. Davis, P.E.

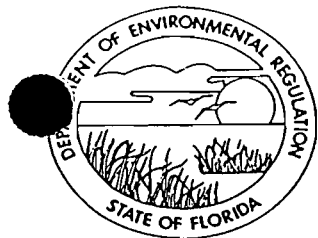
CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on OCT - 6 1989 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Subsection 120.52(10), Florida
Statutes, with the designated
Department Clerk, receipt of which
is hereby acknowledged.


CLERK

OCT - 6 1989
DATE



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Richard Garrity, Deputy Assistant Secretary

PERMITTEE:

Tampa Electric Company
P.O. Box 111
Tampa, FL 33601

PERMIT/CERTIFICATION

Permit No: A029-163788
County: Hillsborough
Expiration Date: 06/30/94
Project: Big Bend Station
Units 1-3 Coal
Bunkers with Three
Roto-Clones

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made in part hereof and specifically described as follows:

For the operation of Big Bend Station Units 1-3 coal bunkers with an exhaust fan/cyclone collector (Roto-Clone) controlling dust emissions from each unit's respective bunker. Two moving transfer stations via their respective conveyor belts route coal through enclosed chutes to the various bunkers. Coal Bunkers 1-3 are each equipped with a 9400 ACFM American Air Filter (AAF) Company Type D Roto-Clone to abate dust emissions during ventilation. A number of vent pipes convey air from each bunker to a Roto-Clone during particulate removal. Particulate matter removed by the Roto-Clones is returned to the coal bunkers via a hopper and return line. Unit No. 1 Coal Bunker is situated west of Unit No. 2 Coal Bunker. Unit No. 3 Coal Bunker is situated east of Unit No. 2 Coal Bunker.

Location: Big Bend Road, North Ruskin

UTM: 17-361.9 E 3075.0 N NEDS NO: 0039 Point ID: 15 Unit No. 1
Bunker
16 Unit No. 2
Bunker
17 Unit No. 3
Bunker

Replaces Permit No.: N/A

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-163788
PROJECT: Big Bend Station
Units 1-3 Coal Bunkers with Three
Roto-Clones

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Since a source of less than 1 TPY is exempt from particulate RACT provisions, the maximum allowable particulate emissions shall not exceed 0.99 tons per year from each cyclone exhaust [Subsection 17-2.650(2)(b)3., F.A.C.]. Also, maximum allowable particulate emissions shall not exceed 0.48 lbs./hr. from each cyclone exhaust, as determined from the applicable emission factors described in AP-42, Section 11.2.3 (May, 1983).
3. Visible emissions shall not be equal to or greater than 20% opacity in accordance with Subsection 17-2.610(2)(a), F.A.C.
4. The annual coal throughput shall not exceed 4,000 TPH per bunker.
5. To show compliance with the annual allowable emission rate, hours of bunker loading operation shall not exceed 4167 hours per year.
6. Test the emissions for the following pollutant(s) at intervals of 12 months from June 13, 1989 or within 90 days prior to this date and submit one copy of the test data to the Florida Department of Environmental Regulation and one copy of test data to the Air Section of the Environmental Protection Commission of Hillsborough County office within forty five days of such testing. Testing procedures shall be consistent with the requirements of Section 17-2.700, F.A.C.

(X) Particulates	() Sulfur Oxides
() Fluorides	() Nitrogen Oxides
(X) Opacity	() Hydrocarbons
	() Total Reduced Sulfur

7. The maximum allowable emission rate for particulate matter for this source is set by Specific Condition No. 2. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, the Department hereby waives the requirement for a stack test. The alternative standard establishes a visible emission limitation not to exceed an opacity of 5%.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: AO29-163788
PROJECT: Big Bend Station
Units 1-3 Coal Bunkers with Three
Roto-Clones

SPECIFIC CONDITIONS: (continued)

8. Compliance with the alternate emission limitation of Specific Condition No. 7 shall be determined using DER Method 9 contained in Section 17-2.700, F.A.C. The compliance testing shall consist of an DER Method #9 test to be conducted as per Specific Condition No. 6 on 1 of the 3 coal bunker ventilation roto-clones such that all 3 Roto-clones will be tested within a 3 year period. The Method #9 test interval on these sources shall be thirty (30) minutes in duration. Also, within 90 days upon the issuance date of this permit all three coal bunker Roto-clones shall have been tested for visible emissions using DER Method #9. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Section 17-2.700, F.A.C.

9. Testing of emissions must be accomplished at the maximum attainable bunkering rate under typical bunkering operations. The actual coal transfer to bunker rate shall be specified in each test result. Failure to include the actual process or production rate in the results may invalidate the test [Section 403.161(1)(c), Florida Statutes].

10. Should the Department have reason to believe the particulate emission standard is not being met, the Department may require that compliance with the particulate emission standards be demonstrated by testing using EPA Methods 1, 2, 4 and 5 in accordance with Section 17-2.700, F.A.C.

11. The Environmental Protection Commission of Hillsborough County shall be notified 15 days in advance of any compliance test to be conducted on this source.

12. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Section 403.061(13), Florida Statutes.

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

An emission report shall be submitted to both the Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County.

PERMITTEE:
Tampa Electric Company

PERMIT/CERTIFICATION NO.: A029-163788
PROJECT: Big Bend Station
Units 1-3 Coal Bunkers with Three
Roto-Clones

SPECIFIC CONDITIONS: (continued)

13. An original application to renew this operating permit and three copies with original seals and signatures shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to the expiration date of this permit.

Issued this 5 day of Oct
1988.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



Richard Garrity, Ph.D.
Deputy Assistant Secretary

GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to the authority of Section 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.712(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life or property caused by the construction or operation of this permitted source or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as maybe required by law and at reasonable times, access to the premises, where the permitted activity is located or conducted:

GENERAL CONDITIONS (con't):

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of Compliance with State Water Quality Standards (Section 401. PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

RULES OF THE ADMINISTRATION COMMISSION, MODEL RULES OF PROCEDURE
CHAPTER 28-5, DECISIONS DETERMINING SUBSTANTIAL INTERESTS
PART II, FORMAL HEARINGS
A) PREHEARING PROCEDURES

BEST AVAILABLE COPY

28-5.201 Initiation of Formal Proceedings.

(1) Initiation of formal proceedings shall be made by petition to the Agency responsible for rendering final Agency action. The term petition as used herein includes any application or other document which expresses a request for formal proceedings. Each petition should be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only, and lines shall be double-spaced and indented.

(2) -- All petitions filed under these rules should contain:

(a) The name and address of each Agency affected and each Agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners, and an explanation of how his/her substantial interests will be affected by the Agency determination;

(c) A statement of when and how petitioner received notice of the Agency decision of intent to render a decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A demand for relief to which the petitioner deems himself entitled; and

(g) Other information which the petitioner contends is material.

(3) Upon receipt of a petition for formal proceedings, the Agency shall either accept or deny the petition, and if accepted shall elect either to conduct the hearing itself through the Agency head, or member thereof, assign a person authorized by Subsection 120.57(1)(a) or other authority, or request that a Hearing Officer from the Division of Administrative Hearings be assigned to conduct the hearing.

(a) A petition may be denied if the petitioner does not state adequately a material factual allegation, such as a substantial interest in the Agency determination, or if the petition is untimely.

(b) The Agency shall promptly give written notice to all parties of the action taken on the petition, and shall state with particularity its reasons therefor.

(4) If the Agency elects to request that a Hearing Officer of the Division of Administrative Hearings be assigned to conduct the hearing, the Agency shall forward the petition, and all materials filed with the Agency, to the Division of Administrative hearings, and shall notify all parties of its action.

Specific Authority: 120.53(1), 120.54(10), F.S.

Law Implemented: 120.57, F.S.

History: New 3-23-80



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

AUG - 3 1994

RECEIVED

AUG 9 1994

ENVIRONMENTAL
PLANNING

4APT-AEB

Mr. A. Spencer Autry
Designated Representative
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

Dear Mr. Autry:

Enclosed you will find the final Acid Rain permit issued by the U.S. Environmental Protection Agency (EPA) for Tampa Electric Company - ~~Big Bend~~. The permit was issued by EPA Region IV on July 15, 1994. The enclosed notice of this final permit action was published in the Federal Register on July 28, 1994. Additionally, we have enclosed the response to comments document applicable to your facility. This document will be included in the official EPA administrative record.

Your cooperation has been appreciated. If you have any questions, please contact Scott Davis or me at (404) 347-5014.

Sincerely,

Brian L. Beals
Acting Chief
Source Evaluation and
Asbestos Section
Air, Pesticides and Toxics
Management Division

Enclosure

cc: Preston Lewis, FDEP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

PHASE I ACID RAIN PERMIT

Issued to: Tampa Electric Corporation-Big Bend
Operated by: Tampa Electric Corporation
Effective: January 1, 1995 to December 31, 1999

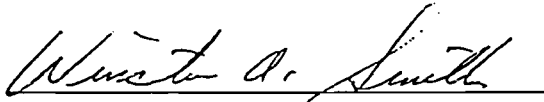
Summary of Previous Actions

This page will be replaced to document new EPA actions each time a new action is taken by the Agency. The following actions have been taken:

1. Draft permit, including SO₂ compliance plan,
issued for public comment. July 16, 1993
(See page 1)

Present Action

2. SO₂ portion of permit issued as direct final permit, which will be final 40 days after notice in the Federal Register, unless adverse comment is received within 30 days after publication.


Signature

7-15-94
Date

Winston A. Smith
Director, Air, Pesticides and Toxics Management Division
U.S. Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365
Telephone: (404) 347-3043 Facsimile: (404) 347-5207



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

PHASE I ACID RAIN PERMIT

Issued to: Tampa Electric Corporation-Big Bend
Operated by: Tampa Electric Corporation
Effective: January 1, 1995 to December 31, 1999

The Acid Rain Permit comprises the following:

1. The statement of basis prepared by EPA containing:

Part A, with references to statutory and regulatory authorities, and comments, notes and justifications that apply to the source in general; and

Part B, for each unit at this source:

- a table of SO₂ allowances to be allocated under this permit during Phase I, and
- comments, notes and justifications regarding permit decisions and changes made to the permit application during the review process, and any additional requirements.

2. The permit application that this source submitted, as corrected by EPA. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Plant Name: Big Bend
State: Florida
ORIS Code: 0645

Statutory and Regulatory Authorities. In accordance with Title IV of the Clean Air Act Amendments of 1990, the U. S. Environmental Protection Agency issues this permit pursuant to 40 CFR part 72, subparts E and F.

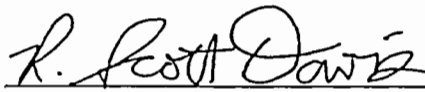
Comments, notes and justifications that apply to the source in general:

Due to a typographical error on the Phase I Permit Application form, the reference on the Phase I Permit Application form at Step 2, "Hold allowances in accordance with 40 CFR 72.9(d)(1)," has been changed to "Hold allowances in accordance with 40 CFR 72.9(c)(1)."

On the original Phase I Permit Application submitted by Tampa Electric Company, Big Bend Unit BB04 was incorrectly identified as an underutilized Phase I unit. The designated representative corrected this error by submitting a revised application that properly identified Big Bend Unit No. BB04 as a compensating unit. The revised application was submitted by the designated representative on March 8, 1993, and was received by EPA on March 12, 1993.

R. SCOTT DAVIS

Permit Reviewer



Signature

7/14/94

Date

Plant Name: Big Bend
 State: Florida
 ORIS Code: 0645
 Boiler ID#: BB01

Phase I SO₂ Allowance Allocation

	1995	1996	1997	1998	1999
Table 1 40 CFR 73.10	27,662	27,662	27,662	27,662	27,662
Phase I Extension 40 CFR 72.42	N/A	N/A	N/A	N/A	N/A
Substitution 40 CFR 72.41	0	0	0	0	0
Reduced Utilization 40 CFR 72.43	0	0	0	0	0

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

See changes made to the Permit Application form on Statement of Basis, page 2.

Consistent with the Partial Settlement Agreement in Environmental Defense Fund v. Carol M. Browner, No. 93-1203 (executed on May 4, 1994):

1. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a compensating unit. If this plan is activated, it would result in the use of energy efficiency and improved unit efficiency measures to account for underutilization of this unit. There is no allowance allocation for the use of these compliance measures.
2. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Big Bend Unit BB04 as a substitution unit.
3. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB01 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB01 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
4. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB02 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

Plant Name: Big Bend
State: Florida
ORIS Code: 0645
Boiler ID#: BB01

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

5. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB03 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

6. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB04 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

7. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB05 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

8. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB06 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

9. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB01 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB01 as a substitution unit.

10. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB02 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

Plant Name: Big Bend
State: Florida
ORIS Code: 0645
Boiler ID#: BB01

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

11. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB03 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

12. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB04 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

13. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB05 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

14. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB06 as a substitution unit. In this plan, Big Bend Unit BB02 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

R. SCOTT DAVIS
Permit Reviewer

R. Scott Davis
Signature

7/14/94
Date

Plant Name: Big Bend
 State: Florida
 ORIS Code: 0645
 Boiler ID#: BB02

Phase I SO₂ Allowance Allocation

	1995	1996	1997	1998	1999
Table 1 40 CFR 73.10	26,387	26,387	26,387	26,387	26,387
Phase I Extension 40 CFR 72.42	N/A	N/A	N/A	N/A	N/A
Substitution 40 CFR 72.41	0	0	0	0	0
Reduced Utilization 40 CFR 72.43	0	0	0	0	0

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

See changes made to the Permit Application form on Statement of Basis, page 2.

Consistent with the Partial Settlement Agreement in Environmental Defense Fund v. Carol M. Browner, No. 93-1203 (executed on May 4, 1994):

1. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a compensating unit. If this plan is activated, it would result in the use of energy efficiency and improved unit efficiency measures to account for underutilization of this unit. There is no allowance allocation for the use of these compliance measures.
2. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Big Bend Unit BB04 as a substitution unit.
3. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB01 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB01 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
4. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB02 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

Plant Name: Big Bend
State: Florida
ORIS Code: 0645
Boiler ID#: BB02

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

5. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB03 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
6. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
7. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB05 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
8. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB06 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate Hookers Point Unit HB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
9. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB01 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB01 as a substitution unit.
10. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB02 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

Plant Name: Big Bend
State: Florida
ORIS Code: 0645
Boiler ID#: BB02

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

11. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB03 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

12. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

13. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB05 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

14. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB06 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB03, which are Phase I units, also designate F.J. Gannon Unit GB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

R. SCOTT DAVIS
Permit Reviewer


Signature

7/14/94
Date

Plant Name: Big Bend
 State: Florida
 ORIS Code: 0645
 Boiler ID#: BB03

Phase I SO₂ Allowance Allocation

	1995	1996	1997	1998	1999
Table 1 40 CFR 73.10	26,036	26,036	26,036	26,036	26,036
Phase I Extension 40 CFR 72.42	N/A	N/A	N/A	N/A	N/A
Substitution 40 CFR 72.41	0	0	0	0	0
Reduced Utilization 40 CFR 72.43	0	0	0	0	0

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

See changes made to the Permit Application form on Statement of Basis, page 2.

Consistent with the Partial Settlement Agreement in Environmental Defense Fund v. Carol M. Browner, No. 93-1203 (executed on May 4, 1994):

1. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a compensating unit. If this plan is activated, it would result in the use of energy efficiency and improved unit efficiency measures to account for underutilization of this unit. There is no allowance allocation for the use of these compliance measures.
2. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Big Bend Unit BB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Big Bend Unit BB04 as a substitution unit.
3. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB01 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB01 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.
4. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB02 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

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Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

5. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB03 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

6. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

7. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB05 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

8. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-Hookers Point Unit HB06 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate Hookers Point Unit HB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

9. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB01 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB01 as a substitution unit.

10. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB02 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB02 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

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Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

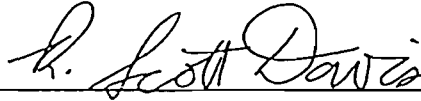
11. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB03 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB03 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

12. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB04 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB04 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

13. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB05 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB05 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

14. EPA approves a conditional substitution plan for this unit for 1995-1999 that designates Tampa Electric Company-F.J. Gannon Unit GB06 as a substitution unit. In this plan, Big Bend Unit BB01 and Unit BB02, which are Phase I units, also designate F.J. Gannon Unit GB06 as a substitution unit. The substitution plan is revised to reflect changes in values used to allocate allowances to the substitution unit.

R. SCOTT DAVIS
Permit Reviewer


Signature

7/14/94
Date

Plant Name: Big Bend
 State: Florida
 ORIS Code: 0645
 Boiler ID#: BB04

Phase I SO₂ Allowance Allocation

	1995	1996	1997	1998	1999
Table 1 40 CFR 73.10	N/A	N/A	N/A	N/A	N/A
Phase I Extension 40 CFR 72.42	N/A	N/A	N/A	N/A	N/A
Substitution 40 CFR 72.41	6,400*	6,400*	6,400*	6,400*	6,400*
Reduced Utilization 40 CFR 72.43	6,400*	6,400*	6,400*	6,400*	6,400*

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

See changes made to the Permit Application form on Statement of Basis, page 2.

Consistent with the Partial Settlement Agreement in Environmental Defense Fund v. Carol M. Browner, No. 93-1203 (executed on May 4, 1994):

1. (a) EPA approves a conditional substitution plan for this unit for 1995-1999 in which it is designated as a substitution unit for Big Bend Unit BB01, Unit BB02, and Unit BB03, which are Phase I units.

(b) The value in step 3, column e, of the substitution plan for this unit reflects the lesser of (i) the unit's 1985 actual emission rate from NADB, (ii) the unit's 1985 allowable emission rate from NADB, (iii) the greater of the unit's 1989 or 1990 actual emissions rate, or (iv) the unit's most stringent federally enforceable or state enforceable emissions limitation for Phase I as of November 15, 1990. The value in step 4, column e, reflects any change in step 3.

2. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 in which it is designated as a compensating unit for Big Bend Unit BB01, a Phase I unit.

3. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 in which it is designated as a compensating unit for Big Bend Unit BB02, a Phase I unit.

4. EPA approves a conditional reduced utilization plan for this unit for 1995-1999 in which it is designated as a compensating unit for Big Bend Unit BB03, a Phase I unit.

Statement of Basis. Part B

Plant Name: Big Bend
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Boiler ID#: BB04

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process:

*5. If this unit's substitution plan or one or more of the reduced utilization plans are activated, this unit will receive the allowances indicated above. This unit may receive, in a given year, allowances either as a substitution unit or as a compensating unit but not both. Any or all of the 3 reduced utilization plans can be active for the same year, but this unit will receive the allowances above only once for each year this unit serves as a compensating unit. A unit cannot serve as both a substitution unit and a compensating unit for the same year.

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APPENDIX E

POLLUTANT CODES

POLLUTANT CODES

A. Units 1 and 2

Pollutant	FDEP Code	ELSA No.
Sulfur Dioxide	SO2	1
Particulate Matter	PM	2

B. Unit 3

Pollutant	FDEP Code	ELSA No.
Sulfur Dioxide	SO2	1
Nitrogen Oxides	NOX	2
Particulate Matter	PM	3

C. Unit 4

Pollutant	FDEP Code	ELSA No.
Sulfur Dioxide	SO2	1
Nitrogen Oxides	NOX	2
Particulate Matter	PM	3
Carbon Monoxide	CO	4

D. Fly Ash Silo Nos. 1, 2, and 3, and Solid Fuel Bunkers

Pollutant	FDEP Code	ELSA No.
Particulate Matter	PM	1