TITLE V PERMIT APPLICATION
FLORIDA POWER & LIGHT COMPANY
TURKEY POINT NUCLEAR PLANT
FLORIDA CITY, FLORIDA

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

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

May 2003
0237560

DISTRIBUTION:
4 Copies – FDEP
2 Copies – Florida Power and Light
1 Copy – Golder Associates Inc.

Department of Environmental Protection

Division of Air Resources Management

Identification of Facility

1. Facility Owner/Company Name: **Florida Power and Light Company**	
2. Site Name: **Turkey Point Nuclear Plant**	
3. Facility Identification Number: **0250003** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **10 miles east of Florida City, Palm Drive** City: **Florida City** County: **Dade** Zip Code: **33035**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Mary Archer** **Principal Environmental Specialist**
2. Application Contact Mailing Address: Organization/Firm: **FPL Environmental Services Dept. [JES/JB]** Street Address: **700 Universe Blvd.** City: **Juno Beach** State: **FL** Zip Code: **33408**
3. Application Contact Telephone Numbers: Telephone: **(561) - 691-7057** Fax: **(561) - 691-7070**

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

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

Current construction permit number: _____

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

Current construction permit number:_____

Operation permit number to be revised:___ _____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected:_____

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

Operation permit number to be revised: **0250003-002-AV** _____

Reason for revision:___**TITLE V PERMIT RENEWAL**_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Air construction permit to construct or modify one or more emissions units.

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

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
Vincent Laudato, Safety/ Environmental Supervisor

2. Owner/Authorized Representative or Responsible Official Mailing Address:
Organization/Firm: **FPL Turkey Point Nuclear Plant**
Street Address: **9760 SW 344th Street**
City: **Florida City** State: **FL** Zip Code: **33035**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
Telephone: **(305)- 246- 7171** Fax: **(305)- 246-6783**

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Signature Date 4/15/03

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky**
Registration Number: **14996**

2. Professional Engineer Mailing Address:
Organization/Firm: **Golder Associates**
Street Address: **6241 NW 23rd Street, suite 500**
City: **Gainesville** State: **FL** Zip Code: **32653**

3. Professional Engineer Telephone Numbers:
Telephone: **(352) 336- 5600** Fax:**(352) 336-6603**

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [X], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

5/3/03
Date

(seal)

*Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
005	(4) 2.5 MW Diesel Emergency Generators	N/A	N/A
006	(5) Other Diesel Emergency Generators	N/A	N/A
007	Miscellaneous Diesel Plant Equipment	N/A	N/A
008	Unregulated Emissions Units and/or Activities	N/A	N/A

Application Processing Fee

Check one: [ ] Attached - Amount: $_____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

Application Comment

Emissions unit 005 is the existing (4) 2.5 MW Diesel Emergency Generators Electra-Motive [GM] Model 20-645-E4 that are referred to by facility personnel as units 3A, 3B, 4A & 4B. The generators supply backup power to the nuclear plant auxiliary equipment. These units fire low sulfur [0.5%] diesel fuel. Units 3A & 3B commenced operation in November, 1972, while units 4A & 4B commenced operation in 1991.

Emissions unit 006 consists of five other emergency diesel generators used for the plant's security system, waste water treatment, and meteorological assessment. These generators also fire low sulfur [0.5%] diesel fuel.

Emissions unit 007 consists of the following miscellaneous diesel plant equipment:

[3] Service Air Compressor Diesel Engines

[2] Instrument Air Compressor Diesel Engines
[1] Standby steam generator feed pump diesel engine
[1] Service Water Diesel Pump

Emissions unit 008 consists of miscellaneous unregulated plant equipment & vents & activities: see Attachment PTN-8.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **17** East (km): **422.3** North (km): **2952.9**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **26 / 41 / 49** Longitude (DD/MM/SS): **81 / 46 / 55**			
3. Governmental Facility Code: **O**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment (limit to 500 characters): **The Turkey Point Title V Source is composed of two separate co-located power plants: the Fossil Plant and the Nuclear Plant. Permit no. 0250003-002-AV addresses only the [non-nuclear] operations at the Nuclear plant. The operations at the Fossil plant are addressed in a separate Title V permit No. 0250003-001-AV.** **The Nuclear Plant consists of two nuclear generating units with a combined capacity of 1,332 megawatts, nine emergency diesel generators, miscellaneous diesel engines, and miscellaneous unregulated and insignificant emissions units and/or activities. This application does not address the two nuclear generating units which are regulated by the Nuclear Regulatory Commission [NRC].** **The Title V source is a major source of hazardous air pollutants.**			

Facility Contact

1. Name and Title of Facility Contact: **Vince Laudato, Environmental Specialist**
2. Facility Contact Mailing Address: Organization/Firm: **FPL Turkey Point Nuclear Plant** Street Address: **PO Box 4332** City: **Florida City** State: **FL** Zip Code: **33432**
3. Facility Contact Telephone Numbers: Telephone: **(305) 246-7177**: **(305) 246-6783**

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source?	[ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?	
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?	
5. [ ] Synthetic Minor Source of HAPs?	
6. [ ] One or More Emissions Units Subject to NSPS?	
7. [X] One or More Emission Units Subject to NESHAP?	
8. [ ] Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters): **This facility is subject to the asbestos NESHAP, 40 CFR 61 Subpart M.**	

List of Applicable Regulations

See Attached file: PTN-Reg_list	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
NO_x	A	NA	NA	NA	
CO	A	NA	NA	NA	

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location:
   [X] Attached, Document ID:**PTNFS-1** [ ] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [X] Attached, Document ID: **PTNFS-2** [ ] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [X] Attached, Document ID: **Attachment No. PTNFS-3** [ ] Not Applicable
   [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [X] Attached, Document ID: **PTNFS-4** [] Not Applicable [ ] Waiver Requested

5. Fugitive Emissions Identification:
   [X] Attached, Document ID: **PTNFS-5** [] Not Applicable [ ] Waiver Requested

6. Supplemental Information for Construction Permit Application:
   [ ] Attached, Document ID:_____ [X] Not Applicable

7. Supplemental Requirements Comment:

The Emission Units associated with this facility are not subject to CAM (40 part 64) since the emission units do not have a "control device" as defined in section 64.1.
Note: Emission Units 005 through 007 are not subject to acid rain requirements.
By current permit[sp cond 18A] annual & permit renewal compliance testing for NO_x emissions is not required for these emissions units while burning diesel fuel for less than 400 hours in each generator or engine.[Rules 62-296.570(4)(a)3. and 62-297.310(7)(a)3. and 4., F.A.C.]

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [X] Attached, Document ID: **PTNFS-8** [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [X] Attached, Document ID: **PTNFS-9**
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [ ] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [**X**] Attached, Document ID: _ **PTNFS_13** [ ] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [**X**] Attached, Document ID:_ **PTNFS_14.** [] Not Applicable

ATTACHMENT PTN-REG

LIST OF REGULATIONS

Turkey Point Nuclear Plant
File: PTN-Reg_List

[**Note:** This list is a modification of the Title V Core List that includes Miami –Dade County [DERM] regulations.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application.
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

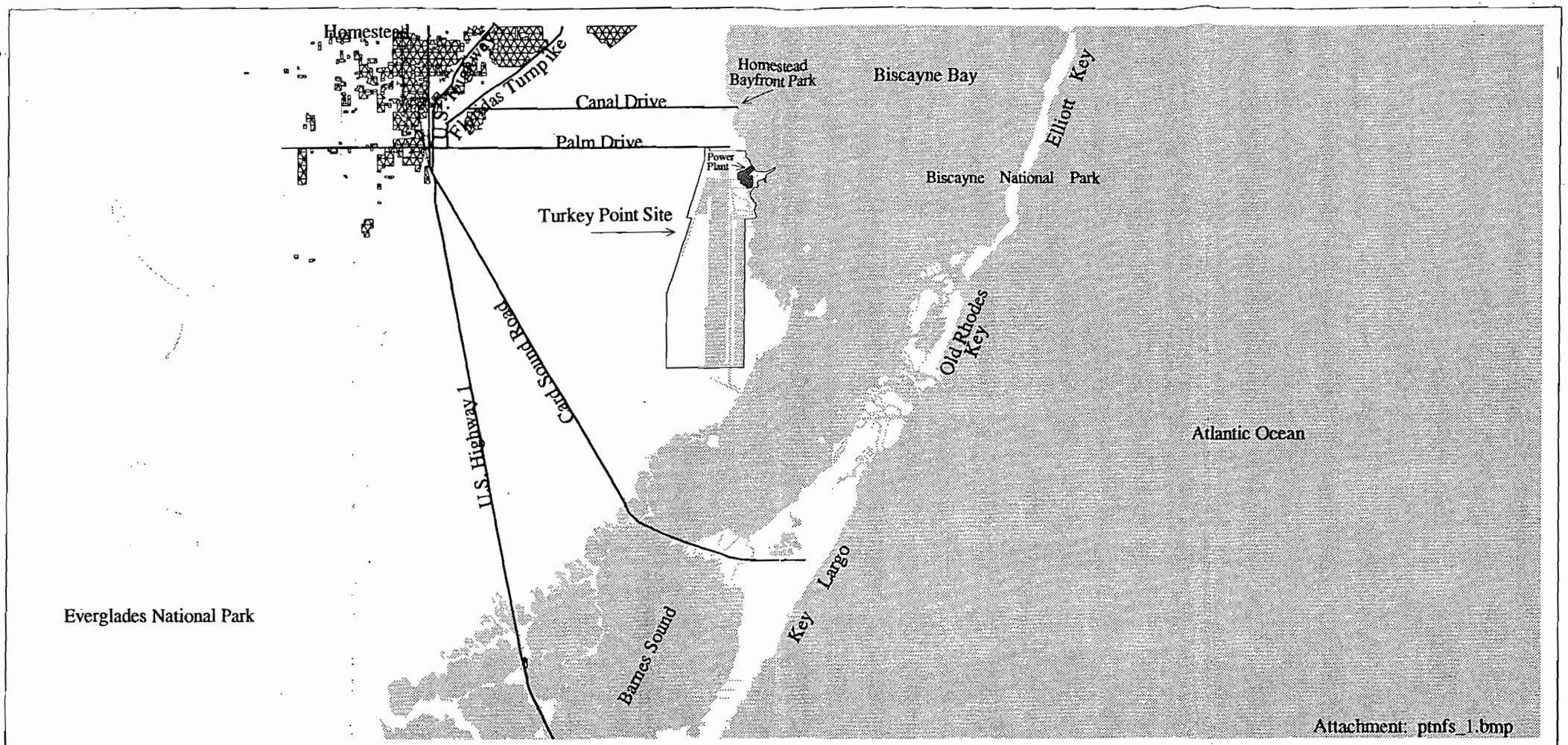
Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

DADE COUNTY DERM CHAPTER 24
Dade County DERM Chp 24-17 [not part of SIP] : SO2
Dade County DERM Chp 24-19(6) [not part of SIP] : open burning
Dade County DERM Chp 24-20 [not part of SIP] : Storage and handling of petroleum
Dade County DERM Chp 24-24 [not part of SIP] : Sampling and testing.
Dade County DERM Chp 24-25 [not part of SIP] : Refrigerants.
Dade County DERM Chp 24-25.2 [not part of SIP] : Refrigerants – no vent.
Dade County DERM Chp 24-25.4 [not part of SIP] : sell or distribute refrig.
Dade County DERM Chp 24-26(1)(e) [not part of SIP] : Air pollution - nuisance
Dade County DERM Chp 24-27 [not part of SIP] : asbestos
Dade County DERM Chp 24-35.1(8) [not part of SIP] : Operating permits
Dade County DERM Chp 24-36 [not part of SIP] : Operation of facility
Dade County DERM Chp 24-37(1),(3) [not part of SIP] : Reports required; operations allowed
Dade County DERM Chp 24-38 [not part of SIP] : Operating records
Dade County DERM Chp 24-39 [not part of SIP] : Circumvention
Dade County DERM Chp 24-54(3) [DEP rule by ref] : violations

ATTACHMENT PTNFS-1

FACILITY LOCATION MAP



Turkey Point Area Map
Dade County

Environmental Affairs
FPL

Kilometers
0 10
0 10
Miles

N
W E
S

- Turkey Point Site
- Water
- Major Roads
- Railroads
- Residential Areas

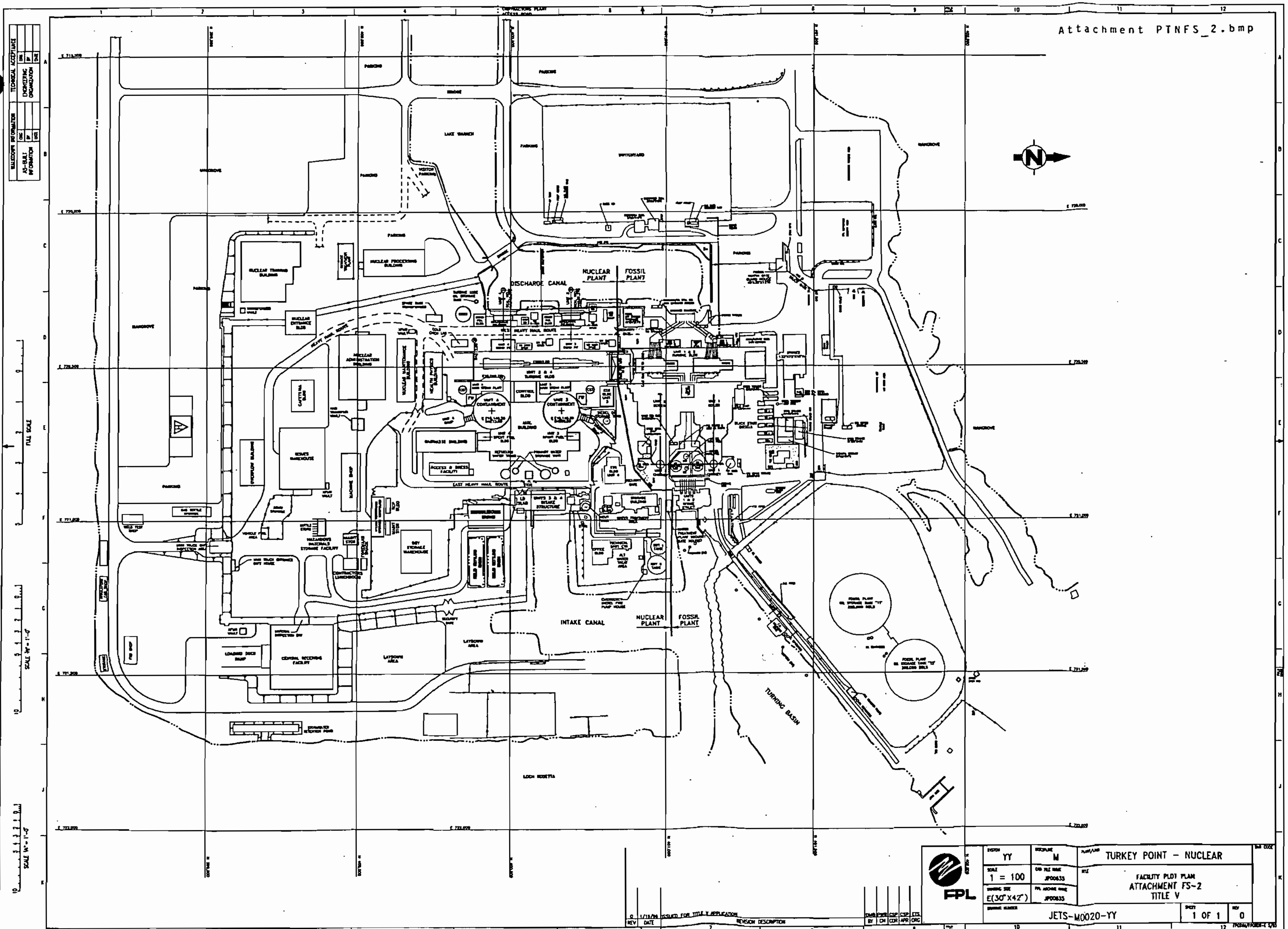
Source: Landuse data provided by South Florida Water Management District (1993)

/export/home/ron/ptp-site.map (6-95) -

ATTACHMENT PTNFS-2

FACILITY PLOT PLAN

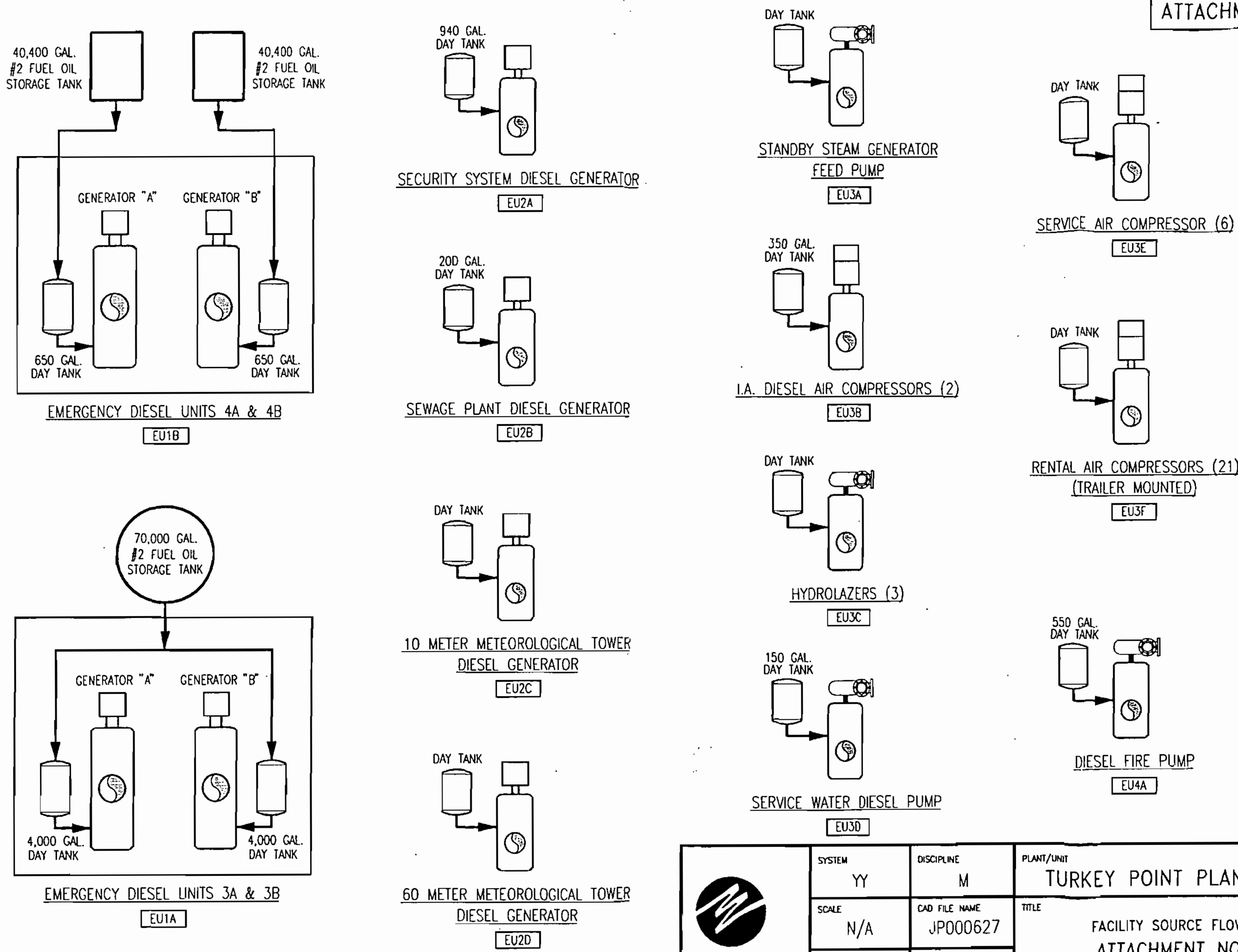
Best Available Copy



ATTACHMENT PTNFS-3

PROCESS FLOW DIAGRAM

ATTACHMENT: PTNFS_3.bmp



NOTES:

1. ACRONYMS:
   EU-EMISSION UNIT
   FO-FUEL OIL
   DG-DIESEL GENERATOR
2. EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:

   EU

   EMISSION UNIT NUMBER

TECHNICAL ACCEPTANCE	ENGINEERING ORGANIZATION — ORG / BY / DATE
WALKDOWN INFORMATION	AS-BUILT INFORMATION — ORG / BY / DATE

SCALE 3/8" = 1'-0" (1 0 1 2 3 4 5)

SCALE 1/4" = 1'-0" (1 0 1 2 3 4 5)

SYSTEM YY	DISCIPLINE M	PLANT/UNIT TURKEY POINT PLANT-NUCLEAR			BAR CODE
SCALE N/A	CAD FILE NAME JP000627	TITLE FACILITY SOURCE FLOW DIAGRAM ATTACHMENT NO. FS-3 MISCELLANEOUS DIESEL ENGINES			
DRAWING SIZE B(11"X17")	FPL ARCHIVE NAME JP000627				
DRAWING NUMBER JETS-M0012-YY			SHEET 1 OF 1	REV 0	

FPL

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
0	8/4/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS

GSYM/FPGBDR-B 5/93

ATTACHMENT PTNFS-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Attachment PTNFS_4
Precautions to Prevent Emissions of Unconfined Particulate Matter

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of particulate matter include:

- fugitive dust from unpaved roads
- sandblasting abrasive material from plant maintenance activities
- fugitive particulates from the use of bagged chemical products

Several precautions were taken to prevent emissions of particulate matter in the *original design* of the facility. These include:

- Paving of roads, parking areas and equipment yards

- Landscaping and planting of vegetation

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296.310 F.A.C.:

- Use of thick poly flaps over the doorways to prevent any sandblasting material from leaving the sandblast facility. The facility also constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.

- Maintenance of paved areas as needed

- Regular mowing of grass and care of vegetation

- Limiting access to plant property by unnecessary vehicles.

- Bagged chemical products are stored in weather-tight buildings until they are used. Spills of powdered chemical products are cleaned up as soon as practicable.

- Vehicles are restricted to slow speeds on the plant site

ATTACHMENT PTNFS-5

FUGITIVE EMISSIONS IDENTIFICATION

Attachment PTNFS_5
Fugitive Emission Identification

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PTNFS_4.DOC. FPL is not aware of fugitive emissions of sulfur dioxide, nitrogen oxides, carbon monoxide or lead compounds which would exceed the reporting thresholds defined in the permit application instructions.

Fugitive HAPs Emissions

FPL is not aware of fugitive emissions of HAP pollutants which would exceed the reporting thresholds defined in the permit application instructions.

ATTACHMENT PTNFS-8

PROPOSED INSIGNIFICANT ACTIVITIES

Attachment PTNFS-8

List of Insignificant Activities

Attachment PTNFS-8

Following are several pages of insignificant activities at the facility. The activities identified in this application are provided for information only and are identified as examples of, but not limited to, the activities previously identified. It is understood that such activities do not have to be included in the with Title V Application. The activities identified herein are consistent, in terms of amounts of emissions and types, with those activities listed in Rule 62-210.300(3)(a) and (b).

Pursuant to Rule 62-210.300(3), notice is herein provided that the emissions units listed in rule 62-210.300(3)(a) F.A.C. and listed with this attachment are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800 F.A.C..

The facility is authorized under the current Title V permit to have categorical exemptions as listed in rule 62-210.300(3)(a).

Attachment PTNFS-8

List of Insignificant Activities

Reactor Power Operation

Pressurizer

Reactor Drain Tank

Safety Injection Tanks

Reactor Refueling

Containment Cleanup

Containment Purge

Plant Vent

RCP Oil Collection Tank

Volume Control Tank

Hol-Up Tanks

Boric Acid Make-up Tanks

CVCS Ion Exchange & Filters

Primary Water Tank/Degas

Boric Acid Storage Tank

Aux Building Exhaust

Chemical Add Tank

high Pressure Safety Injection

Low Pressure Safety Injection

Containment Spray

Refueling Water Tank

Fuel Pool Cooling

Letdown Heat Exchanger

RCP Seal Injection

Misc Primary System Cooling

Laundry Drain Tank

Equipment Drain Tank

Waste Hold-up Tanks

Waste Ion Exchange & Filters

Spent Resin Tank

Liquid Radwaste Monitoring Tanks

Waste Gas compressors

Surge Tank

Gas Decay Tanks

Control Room kitchen vents

Control Room Toilet Vents

Lead Acid Battery Room Vents

Health Physics Office Vent

Laundry Rooms Vents

Resin transfer Operations

Attachment PTNFS-8

List of Insignificant Activities

- Chemical Hot Labs
- RCS Sample System
- PASS Sample System
- Chemistry / HP Counting Rooms
- Demineralizer Water Tank
- Fuel Pool
- Fuel Building Exhaust
- Diesel Oil Storage Tanks
- Dry Storage Warehouse
- Offices / computer rooms
- Electrical generator H2
- Electrical Generator CO2
- Lube Oil Vapor Extractor System
- DEH System Reservoir
- Turbine Cooling Water System
- Excitor Cooling System
- Turbine Switch Gear
- Transformer Cooling Fans
- Transformer Maintenance
- Atmospheric Dumps
- Safety Relief Valves
- Auxiliary Steam
- Steam Generator Wet Lay-Up
- Steam Generator Sluge Lancing
- Steam Jet Air Ejector
- Water Box Priming
- Condenser Storage Tank & Degasifier
- Gland Steam Recovery Tank
- Feed Pump Seal Leakoff / Tank
- Condensate Polisher
- Chemical Addition Tanks
- Wet Lay-up System & tank
- Steam Generator Blowdown
- Chemistry Cold Lab
- Chemistry Operations Offices
- Chemistry Store Room
- Turbine Lube OIl Tank
- Oily water separators
- Satellite Accumulation Drum
- Used OIl collection

Attachment PTNFS-8

List of Insignificant Activities

Screen Wash Collection Pit

Raw Water Storage Tank

Treated water storage tank

Resin & Charcoal Vessels

Neutralization Basin

Neutralization Tank

Sulfuric Acid Tank

Sodium Hydroxide Tanks

Brine heating tank

Degasifier

Water Treatment Plant control building

Equipment

Gas house

Nitrogen Dewar / Trailer

Hydrogen tube trailer

hydrolazing

pesticide application

lawn maintenance

Open Material Stockpiles

Storm Basins

Temporary Trailer Offices

Port-a-johns

Flammable Liquid Storage Cabinets

Ranger Hut Vents

Machine Shop Vents

Sewage plant gases

sludge tankers

Maintenance Building Vents

Covered Work Area Vents

Cafeteria Vents

ANPO Offices vents

Fire House materials

Operations Support Center Vents

Warehouse offices Vents

Break Area Vents

Carpenter Shop / Offices Vents

Weld Test Shop Vents

Backfit Maintenance Building Vents

AC Shop Vents

Security Building Vents

Attachment PTNFS-8

List of Insignificant Activities

HP/FFD/Site Med/Sec Office Vents

Speakout Vents

HP Support Office Vents

Nuclear Administration Building Vents

Radioactive Source building Vents

Backfit QC Buiding Vents

Shop Vents

Paint Building Vents

Oil Storage Building Vents

Haz Waste Storage Building Vents

Aerosol Can Puncturing

Switchyard transformer vents

Fitness Center Vents

Picnic Pavillion Vents

Gun Range

Day Care Center Vents

""""Slime sucker"" pumps @ L.U."

Use of spray cans & solvents for routine maintenance

ATTACHMENT PTNFS-9

LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

Attachment PTNFS_9
Equipment / Activities Regulated Under Title VI

The following equipment at the Turkey Point Nuclear plant contains CFC's in quantities greater than 50 pounds:

Name of Unit	Section	Pounds CFC
Training building	Chiller Room - 1st Floor	240
574A Computer Room	Control Room Roof	700
574B Computer Room	Control Room Roof	700
Nuclear Maintenance Building	Chiller on Roof	140
Nuclear Administration Building	1 Chiller in Chiller Room	192
Nuclear Administration Building	2 Chiller in Chiller Room	192
Construction building	West of Building	60
Nuclear Entrance Building	On Roof	106
Containment AC units (temporary)	Outside containment	170 (2)

Note that the facility houses over 100 pieces of additional CFC-containing equipment that contains less than 50 pounds of CFC. This number will fluctuate over time with overhauls, construction of new buildings, demolition of existing buildings and replacement of existing equipment.

ATTACHMENT PTNFS-13

COMPLIANCE REPORT AND PLAN

Attachment PTNFS_13
Turkey Point Nuclear Plant
Compliance Report and Plan

The facility and emissions units identified in this application are in compliance with the Applicable Requirements identified in Sections II.B. and III.D. of the application form and attachments referenced in Section III.L. 12 (if included). Compliance is certified as of the date this application is submitted to the Florida Department of Environmental Regulation as required in Rule 62-213.420(1)(a) F.A.C..

ATTACHMENT PTNFS-14

COMPLIANCE CERTIFICATION

FPL

Mr. David Struhs, Secretary
Department of Environmental Protection
Executive Office
10Th Floor Douglas Building
Commonwealth Boulevard
Talahassee, Fl 32399

Re: **Responsible Official Designation Title V Program**
Permit # 0250003-002-AV

Dear Mr. Struhs:

This correspondence is to certify the "Responsible Official (s)" for the Title V Permit for Turkey Point Nuclear Plant, operated by Florida Power & Light Company. The following individual is authorized to act as the "Responsible Official (s)" for that facility, pursuant to State Rule 62-213, F.A.C.

Responsible Official	Title	Title V Facility
Vincent Laudato	Safety/ Environmental Supv	Turkey Point Nuclear Plant
Sean Fletcher	Environmental Compliance	Turkey Point Nuclear Plant

The designated "Responsible Official (s)" are hereby authorized to act on behalf of Florida Power & Light on all permit related activities for the facility.

Sincerely,

Terry Jones

Terry O. Jones
Vice President
Turkey Point Nuclear Plant
Florida Power & Light Company

Cc: Vincent Laudato
Sean Fletcher

Department of Environmental Protection

Division of Air Resource Management

RESPONSIBLE OFFICIAL NOTIFICATION FORM

Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.

Identification of Facility

1. Facility Owner/Company Name: **Florida Power and Light Company**	
2. Site Name: **Turkey Point Nuclear Plant**	3. County: **Miami-Dade**
4. Title V Air Operation Permit/Project No. *(leave blank for initial Title V applications)*: **0250003-002-AV**	

Notification Type *(Check one or more)*

≤ **INITIAL**:	Notification of responsible officials for an initial Title V application.
XXRENEWAL:	Notification of responsible officials for a renewal Title V application.
≤ **CHANGE**:	Notification of change in responsible official(s).
	Effective date of change in responsible official(s) 4/8/03

Primary Responsible Official

1. Name and Position Title of Responsible Official:
Vincent Laudato, Safety/ Environmental Supervisor

2. Responsible Official Mailing Address:
Organization/Firm: **FPL Turkey Point Nuclear Plant**
Street Address: **9760 SW 344th Street**
City: **Florida City** State: **FL** Zip Code: **33035**

3. Responsible Official Telephone Numbers:
Telephone: **(305) 246-7177** Fax: **(305) 246-6783**

4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[xx] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[ ] The designated representative at an Acid Rain source.

5. Responsible Official Statement:

I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.

Signature 4/15/03 Date

Additional Responsible Official

1. Name and Position Title of Responsible Official:
Sean Fletcher, Environmental Compliance Coordinator

2. Responsible Official Mailing Address:
Organization/Firm: **FPL Turkey Point Nuclear Plant**
Street Address: **9760 SW 344th Street**
City: **Florida City** State: **FL** Zip Code: **33035**

3. Responsible Official Telephone Numbers:
Telephone: **(305)246-7301** Fax: **(305) 246-6783**

4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[**xx**] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[ ] The designated representative at an Acid Rain source.

5. Responsible Official Statement:

I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.

Signature

4.15.03

Date

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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

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

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
(4) 2.5 MW Diesel Emergency Generators Electra-Motive [GM] Model 20-645-E4 referred to as units 3A-B & 4A-B. The generators supply backup power to the nuclear plant auxiliary equipment.

4. Emissions Unit Identification Number:
[**005**] No ID [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**3A-B Nov 1972** **4A-B 1991**	**49**	[**NO**]

9. Emissions Unit Comment: (Limit to 500 Characters)
Emissions unit 005 is the existing (4) 2.5 MW Diesel Emergency Generators Electra-Motive [GM] Model 20-645-E4. The generators supply backup power to the nuclear plant auxiliary equipment. These units fire low sulfur [0.5%] diesel fuel.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

   none

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Electro-Motive Division of General Motors**
   Model Number: **Model 20-645-E4**
2. Generator Nameplate Rating: **2.5** MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	**24.89**	mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr	tons/day	
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	**8760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input rate reflects one emergency diesel generator. The requested operating hours is a value for all 4 generators together. Startup date for the generators = 1991.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment PTN-EU005_Reg	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **Emergency generator unit 3A & 3B**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unit 3A & 3B can exhaust through a stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **20** feet	7. Exit Diameter: **1.83** feet
8. Exit Temperature: **735** °F	9. Actual Volumetric Flow Rate: **23000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **567252.39** North (km): **2813481.61**		
14. Emission Point Comment (limit to 200 characters): **Stack exit diameter, actual volumetric flow rate and exit temperature were provided by the manufacturer, MKW Power Systems. Stack height is approximate.**		

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

Emission Point Description and Type

2. Identification of Point on Plot Plan or Flow Diagram? **Emergency generator unit 4A & 4B**	2. Emission Point Type Code: **3**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

Unit 3A & 3B can exhaust through a stack.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

6. Discharge Type Code: **V**	6. Stack Height: **20** feet	7. Exit Diameter: **1.83** feet
8. Exit Temperature: **635** °F	9. Actual Volumetric Flow Rate: **23000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **567336.18** North (km): **2813482.03**

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

Stack exit diameter, actual volumetric flow rate and exit temperature were provided by the manufacturer, MKW Power Systems. Stack height is approximate.

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __1___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Low sulfur [0.5%] diesel fuel burned in the four main emergency diesel generating units.**		
2. Source Classification Code (SCC): **2-01-002-02**	3. SCC Units: **Thousand Gallons burned**	
4. Maximum Hourly Rate: **0.183**	5. Maximum Annual Rate: **1,603.2**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Value in field 4 reflects one emergency diesel generator [of the four included in this EU]. Startup date for the generators = 1991.**		

Segment Description and Rate: Segment _____ of _____

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

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO_x	**NA**	**NA**	**EL**

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control: **0**
3. Potential Emissions: **448.2** lb/hour **1,962.2**	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 **0** to **0** tons/year	
6. Emission Factor: **4.5 lb/mmBtu** Reference: **Manufacturer Data**	7. Emissions Method Code: **5**

8. Calculation of Emissions (limit to 600 characters):

4.5 lb/mmBtu x 183 gph x0.136 mmBtu/gal = 112 lb/hour

112 lb/hour x 4 diesel generators = 448 lb/hour x 8,760 hours/year x ton/2000 lb = 1,962.2 TPY

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):
NO_x testing not required to be performed annually if the emission unit operates less than 400 hr/yr per generator [Rules 62-296.570(3) and 62-297.310(7)(a)3. and 4., F.A.C.]

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code: **OTHER – emissions limit required by rule**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **4.75 lbs/mmBtu**	4. Equivalent Allowable Emissions: **448** lb/hour **1,962.2** tons/year

5. Method of Compliance (limit to 60 characters):
Annual compliance if operation ≥ 400 hr/yr/generator

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

4.75 lb/mmBtu is the current reg.limit [Rule 62-296.570(4)(b)7]on NO_x emissions. Equivalent allowable emissions are given for liquid fuel firing.

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___1___

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1). Allowed for start-up, shutdown and malfunction if the duration of excess emissions is minimized & total excess emission is 2 hr/24 hr**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor __1___ of __1__

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Continuous monitors are not required for the main plant emergency diesel generators.**	

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

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: **PTNU1A_1 & PTNU1B_1** [] Not Applicable [] Waive

2. Fuel Analysis or Specification
   [X] Attached, Document ID: **PTNU1_2** [ ] Not Applicable [ ] Waiver Requested

3. Detailed Description of Control Equipment
   [] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested

4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID [X] Not Applicable [ ] Waiver Requested

5. Compliance Test Report
   [] Attached, Document ID:
   [ ] Previously submitted, Date:_____
   [X] Not Applicable

6. Procedures for Startup and Shutdown
   [X] Attached, Document ID: **PTNU1_6** [ ] Not Applicable [] Waiver Requested

7. Operation and Maintenance Plan
   [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested

8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID:_____ [X] Not Applicable

9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID:_____ [X] Not Applicable

10. Supplemental Requirements Comment:

    See Attachment PTNU1_10.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID:_ **PTNU1_11** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT PTN-EU005

LIST OF REGULATIONS

Turkey Point Nuclear Plant
File: PTN-EU005_Reg

State: *(description)*

STATIONARY SOURCES - GENERAL REQUIREMENTS
62-210.300(3)(a)22, F.A.C.: Exemptions.
62-210.700, F.A.C.: Excess Emissions.

STATIONARY SOURCES - EMISSION STANDARDS
62-296.320(4)(b), F.A.C.: Visible Emissions Standard.
62-296.570(4)(a)3, F.A.C.: Test exclusion
62-296.570(4)(b)7, F.A.C.: Diesel NOx limit
62-296.570(4)(c), F.A.C.: Excess Emissions.

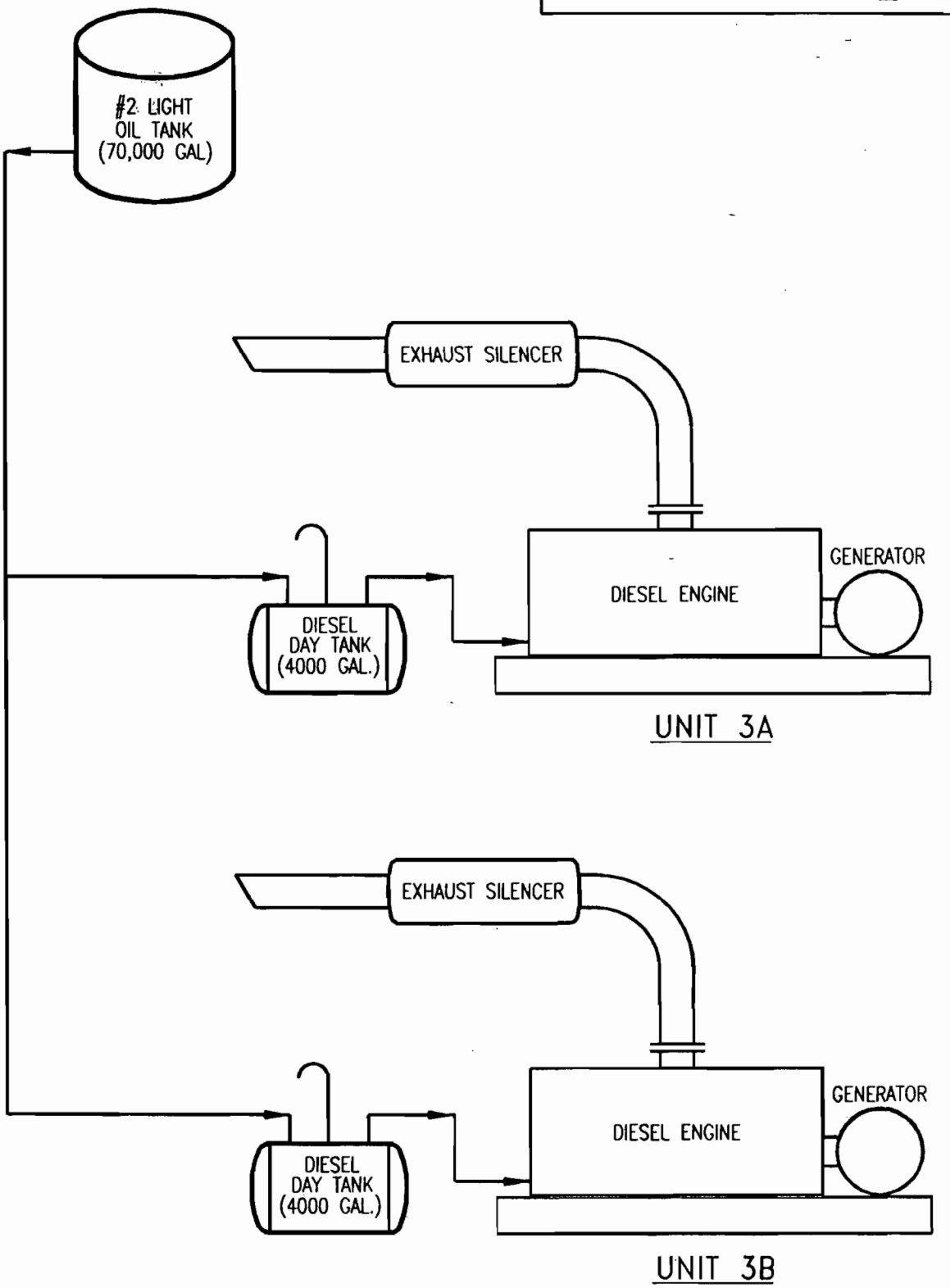
OPERATION PERMITS FOR MAJOR SOURCES
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.460, F.A.C.: Permit Shield.

STATIONARY SOURCES - EMISSIONS MONITORING
62-297.310(2)(b), F.A.C.: General Test Requirements. Capacity
62-297.310(4)(a)2, F.A.C.: Opacity Compliance Tests.
62-297.310(5), F.A.C.: Process Variables.
62-297.310(7)(a)3.b, F.A.C.: Frequency of Compliance Tests.
62-297.310(7)(a)4.a, F.A.C.: Visible emissions.
62-297.310(7)(a)9., F.A.C.: Test Notification
62-297.310(8) , F.A.C.: Test Reports.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

ATTACHMENT PTNU1A-1
AND ATTACHMENT PTNU1B-1

PROCESS FLOW DIAGRAM

ATTACHMENT: PTNU1A_1.bmp



TECHNICAL ACCEPTANCE | ENGINEERING ORGANIZATION | ORG | BY | DATE

WALKDOWN INFORMATION | AS-BUILT INFORMATION | ORG | BY | DATE

BAR CODE

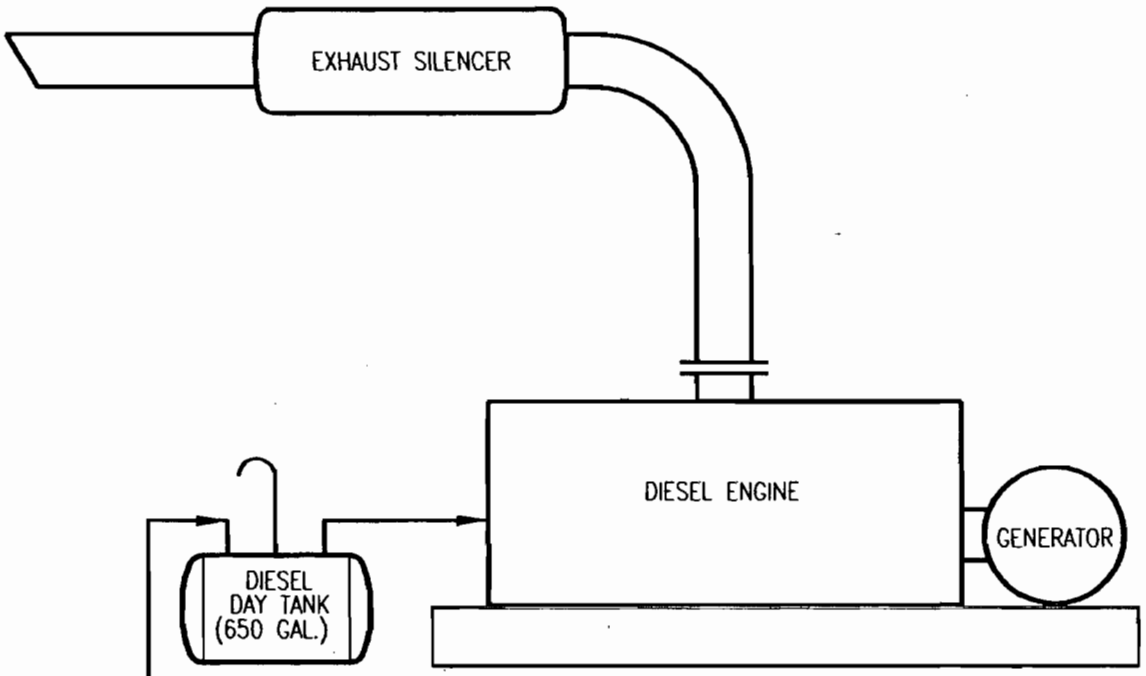
REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000628	TITLE: EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU1A
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000628	
DRAWING NUMBER: JETS-M0013-YY	SHEET: 1 OF 1	REV: 0

FPGSYM/FPGBDR-A 9/90

ATTACHMENT: PTNU1B_1.bmp



UNIT 4A & 4B

TECHNICAL ACCEPTANCE
ENGINEERING ORGANIZATION | ORG | BY | DATE

WALKDOWN INFORMATION
AS-BUILT INFORMATION | ORG | BY | DATE

BAR CODE

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM: YY	DISCIPLINE: M	PLANT/UNIT: TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000629	TITLE: EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU1B
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000629	
DRAWING NUMBER: JETS-M0014-YY	SHEET: 1 OF 1	REV: 0

FPGSTM/FPGBDR-A 9/90

ATTACHMENT PTNU1-2

FUEL ANALYSIS OR SPECIFICATION

Attachment PTNU1_2

Fuel Analysis

Light Distillate oil (typical)*

Parameter	Typical value	Max value
API gravity @ 60 F	32-34[1]	40 [1]
Relative density	285 lb / bbl [2]	not available
Heat content	19,130 Btu / lb	not available
% sulfur	0.01 - 0.05 [1]	0.05 [1]
% nitrogen	9 mg / kg	not available
% ash	negligible	0.01 [1]

*Note: The values listed are "typical" values based upon 1) information FPL gathered by laboratory analysis, and 2) FPL's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

[1] Data taken from the FPL fuel purchasing specification

[2] Data from laboratory analysis

ATTACHMENT PTNU1-6

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PTNU1_6

Procedures for Startup / Shutdown

The emergency diesel generators are the main backup emergency electrical power supply components for the nuclear generating units. The function of the emergency diesel generator is to supply electric power to key power plant equipment during emergency loss-of-power situations. This equipment is typically test-run on a monthly basis for 1 to 2 hours to ensure that it will function properly when needed in an emergency.

Startup for a typical emergency diesel generator begins with actuating a switch which operates an air start motor on the diesel engine which "turns over" the diesel engine until ignition of the diesel fuel commences.

Shutdown is performed when the normal electric power supply to plant equipment is restored. Shutdown is performed by shutting off the diesel fuel supply to the emergency diesel generator.

Best Operating Practices include proper maintenance of the diesel engines by trained personnel on the generating unit in accordance with Nuclear Regulatory commission specifications, and the purchase of diesel fuel that also meets these strict specifications. On occasion, maintenance personnel from the diesel generator manufacturer may be utilized to perform more extensive overhaul work.

If excess emissions are suspected during operation of the emergency diesel, appropriate measures to minimize the duration of the event may include shutting down the equipment and investigating the cause of the opacity.

ATTACHMENT PTNU1_10

SUPPLEMENTAL REQURIEMENTS COMMENT

ATTACHMENT PTNU1_10

FPL requests clarification of Conditions A9 and A18 when these conditions are considered for the Title V renewal. Pursuant to Rule 62-296.570(3) F.A.C. FPL applied for an operation permit for RACT requirements. Included in this request was the compliance determination, which is reflected in Condition A18. This condition does not require either annual or renewal compliance testing if diesel fuel is used for less than 400 hours per year as allow under Rule 62-296.570(4)(a)3 F.A.C. This condition however should be clarified as follows:

A18. By this permit, annual and permit renewal compliance testing for NO_x is not required for these emission units while burning diesel fuel for less than 400 hours in each generator or engine **per year**. [Rule 62-296.570(3) and (4)(a)3 F.A.C.]

Condition A9 should be clarified to remove the sentence "However, a compliance test that demonstrates compliance with the applicable emission limiting standard shall be conducted prior to obtaining a renewed operation permit." This is standard language in Rule 62-297.310(7) F.A.C., which has been preempted by the Department's issuance of an operation permit for RACT that included the compliance requirement contained in Condition A18.

ATTACHMENT PTNU1-11

ALTERNATIVE METHODS OF OPERATION

Attachment PTNU1_11.doc
Alternative Methods of Operation

The main plant emergency diesel generators will operate on an as-needed basis in order to provide backup power to the nuclear plant equipment in the event of a loss of external power. A typical operation of the diesel generators is less than 400 hr/yr for each generator.

The main plant diesel generators are test-started and run several times per month in accordance with Nuclear Regulatory Commission (NRC) regulations, in order to assure operability if needed in the event of a loss of external power.

This equipment burns distillate oil fuel.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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

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

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Auxiliary Emergency Diesel Generators

4. Emissions Unit Identification Number: **006**
[ ] No ID [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**Vary with equip.**	**49**	**[NO]**

9. Emissions Unit Comment: (Limit to 500 Characters)

The emission unit consists of five pieces of equipment [diesel generators] used for the security system, waste water treatment, and meteorological assessment. The initial startup dates, manufacturer and model numbers vary with each piece of equipment.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

NONE

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	**4.08**	mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr	tons/day	
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	**400**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):
Information provided is for the security emergency diesel generator, which is the largest.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment PTN-EU005_Reg	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN security system emergency diesel generator**	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Five pieces of equipment [diesel generators] used for the security system, waste water treatment, and meteorological assessment.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: **V**	6. Stack Height: **13** feet
7. Exit Diameter: **0.67** feet	
8. Exit Temperature: **1006** °F	9. Actual Volumetric Flow Rate: **3686** acfm
10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone: **17** East (km): **567282.32** North (km): **2813081.87**	
14. Emission Point Comment (limit to 200 characters):	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN sewage system emergency diesel generator**	2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Five pieces of equipment [diesel generators] used for the security system, waste water treatment, and meteorological assessment.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: **H**	6. Stack Height: **7.25** feet
7. Exit Diameter: **0.33** feet	
8. Exit Temperature: **847** °F	9. Actual Volumetric Flow Rate: **1114** acfm
10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone: **17** East (km): **567086.79** North (km): **2813080.89**	
14. Emission Point Comment (limit to 200 characters):	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN meteorological tower emergency diesel generators**	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Five pieces of equipment [diesel generators] used for the security system, waste water treatment, and meteorological assessment.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **H**	6. Stack Height: **7.25** feet	7. Exit Diameter: **0.33** feet
8. Exit Temperature: **847 °F**	9. Actual Volumetric Flow Rate: **1114** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters): **Stack height, exit diameter, temperature and flow rates are estimates.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in PTN security system emergency diesel generator**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.03**	5. Maximum Annual Rate: **262.8**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in PTN sewage emergency diesel generators**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.015**	5. Maximum Annual Rate: **131.4**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment ___3__ of __3___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in PTN meteorological tower emergency diesel generators**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.003**	5. Maximum Annual Rate: **26.3**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10.Segment Comment (limit to 200 characters): **Information provided above is based on 3-gallons per hour of fuel consumption for the 2 met. Tower generators combined.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO_x	**NA**	**NA**	**EL**

Pollutant Detail Information Page 1 of 1 **Nitrogen Oxides**

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **28.79** lb/hour **126.1** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **4.41 lb/MMBtu** Reference: **AP-42**	7. Emissions Method Code: **3**

8. Calculation of Emissions (limit to 600 characters):

4.41 LB/mmBtu X 15 gph X 0.136 mmBtu/gal = 9.0 lbs/hour
4.41 LB/mmBtu X 1 gph X 0.136 mmBtu/gal = 0.6 lbs/hour
4.41 LB/mmBtu X 2 gph X 0.136 mmBtu/gal = 1.2 lbs/hour
4.41 LB/mmBtu X 30 gph X 0.136 mmBtu/gal = 17.99 lbs/hour
9 + 0.6 + 1.2 + 17.99 = 9.0 lbs/hour
28.79 LB/hr X 8,760 hr/yr x ton/2,000 = 126.1

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

NO_x testing not required if less than 400 hr/yr/generator [Rule 62-296.570(3) and 62-297.310(7)(a)3. and 4. F.A.C.]

Allowable Emissions Allowable Emissions ___1___ of ___2___

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **4.75 lb/mmBtu**	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test if ≥ 400 hr/yr/generator.**	

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

4.75 lb/mmBtu is the regulatory limit imposed by DEP Rule 62-296.570(4)(b)7.

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___1___

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1). Allowed for start-up, shutdown and malfunction if the duration of excess emissions is minimized & total excess emission is 2 hr/24 hr.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor __1___ of __1__

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **No CEM is required for the auxiliary emergency diesel generators.**	

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

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: **PTNU2A_1 & PNTU2B_1** [] Not Applicable

2. Fuel Analysis or Specification
   [X] Attached, Document ID: **PTNU2_2** [ ] Not Applicable [ ] Waiver Requested

3. Detailed Description of Control Equipment
   [ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested

4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID:
   [ ] Not Applicable [X] Waiver Requested

5. Compliance Test Report
   [ ] Attached, Document ID:_____
   [ ] Previously submitted, Date:
   [X] Not Applicable

6. Procedures for Startup and Shutdown **PTNU2_6**
   [ ] Attached, Document ID: [ ] Not Applicable [ ] Waiver Requested

7. Operation and Maintenance Plan
   [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested

8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID:_____ [X] Not Applicable

9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID:_____ [X] Not Applicable

10. Supplemental Requirements Comment:

    See Attachment PTNU1_10.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: **PTNU2_11** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT PTNU2A-1
AND ATTACHMENT PTNU2B-1

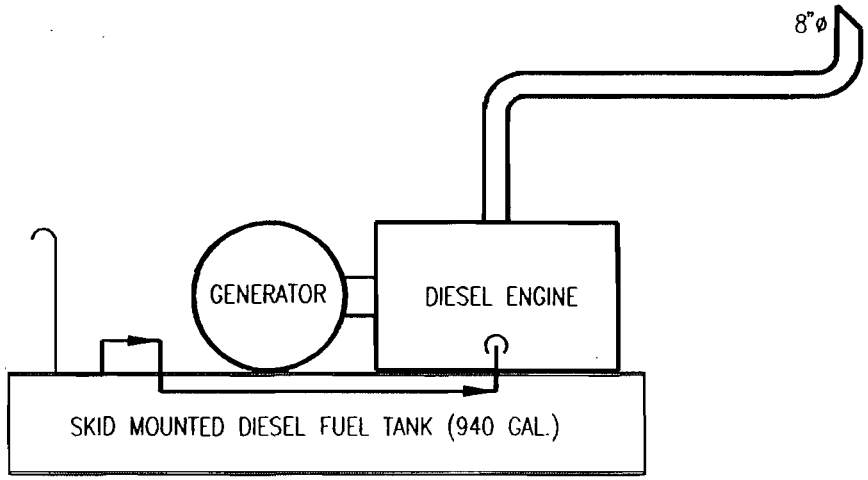
PROCESS FLOW DIAGRAM

ATTACHMENT: PTNU2A_1.bmp

TECHNICAL ACCEPTANCE	ORG	BY	DATE
ENGINEERING ORGANIZATION			

WALKDOWN INFORMATION	ORG	BY	DATE
AS-BUILT INFORMATION			

BAR CODE



SECURITY SYSTEM DIESEL GENERATOR

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000630	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU2A
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000630	

DRAWING NUMBER	SHEET	REV
JETS-M0015-YY	1 OF 1	0

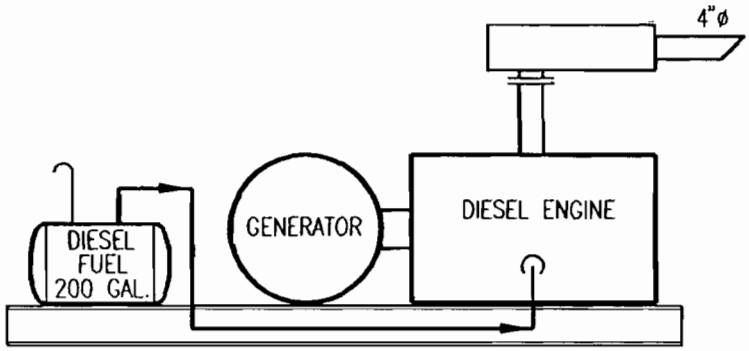
FPGSYM/FPGBOR-A 9/90

ATTACHMENT: PTNU2B_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



SEWAGE PLANT DIESEL GENERATOR

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000633	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU2B
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000633	

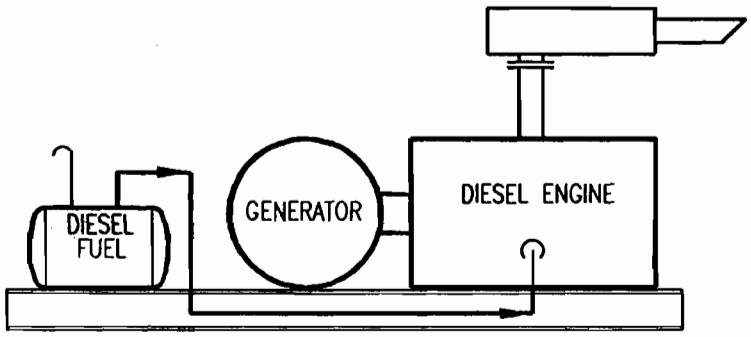
DRAWING NUMBER	SHEET	REV
JETS-M0018-YY	1 OF 1	0

FPCSYM/FPCBDR-A 9/90

ATTACHMENT: PTNU2C_1.bmp

WALKDOWN INFORMATION				TECHNICAL ACCEPTANCE			
AS-BUILT INFORMATION	ORG			ENGINEERING ORGANIZATION	ORG		
	BY				BY		
	DATE				DATE		

BAR CODE



10 METER METEOROLOGICAL TOWER
DIESEL GENERATOR

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000636	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU2C
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000636	

DRAWING NUMBER: JETS-M0018-YY

SHEET: 1 OF 1 | REV: 0

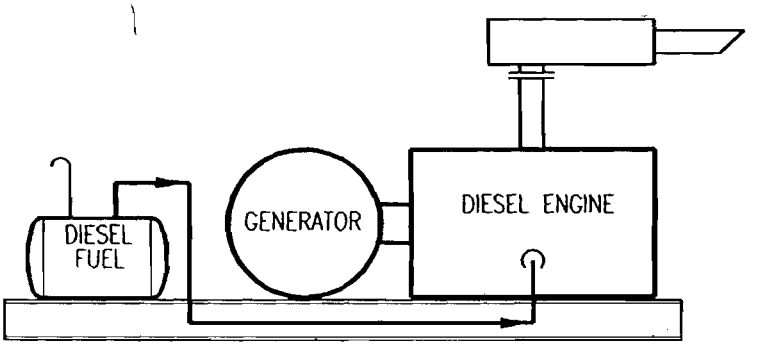
FPGSIM/FPGBDR-A 9/90

ATTACHMENT: PTNU2D_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



60 METER METEOROLOGICAL TOWER
DIESEL GENERATOR

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000637	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU2D
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000637	

DRAWING NUMBER	SHEET	REV
JETS-M0022-YY	1 OF 1	0

FPGSYM/FPGBDR-A 9/90

ATTACHMENT PTNU2-2

FUEL ANALYSIS OR SPECIFICATION

Attachment PTNU2_2

Fuel Analysis

Light Distillate oil (typical)*

Parameter	Typical value	Max value
API gravity @ 60 F	32-34 [1]	40 [1]
Relative density	285 lb / bbl [2]	not available
Heat content	19,130 Btu / lb	not available
% sulfur	0.01 - 0.05 [1]	0.05 [1]
% nitrogen	9 mg / kg	not available
% ash	negligible	0.01 [1]

*Note: The values listed are "typical" values based upon 1) information FPL gathered by laboratory analysis, and 2) FPL's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

[1] Data taken from the FPL fuel purchasing specification

[2] Data from laboratory analysis

ATTACHMENT PTNU2-6

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PTNU2_6

Procedures for Startup / Shutdown

The emergency diesel generators are the main backup power supply components for the nuclear plant security system, sewage plant, and meteorological tower. The function of the emergency diesel generators are to supply electric power to various plant equipment during loss-of-power situations. This equipment is typically test-run on a monthly basis to ensure that it will function properly when needed in an emergency.

Startup for a typical emergency diesel generator begins with actuating a switch which sends an electric signal to a starter motor on the diesel engine which "turns over" the diesel engine until ignition of the diesel fuel commences.

Shutdown is performed when the normal electric power supply to plant equipment is restored. Shutdown is performed by shutting off the diesel fuel supply to the emergency diesel generator.

Best Operating Practices include proper maintenance of the diesel engine on the generating unit, and monitoring the visible emissions from the emergency diesel generator to ensure that the opacity limitation is not exceeded. All efforts to minimize both the level and duration of excess emissions are undertaken.

ATTACHMENT PTNU2-11

ALTERNATIVE METHODS OF OPERATION

Attachment PTNU2_11

Alternative Methods of Operation

The auxiliary diesel generators are fired with light distillate oil fuel. Operating hours on the diesel generators is typically less than 400 hours per year.

Each emergency diesel generator is typically started up at least once per month and run for about 1/2 hour to ensure operability if needed to provide backup power to various plant operating equipment or to the meteorological towers.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

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

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

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[**X**] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Miscellaneous diesel equipment

4. Emissions Unit Identification Number: **007**
[ ] No ID [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	**[NO]**

9. Emissions Unit Comment: (Limit to 500 Characters) **EU consists of the following miscellaneous diesel plant equipment: [6] service air compressor diesel engines; [2]instrument air compressor diesel engines; [1] standby steam generator feed pump diesel engine; [1] service water diesel pump; plus there may be as many as 40 FPL-owned and rental diesel air compressors on site at any given time, for overhauls & various maintenance activities. These are typically mounted on small trailers.**

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

   None

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Catapillar** Model Number: **unknown**
2. Generator Nameplate Rating: **0** MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	**5.848**	mmBtu/hr		
2. Maximum Incineration Rate:	**0**	lb/hr	**0**	tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	hours/day			days/week
	weeks/year		**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): **Information provided is for the standby steam generator feed pump [SSGFP]diesel, which is the largest of the diesel equipment in this emission unit.**				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attached file: PTN-EU005_Reg	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN instrument air compressor diesel engine**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Air compressors engines;; SSGFP; service water diesel pump**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **12** feet	7. Exit Diameter: **0.33** feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **567196.67** North (km): **2813450.57**		
14. Emission Point Comment (limit to 200 characters): **Information above is for one instrument air compressor located on unit 3 and there are two at this site.**		

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN standby steam generator feedpump diesel engine**	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Air compressors engines;; SSGFP; service water diesel pump**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **V**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **864** °F	9. Actual Volumetric Flow Rate: **5025** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **567253.46** North (km): **2813266.29**

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

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN service water diesel pump**	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Air compressors engines;; SSGFP; service water diesel pump**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **V**	6. Stack Height: **8** feet	7. Exit Diameter: **0.33** feet
8. Exit Temperature: **770 °F**	9. Actual Volumetric Flow Rate: **1120** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **567419.67** North (km): **2813543.97**

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

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN diesel air compressors**	2. Emission Point Type Code: **3**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Air compressors engines;; SSGFP; service water diesel pump**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **V**	6. Stack Height: **6** feet	7. Exit Diameter: **0.5** feet
8. Exit Temperature: **850** °F	9. Actual Volumetric Flow Rate: **904** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: East (km): North (km):

15. Emission Point Comment (limit to 200 characters):
There may be as many as 40 FPL-owned and rental diesel air compressors on site at any given time, for overhauls & various maintenance activities. These are typically mounted on small trailers.

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __1___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in the Standby Steam Generator Diesel Feedpump**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.043**	5. Maximum Annual Rate: **17.2**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): Information above for the **SSGDFP reflects 400 hours of operation per year**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in the service water diesel pump**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
3. Maximum Hourly Rate: **0.077**	4. Maximum Annual Rate: **3.08**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: : **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Information provided for the service water diesel pump for 400 hours of operation per year**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __1___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in the three permanent diesel air compressors**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.0446**	5. Maximum Annual Rate: **17.84**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: : **0.01**	11. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Information provided for the six permanent diesel air compressors reflects 400 hours of operation per year each.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in 21 rental diesel air compressors**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.252**	5. Maximum Annual Rate: **100.8**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: : **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Information provided above reflects the combined fuel usage of the rental diesel air compressors [21 each] at 400 hours of operation per year of operation each.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __1___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in instrument air diesel air compressors**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **thousand gallons**	
4. Maximum Hourly Rate: **0.252**	5. Maximum Annual Rate: **100.8**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: : **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Information provided above reflects the combined fuel usage of the instrument air diesel air compressors [2 each] at 400 hours of operation per year of operation.**		

Segment Description and Rate: Segment _____ of _____

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

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO_x	**NA**	**NA**	**EL**

Pollutant Detail Information Page 1 of 1 **Nitrogen Oxides**

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **240.68** lb/hour **1,054.2** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **4.41 lb/MMBtu** Reference: **AP-42**	7. Emissions Method Code: **3**

8. Calculation of Emissions (limit to 600 characters):

4.41 LB/mmBtu X 43 gph X 0.136 mmBtu/gal = 25.78 lbs/hour [S.S.G.F]
4.41 LB/mmBtu X 15 gph X 0.136 mmBtu/gal = 9 lb/hr X 2 = 18 lbs/hour [Inst.Air diesels]
4.41 LB/mmBtu X 8 gph X 0.136 mmBtu/gal = 4.8 lb/hr X 3 = 14.39 lbs/hour [hydrolazers]
4.41 LB/mmBtu X 44.6 gph X 0.136 mmBtu/gal = 26.75 lbs/hour Dsl.Air Comp., 6es, combined]
4.41 LB/mmBtu X 7.7 gph X 0.136 mmBtu/gal = 4.62 lbs/hour [service wtr diesel pmp]
4.41 LB/mmBtu X 12 gph X 0.136 mmBtu/gal = 7.2 lb/hr X 21 = 151.14 lbs/hour [rental air comp.]
25.78 + 186 + 14.39 + 26.75 + 4.62 + 151.14 = 240.68 lbs/hour combined total
240.68 LB/hr X 8,760 hr/yr x ton/2,000 lb = 1,054.2 TPY

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

NO_x testing not required in less than 400 hr/yr/generator [Rule 62-296.570(3) and 62-297.310(7)(a)3. and 4. F.A.C.

Allowable Emissions Allowable Emissions ___1___ of ___2___

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **4.75 lb/mmBtu**	4. Equivalent Allowable Emissions: lb/hour **1,054.2** tons/year

5. Method of Compliance (limit to 60 characters):

Annual compliance testing if ≥ 400 hr/yr/generator.

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

4.75 lb/mmBtu is the regulatory limit imposed by DEP Rule 62-296.570(4)(b)7.

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___1___

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **Allowed for start-up, shutdown and malfunction if the duration of excess emissions is minimized & total excess emission is 2 hr/24 hr [Rule 62-210.700(1)].**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor __1___ of __1__

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Continuous monitors are not required for the miscellaneous diesel-driven equipment.**	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID:**PTNU3A_1, PTNU3B_1, PTNU3D_1, PTNU3E_1, PTNU3F_1** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: **PTNU3_2** [ ] Not Applicable [ ] Waiver
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_ _ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: **PTNU3_6** [ ] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
11.Supplemental Requirements Comment: **See Attachment PTNU1_10**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[**X**] Attached, Document ID: **PTNU3_11** [] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [**X**] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [**X**] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [**X**] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[**X**] Not Applicable

ATTACHMENT PTNU3A-1
ATTACHMENT PTNU3B-1
ATTACHMENT PTNU3D-1
ATTACHMENT PTNU3E-1
ATTACHMENT PTNU3F-1

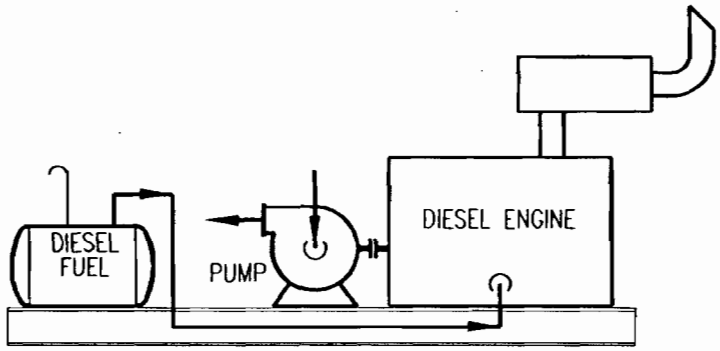
PROCESS FLOW DIAGRAM

ATTACHMENT: PTNU3A_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



STANDBY STEAM GENERATOR FEED PUMP

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000638	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU3A
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000638	

DRAWING NUMBER	SHEET	REV
JETS-M0023-YY	1 OF 1	0

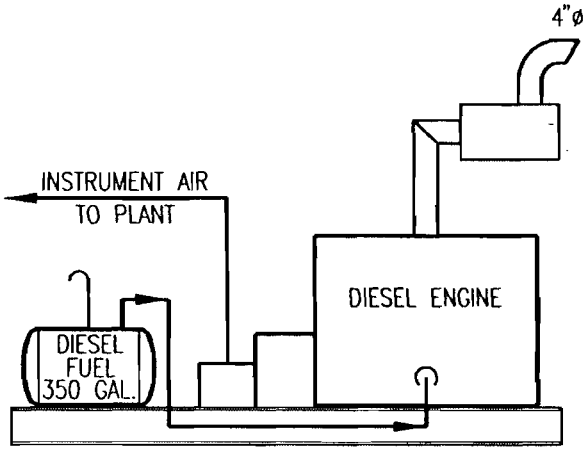
FPGSYM/FPGBDR-A 9/90

ATTACHMENT: PTNU3B_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



INSTRUMENT AIR
DIESEL AIR COMPRESSOR (2)

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000634	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU3B
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000634	

DRAWING NUMBER: JETS-M0019-YY

SHEET: 1 OF 1 | REV: 0

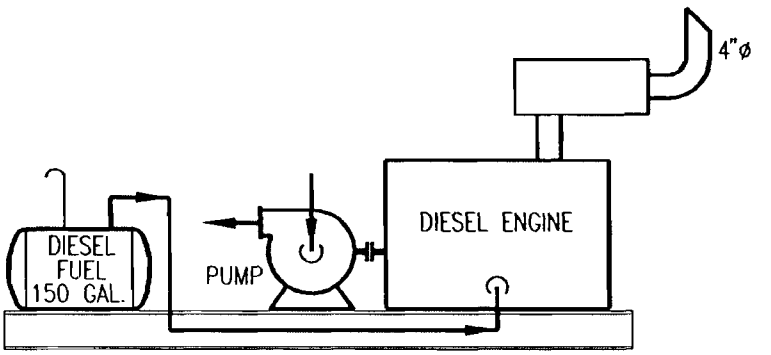
FPGSYM/FPGBDR-A 9/90

ATTACHMENT: PTNU3D_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



SERVICE WATER DIESEL PUMP

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000632	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU3D
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000632	

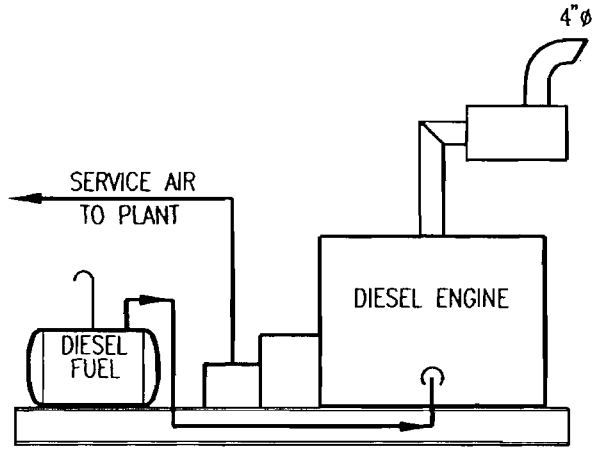
DRAWING NUMBER	SHEET	REV
JETS-M0017-YY	1 OF 1	0

FPCSYM/FPCBOR-A 9/90

ATTACHMENT: PTNU3E_1.bmp

WALKDOWN INFORMATION				TECHNICAL ACCEPTANCE			
AS-BUILT INFORMATION	ORG	BY	DATE	ENGINEERING ORGANIZATION	ORG	BY	DATE

BAR CODE



SERVICE AIR COMPRESSORS (6)

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000639	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU3E
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000639	

DRAWING NUMBER: JETS-M0024-YY

SHEET: 1 OF 1 | REV: 0

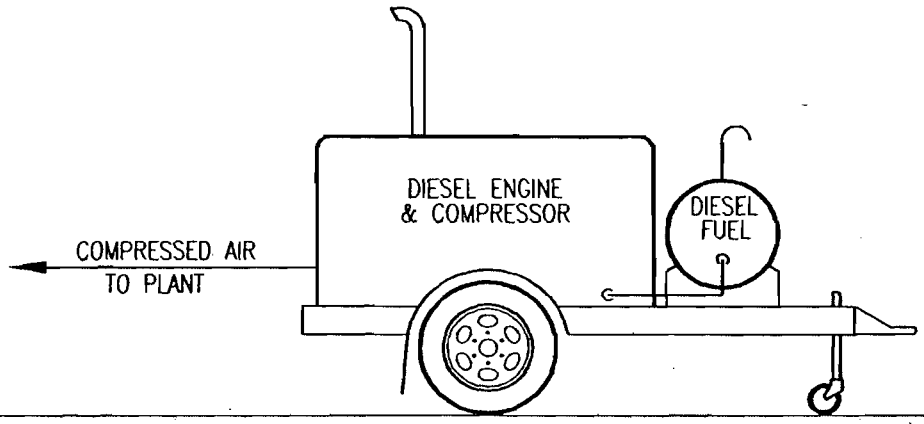
FPGSYM/FPGBDR-A 9/90

ATTACHMENT: PTNU3F_1.bmp

TECHNICAL ACCEPTANCE	ORG	BY	DATE
ENGINEERING ORGANIZATION			

WALKDOWN INFORMATION	ORG	BY	DATE
AS-BUILT INFORMATION			

BAR CODE



RENTAL AIR COMPRESSORS (21)

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000640	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU3F
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000640	
DRAWING NUMBER: JETS-M0025-YY	SHEET: 1 OF 1	REV: 0

FPCSYM/FPCBDR-A 9/90

ATTACHMENT PTNU3-2

FUEL ANALYSIS OR SPECIFICATION

Attachment PTNU3_2

Fuel Analysis

Light Distillate oil (typical)*

Parameter	Typical value	Max value
API gravity @ 60 F	32-34[1]	40 [1]
Relative density	285 lb / bbl [2]	not available
Heat content	19,130 Btu / lb	not available
% sulfur	0.01 - 0.05 [1]	0.05 [1]
% nitrogen	9 mg / kg	not available
% ash	negligible	0.01 [1]

*Note: The values listed are "typical" values based upon 1) information FPL gathered by laboratory analysis, and 2) FPL's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

[1] Data taken from the FPL fuel purchasing specification

[2] Data from laboratory analysis

ATTACHMENT PTNU3-6

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PTNU3_6

Procedures for Startup / Shutdown

The diesel driver is the motive power supply component for the nuclear steam boiler diesel driven feed pump. The function of the diesel driver is to supply motive power to the standby steam generator feed pump during loss-of-power situations. This equipment is typically test-run on a monthly basis to ensure that it will function properly when needed in an emergency.

Startup for the diesel driver begins with actuating a switch which sends an electric signal to a starter motor on the diesel engine which "turns over" the diesel engine until ignition of the diesel fuel commences.

Shutdown is performed when the normal electric power supply to plant equipment is restored. Shutdown is performed by shutting off the diesel fuel supply to the diesel driver.

Best Operating Practices include proper maintenance of the diesel engine on the generating unit, and monitoring the visible emissions from the emergency diesel generator to ensure that the opacity limitation is not exceeded. All efforts to minimize both the level and duration of excess emissions are undertaken.

ATTACHMENT PTNU3-11

ALTERNATIVE METHODS OF OPERATION

Attachment PTNU3_11

Alternative Methods of Operation

The miscellaneous diesel equipment is fired with light distillate oil fuel. Operating hours on the miscellaneous diesel equipment is typically less than 400 hours per year.

Miscellaneous diesel equipment is typically started as needed to provide air or other services to various plant operating equipment.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

9. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

9. Type of Emissions Unit Addressed in This Section: (Check one)

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

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

[ ]This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Unregulated emission units

4. Emissions Unit Identification Number:
[**008**] No ID [ ] ID Unknown

9. Emissions Unit Status Code:	9. Initial Startup Date:	9. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	**[No]**

9. Emissions Unit Comment: (Limit to 500 Characters)
This emission units section covers all unregulated sources at the Turkey Point Nuclear Site that are not addressed elsewhere in this application. Please refer to Attachment PTN-FW for a list of included sources. Note: this section includes the diesel fire pump, which is exempted form permitting by DEP Rule 62-210.300(3)(a)21, and is also exempted from NO_x RACT by DEP Rule 62-296.570(1)(b).

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

None

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	**400**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):			

This emission unit is comprised of various emission units that may include diesel engines that would operate up to 400 hours per year each, and by such avoid the requirement for compliance testing per DEP Rule 62-297.340(1)(c)2.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Attachment PTN-EU003 – Reg.	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **PTN fire system diesel pump**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Unregulated Emission Units 008**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **6** feet	7. Exit Diameter: **0.5** feet
8. Exit Temperature: **980** °F	9. Actual Volumetric Flow **3,190** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate:**17** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **567447.6** North (km): **2813544.11**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __2___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Diesel fuel fired in the unregulated plant equipment.**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **0.018**	5. Maximum Annual Rate: **7.2**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Information provided reflects the fire system diesel pump at 400 hours per year of operation.**		

Segment Description and Rate: Segment __2___ of __2___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Above ground tank #3U – working and breathing loss**		
2. Source Classification Code (SCC): **4-03-010-21**	3. SCC Units: **thousand gallons transferred or handled**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:**160,000**
7. Maximum % Sulfur:**0.5**	8. Maximum % Ash:**0.01**	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Breathing loss = 36.73 lbs VOC / yr** **Working loss = 7.10 lbs VOC / yr** **Total estimated losses = 0.02 TPY, using the estimated activity factor given above.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
N/A	N/A	N/A	N/A

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):		

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___2___

3. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): **Allowed for start-up, shutdown and malfunction if the duration of excess emissions is minimized & total excess emission is 2 hr/24 hr [Rule 62-210.700(1)].**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

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

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

Supplemental Requirements

1. Process Flow Diagram
   [**X**] Attached, Document ID:**PTNU4A_1** [ ] Not Applicable [ ] Waiver Requested

2. Fuel Analysis or Specification
   [**X**] Attached, Document ID: **PTNU3_2** [ ] Not Applicable [ ] Waiver Requested

3. Detailed Description of Control Equipment
   [ ] Attached, Document ID: [**X**] Not Applicable [ ] Waiver Requested

4. Description of Stack Sampling Facilities
   [ ] Attached, Document ID_
   [**X**] Not Applicable [ ] Waiver Requested

5. Compliance Test Report
   [ ] Attached, Document ID:
   [ ] Previously submitted, Date:_____
   [**X**] Not Applicable

6. Procedures for Startup and Shutdown
   [ ] Attached, Document ID: [**X**] Not Applicable [ ] Waiver Requested

7. Operation and Maintenance Plan
   [ ] Attached, Document ID:_____ [**X**] Not Applicable [ ] Waiver Requested

8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID:_____ [**X**] Not Applicable

9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID:_____ [**X**] Not Applicable

10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT PTN-EU008

APPLICABLE REGULATIONS

Turkey Point Nuclear Plant
File: PTN-EU008_Reg

[Note: unregulated sources]

State: ***(description)***

STATIONARY SOURCES - GENERAL REQUIREMENTS
62-210.300(3)(a)22, F.A.C.: Exemptions.
62-210.700(1),(4),(5),(6), F.A.C.: Excess Emissions.

OPERATION PERMITS FOR MAJOR SOURCES
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.460, F.A.C.: Permit Shield.

STATIONARY SOURCES - EMISSION STANDARDS
62-296.320(1)(b), F.A.C.: Applicability.
62-296.570(4)(a)3, F.A.C.: Test exclusion
62-296.570(4)(b)7, F.A.C.: Diesel NOx limit
62-296.570(4)(c), F.A.C.: Excess Emissions.

ATTACHMENT PTNU4A-1

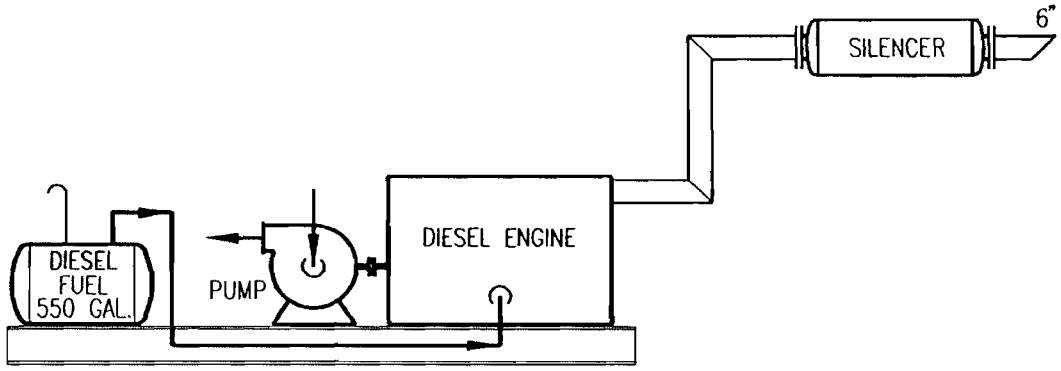
PROCESS FLOW DIAGRAM

ATTACHMENT: PTNU4A_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG	BY	DATE

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG	BY	DATE

BAR CODE



FIRE PUMP DIESEL

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/22/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	TURKEY POINT NUCLEAR
SCALE: N/A	CAD FILE NAME: JP000631	TITLE: EMISSION UNIT FLOW DIAGRAM MISCELLANEOUS DIESELS ATTACHMENT NO. EU4A
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: JP000631	

DRAWING NUMBER	SHEET	REV
JETS-M0016-YY	1 OF 1	0

FPGSYM/FPG8DR-A 9/90

0250003-004-AV

2/21/07

Homestead

U.S. Highway 1

Florida Turnpike

Canal Drive

Palm Drive

Homestead Bayfront Park

Biscayne Bay

Power Plant

Turkey Point Site

Biscayne National Park

Elliott Key

Old Rhodes Key

Card Sound Road

U.S. Highway 1

Atlantic Ocean

Everglades National Park

Barnes Sound

Key Largo

Attachment: ptnfs_1.bmp

Turkey Point Area Map
Dade County

FPL Environmental Affairs

Kilometers 0 10

Miles 0 10

N W E S

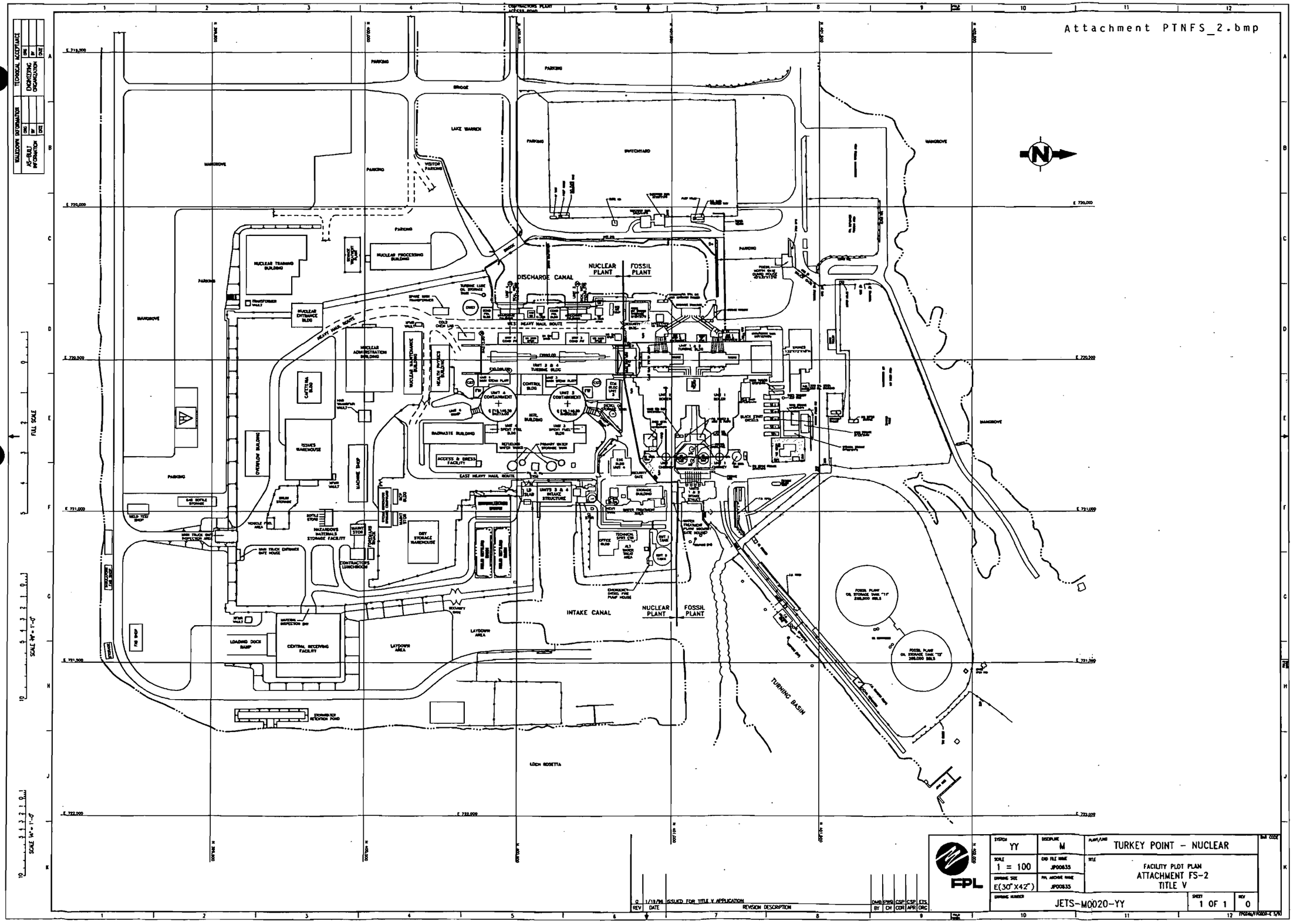
- Turkey Point Site
- Water
- Major Roads
- Railroads
- Residential Areas

Source: Landuse data provided by South Florida Water Management District (1993)

/export/home/ron/ptp-site.map (6-95)

Best Available Copy

Attachment PTNFS_2.bmp



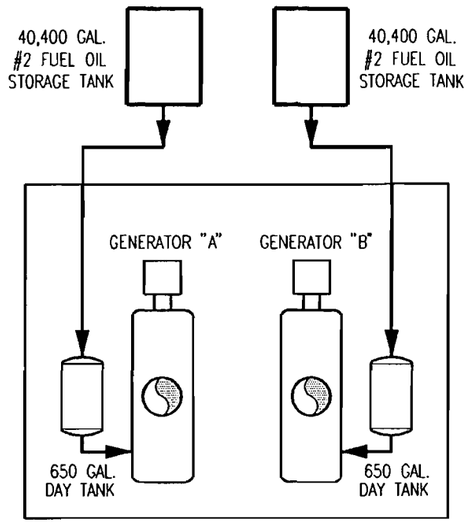
0	1/19/96	ISSUED FOR TITLE V APPLICATION	
REV	DATE	REVISION DESCRIPTION	DWB BY / PWR CH / CSP COR / CSP APR / ETS ORG

FPL

SYSTEM YY	DISCIPLINE M	PLANT/UNIT	TURKEY POINT - NUCLEAR
SCALE 1 = 100	CAD FILE NAME JP00835	TITLE	FACILITY PLOT PLAN ATTACHMENT FS-2 TITLE V
DRAWING SIZE E(30"X42")	FPL ARCHIVE NAME JP00835		
DRAWING NUMBER	JETS-M0020-YY	SHEET 1 OF 1	REV 0

ATTACHMENT: PTNFS_3.bmp

TECHNICAL ACCEPTANCE	ORG	BY	DATE
ENGINEERING ORGANIZATION			
WALKDOWN INFORMATION	ORG	BY	DATE
AS-BUILT INFORMATION			



EMERGENCY DIESEL UNITS 4A & 4B

EU1B

SECURITY SYSTEM DIESEL GENERATOR

EU2A

SEWAGE PLANT DIESEL GENERATOR

EU2B

STANDBY STEAM GENERATOR FEED PUMP

EU3A

I.A. DIESEL AIR COMPRESSORS (2)

EU3B

HYDROLAZERS (3)

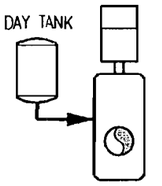
EU3C

SERVICE WATER DIESEL PUMP

EU3D

SERVICE AIR COMPRESSOR (6)

EU3E

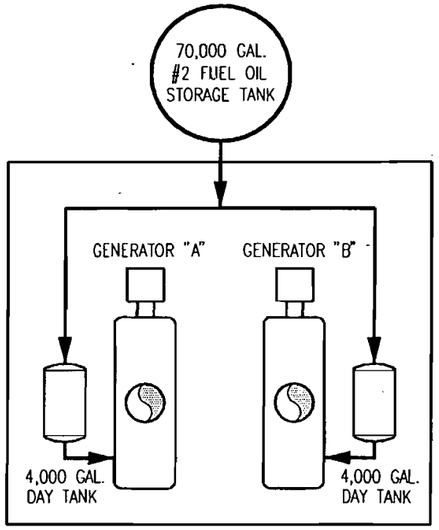


RENTAL AIR COMPRESSORS (21) (TRAILER MOUNTED)

EU3F

DIESEL FIRE PUMP

EU4A



EMERGENCY DIESEL UNITS 3A & 3B

EU1A

10 METER METEOROLOGICAL TOWER DIESEL GENERATOR

EU2C

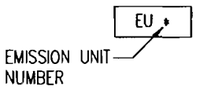
60 METER METEOROLOGICAL TOWER DIESEL GENERATOR

EU2D

NOTES:

1. ACRONYMS:
   EU-EMISSION UNIT
   FO-FUEL OIL
   DG-DIESEL GENERATOR

2. EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:



SCALE 3/8" = 1'-0"

SCALE 1/4" = 1'-0"

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/4/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM: YY	DISCIPLINE: M	PLANT/UNIT: TURKEY POINT PLANT-NUCLEAR	BAR CODE
SCALE: N/A	CAD FILE NAME: JP000627	TITLE: FACILITY SOURCE FLOW DIAGRAM ATTACHMENT NO. FS-3 MISCELLANEOUS DIESEL ENGINES	
DRAWING SIZE: B(11"X17")	FPL ARCHIVE NAME: JP000627		
DRAWING NUMBER: JETS-M0012-YY		SHEET: 1 OF 1	REV: 0

GSYM/FPGBDR-B 5/93