



**FLORIDA KEYS ELECTRIC COOPERATIVE
ASSOCIATION, INC. - FKEC**

91605 OVERSEAS HIGHWAY P.O. BOX 700377, TAVERNIER, FL 33070-0377 PHONE (305) 852-2431 FAX: (305) 852-4794

0870004-002-AC

PSD-FI-237

Mr. Al A. Linero
Dept. of Environmental Protection
Bureau of Air Resources
Mail Station 5505
2600 Blainstone Rd.
Tallahassee, FL 32399-2400

1997
24 January 1977



Dear Mr. Linero:

Enclosed is Florida Keys Electric Cooperative, Inc.'s (FKEC) application for an air construction/operation permit for a 3.58 MW diesel generator for our Marathon Generating Plant (MGP). Also attached is FKEC check No. 00064316 in the amount of seven thousand five hundred dollars (\$7,500.00) in payment of the application processing fee.

Prior to completing the application, I met with Mr. Jerry Smith and Mr. Art Lyall in Ft. Myers to discuss the power supply situation that we have here in the Keys. FKEC purchases electric power from Florida Power & Light (FP&L) and distributes it to Middle and Upper Keys residents. FKEC's long-term contract with FP&L (effective May, 1992) requires that FKEC maintain the capability of generating power in the event that FP&L cannot supply the Keys (e.g., during hurricanes or peak demand periods). Since the onset of the agreement with FP&L, the total operating hours for the MGP have averaged 551 hours/year (including the two weeks that MGP generated power during Hurricane Andrew). FKEC expects this level of operation to continue.

Even though MGP's actual operating hours are few and the air emissions are minimal, because of legal, contractual obligations, FKEC cannot accept operating limitations on hours or fuel consumption, therefore, FKEC is obliged to apply for this permit as a major source of air emissions. Because of our unusual situation of relying on a mainland power supply while maintaining standby generating capability, I would ask that any regulatory flexibility allowed in the permitting process, be applied in the evaluation of FKEC's application for a new generating unit.

In an effort to expedite the review process, one copy of the application packet has been sent directly to Mr. Art Lyall. Three copies are enclosed for further distribution by your office. Please call me if you have questions or if you require further information.

Air Resources Management staff in Ft. Myers and Tallahassee has been very helpful throughout this process. Thank you.

Sincerely,



Deborah A. Shaw
Environmental Affairs Coordinator

Enc: 3 permit application packets - each containing:

Cover Letter.
FDEP Application Form No. 62-210.900(1).
Attachments A-H.
Current FDEP Permits for Generators 1-7.

pc: Cover letter only.

C.A. Russell, CEO/GM - FKEC
J.M. Burch, P.E., Dir. Engineering - FKEC
T.E. Planer, Supt. Transmission - FKEC
J. R. Smith, P.E., FDEP
A.E. Lyall, Engr., FDEP

CC: EPA
NPS

THE FACE OF THIS DOCUMENT HAS COLORED SAFETY PAPER AND MICRO PRINTING

ACCOUNTS PAYABLE CHECK



**FLORIDA KEYS ELECTRIC COOPERATIVE
ASSOCIATION, INC.**

P. O. BOX 700377 — TAVERNIER, FL 33070
Phone: (305) 852-2431

CHECK NO. 00064316 DATE 01/23/97 AMOUNT \$****7,500.00

PAY EXACTLY \$7,500.00 DOLLARS AND 00 CENTS

VOID AFTER 60 DAYS

TO THE ORDER OF:
FL DEPT OF ENVIRON PROTECTION
BUREAU OF AIR RESOURCES
MAIL STATION 5505
2600 BLAIR STONE RD
TALLAHASSEE FL 32399-2400

BARNETT BANK OF THE KEYS
92200 S. Overseas Hwy.
Tavernier, FL 33070

Janice Allen
Charles Russell

⑈064316⑈ ⑆067007758⑆

4802006000⑈

WARNING: ORIGINAL DOCUMENT HAS AN ARTIFICIAL WATERMARK ON REVERSE SIDE

FLORIDA KEYS ELECTRIC COOPERATIVE SUMMARY OF INVOICES TAVERNIER, FL 33070

INVOICE #	INV. DATE	AMOUNT	INVOICE #	INV. DATE	AMOUNT
APP FEE	01/21/97	7500.00			
					TOTAL 7500.00

SUMMARY OF EXPENSE DISTRIBUTION

EXP ACCT #	DEPT.	AMOUNT	EXP ACCT #	DEPT.	AMOUNT	EXP ACCT #	DEPT.	AMOUNT
107.20	00	7500.00						
								TOTAL 7500.00

CHECK NO. 00064316

01/23/97

TOTAL STUB 01 OF 01

Department of
Environmental Protection

File
Copy

FLORIDA DEP LOGO

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

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

Identification of Facility Addressed in This Application

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

1. Facility Owner/Company Name: Florida Keys Electric Cooperative Association, Inc.	
2. Site Name: Marathon Generation Plant	
3. Facility Identification Number: 52 FTM 440004	<input type="checkbox"/> Unknown
4. Facility Location: Marathon Generation Plant Street Address or Other Locator: 3421 Overseas Highway City: Marathon County: Monroe Zip Code: 33050	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	January 27, 1997
2. Permit Number:	0870004-002-AC
3. PSD Number (if applicable):	PSD-FI-237
4. Siting Number (if applicable):	

Owner/Authorized Representative or Responsible Official**1. Name and Title of Owner/Authorized Representative or Responsible Official:**

Charles A. Russell
Chief Executive Officer and General Manager

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

Organization/Firm: Florida Keys Electric Cooperative Association, Inc.

Street Address: 91605 Overseas Highway

City: Tavernier

State: Florida

Zip Code: 33070

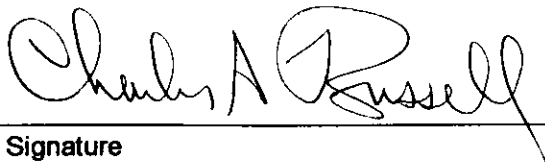
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (305) 852-2431

Fax: (305) 852-4794

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate, and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions unit 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

1/23/97
Date

* Attach letter of authorization if not currently on file.

[illegible]

Purpose of Application and Category

Check one (except as otherwise indicated):

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

This Application for Air Permit is submitted to obtain:

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

Current construction permit number: _____

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

Operation permit to be renewed: _____

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

Current construction permit number: _____

Operation permit to be revised: _____

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

Operation permit to be revised/corrected: _____

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

Operation permit to be revised: _____

Reason for revision: _____

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

This Application for Air Permit is submitted to obtain:

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

Current operation/construction permit number(s): _____

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

Operation permit to be renewed: _____

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

Operation permit to be revised: _____

Reason for revision: _____

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

This Application for Air Permit is submitted to obtain:

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

Current operation permit number(s), if any: A044-227958 ; A044-252749

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

Current operation permit number(s): _____

- ☐ Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

☒ Attached - Amount: \$ 7,500.00☐ Not Applicable.**Construction /Modification Information****1. Description of Proposed Project or Alterations:**

Installation of a new 3.58MW EMD Diesel Generator at Florida Keys Electric Cooperative Association, Inc.'s Marathon Stand-By Generating Plant.

2. Projected or Actual Date of Commencement of Construction:

June 23, 1997

3. Projected Date of Completion of Construction:

September 15, 1997

Professional Engineer Certification**1. Professional Engineer Name:** John M. Burch**Registration Number:** PE - 0048974**2. Professional Engineer Mailing Address:****Organization/Firm:** Florida Keys Electric Cooperative Association, Inc.**Street Address:** 91605 Overseas Highway, P.O. Box 700377,**City:** Tavernier **State:** Florida **Zip Code:** 33070**3. Professional Engineer Telephone Numbers:****Telephone:** (305) 852-2431**Fax:** (305) 852-9129

4. Professional Engineer Statement:

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

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

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

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

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

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here ☐ 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

John M. Buch

Date

1/21/97

(seal)

* Attach any exception to certification statement.

Application Contact**1. Name and Title of Application Contact:**

Deborah A. Shaw
Environmental Affairs Coordinator

2. Application Contact Mailing Address:

Organization/Firm: Florida Keys Electric Cooperative Association, Inc.

Street Address: 91605 Overseas Highway, P.O. Box 700377

City: Tavernier

State: Florida

Zip Code: 33070

3. Application Contact Telephone Numbers:

Telephone: (305) 852-2431

Fax: (305) 852-9129

Application Comment

Florida Keys Electric Cooperative Association, Inc. (FKEC) supplies electric power to the Middle and Upper Florida Keys. FKEC buys its electricity from Florida Power & Light (FP&L) to distribute to Florida Keys Consumers. The Marathon Generation Plant (MGP) is maintained in a standby generating capacity, ready to generate power in the event that FP&L cannot supply power to the Keys. FKEC entered a 20-year extendable contract with FP&L that became effective May 1, 1992 and which requires that FKEC maintain the capability of generating electricity in the event the mainland power supply fails and can no longer continue to deliver alternate economic energy above the effective Base Demand, (See Attachment "F").

Since the implementation of that contract agreement, the MGP total, annual operating hours have averaged 551 hours during "non-hurricane" years (See Attachment "G").

Because FKEC must be able to generate electricity for the Keys during emergencies (e.g., hurricanes), we cannot accept operating limitations on the MGP. Therefore, even though the MGP annual emissions are far below the levels which define a major air pollution source, we are obliged to apply for this permit as a major source.

II. FACILITY INFORMATION**A. GENERAL FACILITY INFORMATION****Facility Location and Type**

1. Facility UTM Coordinates:			
Zone: 17	East (km): 490.70	North (km): 2732.70	
2. Facility Latitude/Longitude:			
Latitude (DD/MM/SS): 24 42 38		Longitude (DD/MM/SS): 81 5 30	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s):
7. Facility Comment (limit to 500 characters): This Facility is a Stand-By Electric Generating Plant consisting of seven (7) diesel engines driving electric generators. An eighth (8th) unit is being added. Total capacity of the facility with eight (8) units will be 21.5 Megawatts. This facility generates power only during emergencies or during Peak Power Demand periods when Florida Power and Light cannot provide sufficient power to supply Florida Keys Electric Cooperative Association, Inc.'s customers.			

Facility Contact

1. Name and Title of Facility Contact: Charles A. Russell Chief Executive Officer and General Manager			
2. Facility Contact Mailing Address: Organization/Firm: Florida Keys Electric Cooperative Association, Inc. Street Address: 91605 Overseas Highway, P.O. Box 700377 City: Tavernier State: Florida Zip Code: 33070			
3. Facility Contact Telephone Numbers: Telephone: (305) 852-2431 Fax: (305) 852-4794			

Facility Regulatory Classifications

1. Small Business Stationary Source?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
2. Title V Source?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
3. Synthetic Non-Title V Source?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	<input checked="" type="checkbox"/> Yes	Potentially	<input type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
6. Major Source of Hazardous Air Pollutants (HAPs)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
7. Synthetic Minor Source of HAPs?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
8. One or More Emissions Units Subject to NSPS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
9. One or More Emission Units Subject to NESHAP?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
10. Title V source by EPA Designation?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
11. Facility Regulatory Classifications Comment (limit to 200 characters):			
<p>This Facility is classified as a Major Title V Source only because it has the potential to emit 250 tons of air pollutants. The plant typically operates less than 10% of the time, to supply power during emergencies and during Peak Power Demand periods when Florida Power and Light cannot fill the demand.</p>			

B. FACILITY REGULATIONS

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

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

40 CFR 70	State Operating Permit Programs
62-4.001 through 62-4.160, FAC	Permits Part I General
62-4.210, FAC	Construction Permits
62-4.220, FAC	Operation Permits for New Sources
62-103.150, FAC	Public Notice of Application and Proposed Agency Action
62-210, FAC	Stationary Sources
62-212.300, FAC	Sources Not Subject to PSD or Nonattainment Requirements
62-213, FAC	Operating Permits for Major Sources of Air Pollution (Title V)
62-204.240, FAC	Ambient Air Quality Standards
62-296.320(4)(b), FAC	General Visible Emissions Standards
62-296.320(4)(c), FAC	Unconfined Emissions of Particulate Matter
62-296.320, FAC	General Pollutant Emission Limiting Standard, Objectionable Odor
62-297.310, FAC	General Test Requirements
62-297.620, FAC	Exceptions and Approvals of Alternative Procedures and Requirements
62-297.401, FAC	Compliance Test Methods

C. FACILITY POLLUTANTS**Facility Pollutant Information**

1. Pollutant Emitted	2. Pollutant Classification
SO ₂	A
CO	A
NO _x	A
PM	A
PM ₁₀	A
VOC	B

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 1 of 6

1. Pollutant Emitted:	SO ₂	
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information: Pollutant 2 of 6

1. Pollutant Emitted:	CO	
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 3 of 6

1. Pollutant Emitted: NO _x		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information: Pollutant 4 of 6

1. Pollutant Emitted: PM		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information: Pollutant 5 of 6

1. Pollutant Emitted:	PM ₁₀	
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

Facility Pollutant Detail Information: Pollutant 6 of 6

1. Pollutant Emitted:	VOC	
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

E. FACILITY SUPPLEMENTAL INFORMATION**Supplemental Requirements for Applications:**

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

Additional Supplemental Requirements for Category I Applications Only

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

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

III. EMISSIONS UNIT INFORMATION

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

**A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)****Type of Emissions Unit Addressed in This Section**

1. Regulated or Unregulated Emissions Unit? Check one:

- ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): 3.58MW EMD Diesel Generator # 8.		
2. Emissions Unit Identification Number: <div style="display: inline-block; margin-left: 20px;"> NEW UNIT <input type="checkbox"/> No Corresponding ID </div> <div style="display: inline-block; margin-left: 20px;"> <input checked="" type="checkbox"/> Unknown </div>		
3. Emissions Unit Status Code: <div style="text-align: center;">C</div>	4. Acid Rain Unit? <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </div>	5. Emissions Unit Major Group SIC Code: <div style="text-align: center;">49</div>
6. Emissions Unit Comment (limit to 500 characters): <p>This is a New Unit necessary for Florida Keys Electric Cooperative Association, Inc. to maintain Contractual Generating Capacity for use during emergency and Peak Power Demand periods.</p>		

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters): <p>Electro-Motive Diesel (EMD), states the following about FKEC's emissions reduction package:</p> <ol style="list-style-type: none"> 1. Retarding fuel injector timing, reduces firing pressure and combustion temperature. 2. Separately cooling the 4 pass after coolers increases combustion air density, therefore, increasing the ratio of air to fuel, reducing the output of NO_x by 36% and PM by 4%.
2. Control Device or Method Code:

Emissions Unit Information Section _____ of _____**B.**

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

Emissions Unit Details

1. Initial Startup Date:		September, 1997
2. Long-term Reserve Shutdown Date:		
3. Package Unit:	EMD	
Manufacturer:	General Motors	Model Number: 20-710G4B
4. Generator Nameplate Rating:	4 MW	
5. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	32	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit to 200 characters): While we request Unlimited Operating Capacity, this unit, like all other Florida Keys Electric Cooperative Association, Inc.'s units, will operate only during emergencies and during Peak Power Demand periods when Florida Power and Light cannot supply power to the Keys.		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule: Please See Application Comment on Page 8.			
24	hours/day	7	days/week
52	weeks/year	8,760	hours/year

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

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

Emissions Unit Information Section _____ of _____

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

40 CFR 70	State Operating Permit Programs
62-4.001 through 62-4.210, FAC	Permits Part I General
62-210, FAC	Construction Permits
62-4.220, FAC	Operation Permits for New Sources
62-103.150, FAC	Public Notice of Application and Proposed Agency Action
62-210 (except 62-210.550 Stack Height), FAC	Stationary Sources
62-213, FAC	Operating Permits for Major Sources of Air Pollution (Title V)
62-204.240, FAC	Ambient Air Quality Standards
62-296.320(4)(b), FAC	General Visible Emissions Standards
62-296.320, FAC	General Pollutant Emission Limiting Standard, Objectionable Odor
62-297.310, FAC	General Test Requirements
62-297.620, FAC	Exceptions and Approvals of Alternative Methods and Requirements
62-297.401, FAC	Compliance Test Methods

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	See Figure 2
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):	
4. ID Numbers or Descriptions of Emissions Units with this Emission Point in Common: <div style="text-align: center;">N/A</div>	
5. Discharge Type Code: <div style="display: flex; justify-content: space-between;"> <div><input type="checkbox"/> D</div> <div><input type="checkbox"/> F</div> <div><input type="checkbox"/> H</div> <div><input type="checkbox"/> P</div> </div> <div style="display: flex; justify-content: space-between;"> <div><input type="checkbox"/> R</div> <div><input type="checkbox"/> V</div> <div><input checked="" type="checkbox"/> W</div> </div>	
6. Stack Height:	3.5 feet
7. Exit Diameter:	3.0 feet
8. Exit Temperature:	≤ 665 °F
NOTE: Emissions Reduction Package may Reduce Temperature by 15-25°F	

Emissions Unit Information Section _____ of _____

9. Actual Volumetric Flow Rate:	acfm
10. Percent 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):	

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)
(limit to 500 characters):

No. 2 Fuel Oil Burned in Diesel Engine.

2. Source Classification Code (SCC): 2-01-001-02

3. SCC Units: Thousand Gallons Burned

4. Maximum Hourly Rate: 0.23

5. Maximum Annual Rate: 2,015

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 0.50

8. Maximum Percent Ash:

9. Million Btu per SCC Unit: 140

10. Segment Comment (limit to 200 characters):

Emissions Unit Information Section _____ of _____**Segment Description and Rate:** Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (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 Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANTS

[illegible]

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

Pollutant Detail Information:

1. Pollutant Emitted:	CO		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:	25.97 lb/hour	114	tons/year [See # 9]
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:	0.81 lbs/MMBtu		
Reference:	AP - 42		
7. Emissions Method Code:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):	<p>0.81 lbs/MMBtu x 32.06 MMBtu/hr = 25.97 lbs/hr</p> <p>25.97 lbs/hr x 8760 hrs/yr x ton/2000 lbs = 114 tpy</p> <p>229 G/HR Fuel Consumption</p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	<p>Based on anticipated, actual operating hours of < 500 hrs/yr, Actual CO Emissions will be < 6.5 tpy.</p>		

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

Pollutant Detail Information:

1. Pollutant Emitted:	NO _x		
2. Total Percent Efficiency of Control:	36 %		
3. Potential Emissions:	99.39 lb/hour	435	tons/year [See # 9]
4. Synthetically Limited?			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5. Range of Estimated Fugitive/Other Emissions:			
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year			
6. Emission Factor: 3.10 lbs/MMBtu			
Reference: AP - 42			
7. Emissions Method Code:			
<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5			
8. Calculation of Emissions (limit to 600 characters):			
3.1 lbs/MMBtu x 32.06 MMBtu/hr = 99.39 lbs/hr 99.39 lbs/hr x 8760 hrs/yr x ton/2000 lbs = 435 tpy			
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):			
based on Anticipated, Actual Operational Hours of < 500 hrs/yr, Actual NO _x Emissions will be < 24.8 tpy			

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

Pollutant Detail Information:

1. Pollutant Emitted:	PM		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:	11.45 lb/hour	50	tons/year [See # 9]
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:	0.3571 lbs/MMBtu or 50 lbs/1000 gal Reference: AIRS		
7. Emissions Method Code:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):	$50 \text{ lbs/1000 gal} \times 1000 \text{ gal/140MMBtu} \times 32.06 \text{ MMBtu/hr} = 11.45$ $11.45 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \frac{\text{ton}}{2000 \text{ lbs}} = 50 \text{ tpy}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	Based on Anticipated, Actual Operating Hours of < 500 hrs/yr, Actual PM Emissions will be < 2.9 tpy.		

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

Pollutant Detail Information:

1. Pollutant Emitted:	PM ₁₀		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:	10.54 lb/hour	46 tons/year	[See # 9]
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:	0.3286 lbs/MMBtu or 46 lbs/1000 gal		
Reference:	AIRS		
7. Emissions Method Code:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):	<p>46 lbs/1000 gal x 1000 gal / 140 MMBtu x 32.06 MMBtu/hr = 10.54 lbs/hr</p> <p>10.54 lbs/hr x 8760 hrs/yr x ^{ton}/2000 lbs = 46 tpy</p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	<p>Based on Anticipated, Actual Operating Hours of < 500 hrs/yr, Actual PM₁₀ Emissions will be <2.6 tpy.</p>		

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

Pollutant Detail Information:

1. Pollutant Emitted:	SO ₂		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:	1.65 lb/hour	7	tons/year [See # 9]
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:	Reference: Mass Balance		
7. Emissions Method Code:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):	$1000 \text{ gal/140 MMBtu} \times 7.2 \text{ lbs/gal} \times 0.05\% \text{ S} \times 2 = 0.0514 \text{ lbs/MMBtu}$ $0.0514 \text{ lbs/MMBtu} \times 32.06 \frac{\text{MMBtu}}{\text{hr}} = 1.65 \text{ lbs/hr}$ $1.65 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \frac{\text{ton}}{2000 \text{ lbs}} = 7.2 \text{ tpy}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	Based on Anticipated, Actual Operating Hours of < 500 hrs/yr, Actual SO ₂ Emissions will be < 0.5 tpy.		

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

Pollutant Detail Information:

1. Pollutant Emitted:	VOC		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:	3.21	lb/hour	14 tons/year [See # 9]
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor:	0.10		
Reference:	AP - 42		
7. Emissions Method Code:	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):	$0.1 \text{ lbs/MMBtu} \times 32.06 \text{ MMBtu/hr} = 3.21 \text{ lbs/hr}$ $3.21 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \frac{\text{ton}}{2000 \text{ lbs}} = 14 \text{ tpy}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	Based on Anticipated, Actual Operating Hours of < 500 hrs/yr, Actual VOC Emissions will be < 0.8 tpy.		

Emissions Unit Information Section _____ of _____**Allowable Emissions** (Pollutant identified on front of page)**A.**

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

B.

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

Emissions Unit Information Section _____ of _____

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype:	VE:20		
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule	<input type="checkbox"/> Other	
3. Requested Allowable Opacity:			
Normal Conditions:	20 %	Exceptional Conditions:	100 %
Maximum Period of Excess Opacity Allowed:	10 min/hour		
4. Method of Compliance:	Annual Testing in Accordance with EPA Method 9 or State Approved Equivalent Method, conducted while the source is operating within 90% to 100% of its Rated Capacity.		
5. Visible Emissions Comment (limit to 200 characters):	General Emission Standard Under 62-296.310(2)(a), FAC. Exceptional Conditions Opacity Limit requested is to allow for Excess Emissions During Startup. As per 62-210.700(1), FAC, Excess Emissions During Startup, Shutdown, or Malfunction shall be permitted but in no case exceed two (2) hours in any twenty-four (24) hour period.		

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype:	VE:X		
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule	<input type="checkbox"/> Other	
3. Requested Allowable Opacity:			
Normal Conditions:	100 %	Exceptional Conditions:	100%
Maximum Period of Excess Opacity Allowed:	60 min/hour		
4. Method of Compliance:	The Duration of Excessive Opacity Emissions will be Monitored to Ensure that Excessive Opacity Emissions do not Exceed two (2) hours in any twenty-four (24) hour period.		
5. Visible Emissions Comment (limit to 200 characters):	Requested Excess Opacity Limit is to allow for Malfunction and Annual Low Load Testing Requirements. As per 62-210.700(1), FAC, Excess Emissions During Startup, Shutdown or Malfunction shall be permitted but in no case exceed two (2) hours in any twenty-four (24) hour period.		

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input style="margin-left: 100px;" type="checkbox"/> Rule <input style="margin-left: 100px;" type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input style="margin-left: 100px;" type="checkbox"/> Rule <input style="margin-left: 100px;" type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

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

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

- ☐ The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ☒ The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ None of the above apply. If so, the baseline emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section _____ of _____**2. Increment Consuming Dioxide?**

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

- ☐ The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ☒ The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ☐ None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:

PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO ₂	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO ₂	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown

4. Baseline Emissions:

PM	0 lb/hour	0 tons/year
SO ₂	0 lb/hour	0 tons/year
NO ₂		0 tons/year

5. PSD Comment (limit to 200 characters):

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

Supplemental Requirements for All Applications

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

Emissions Unit Information Section _____ of _____

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

ATTACHMENTS AND FIGURES

Figure 1

**SITE MAP
MARATHON GENERATING PLANT LOCATION
MARATHON, FLORIDA**

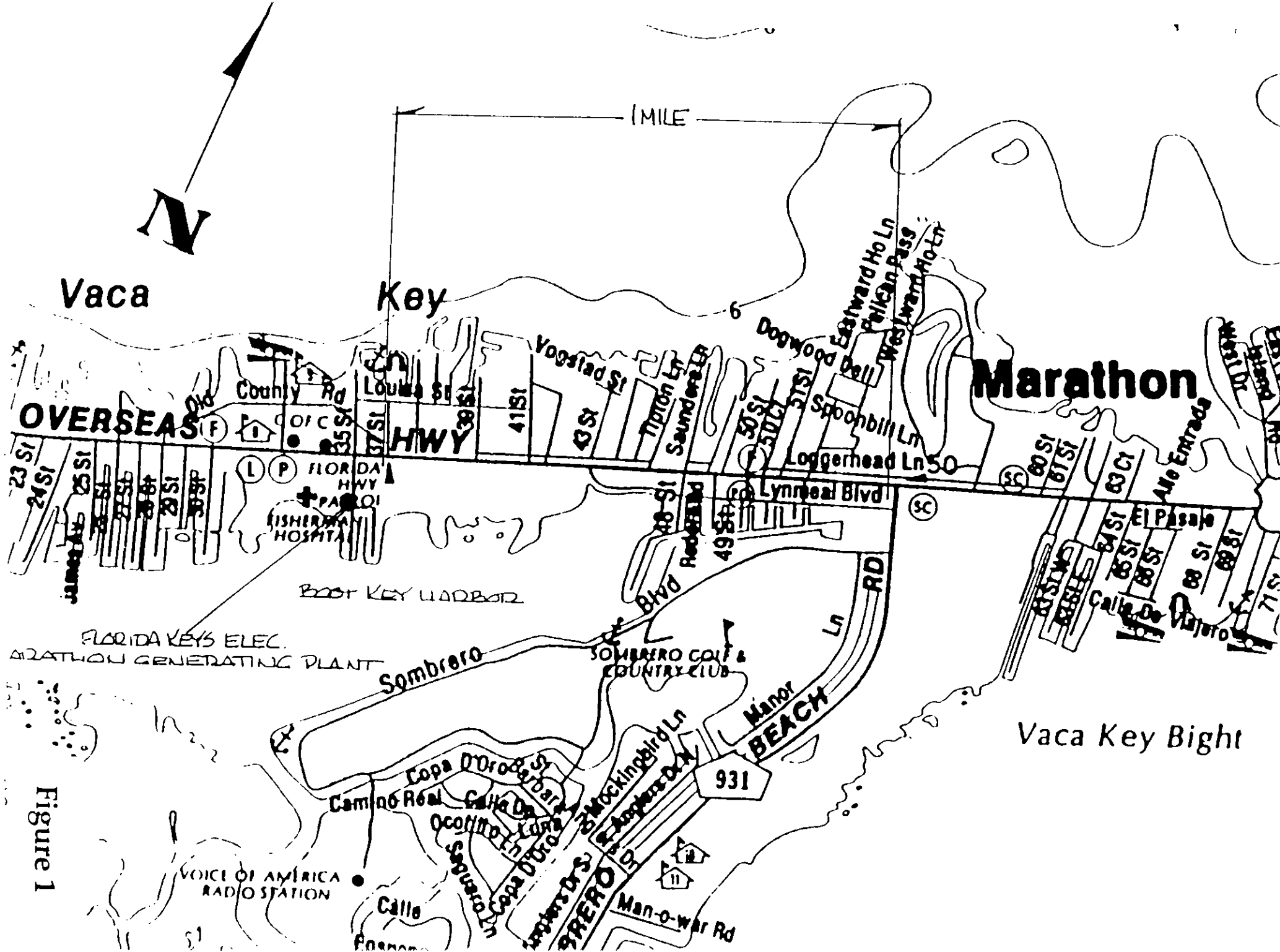
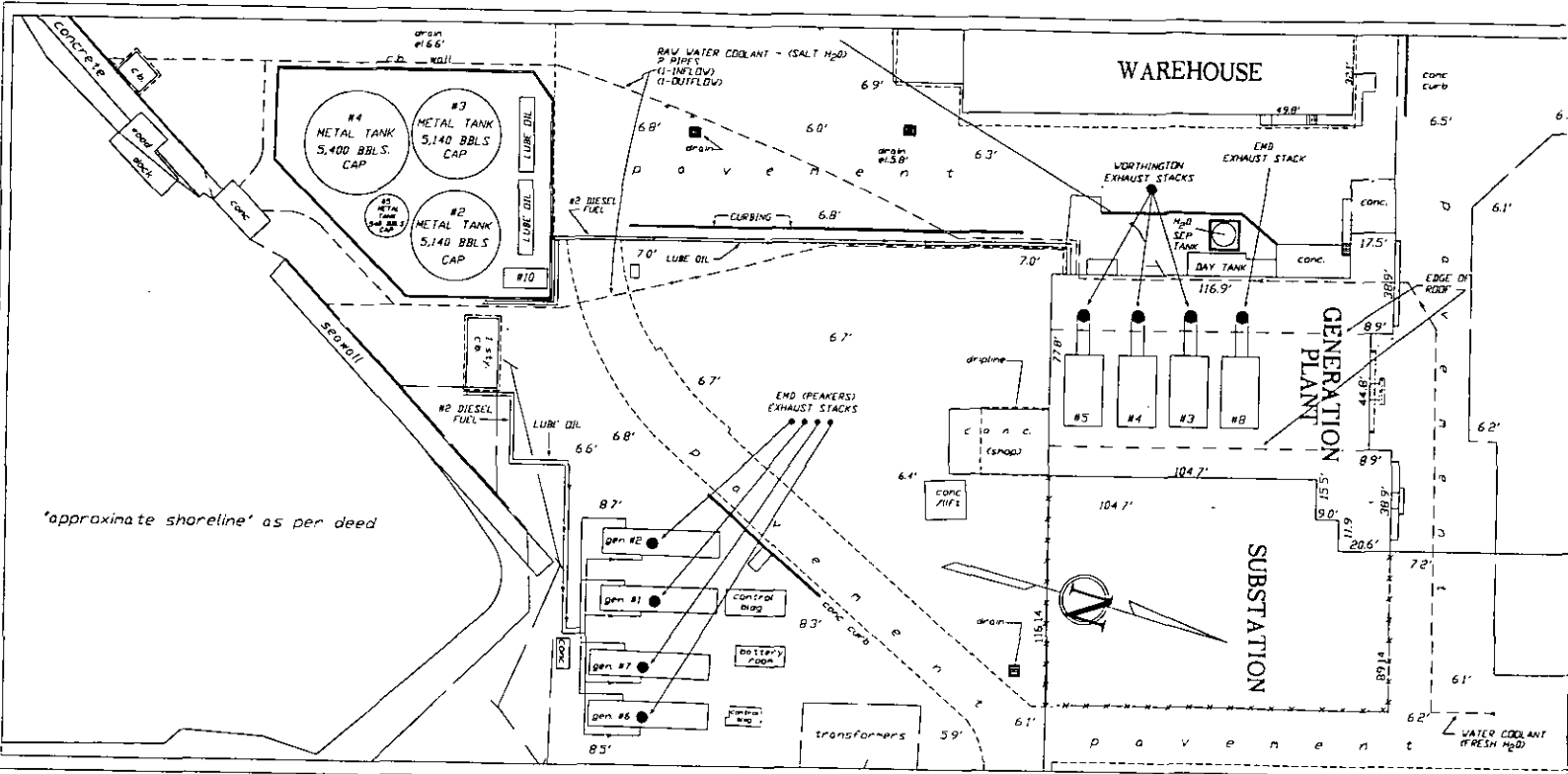



Figure 1

Figure 2

**MARATHON GENERATING PLANT SITE PLAN
SHOWING LOCATION OF NEW UNIT # 8 AND ITS STACK**




**FLORIDA KEYS
ELECTRIC COOPERATIVE
ASSOCIATION, INC.**
 TAVERNIER, FLORIDA
 ENGINEERING SERVICES

DRAWN	CP	MARATHON GEN. PLANT			
DESIGN	C PANKOW	SITE PLAN			
		PLANT. REMOTE UNITS, TANK FARM			
PROJECT/WORKSHEET		DWG. NO.	SHEET	SCALE	REV.
DATE	04/29/96	MG-P-001	1/1	AS NOTED	0

MARATHON GENERATION PLANT
 DIESEL, LUBE OIL AND COOLANT
 WATER FLOW DIAGRAM.
 EXHAUST STACK LOCATIONS.

ARTICLE V
FKEC RESOURCES

Section 5.1 - FKEC Resources: Prior to the beginning of a Billing Year, FKEC shall designate the FKEC-owned generating units that shall constitute FKEC Resources for the Billing Year. FKEC may designate as FKEC Resources only those FKEC-owned generating resources that FKEC reasonably determines will be available for reliable dispatch and operation during the Billing Year, subject to the further limitations of Section 5.4. FKEC is obligated to have available at all times, and to provide if required by FPL, capacity and energy from FKEC Resources to meet any portion of FKEC's Load above the then-effective Base Demand. FPL will dispatch such FKEC Resources pursuant to Article 6.2. FKEC agrees to maintain the FKEC Resources in good operating condition in accordance with Prudent Utility Practice. Notwithstanding the foregoing, the amount of FKEC Resources for a Billing Year shall not exceed twenty-five percent (25%) of the FKEC System peak load for the prior Billing Year; provided, that in the event either Party gives seven years' notice to terminate the Agreement pursuant to Section 2.1, the amount of FKEC Resources for a Billing Year shall not exceed thirty percent (30%) of the FKEC System peak load for the Prior Billing Year, effective in the Billing Year immediately following the year in which such termination notice is given. FKEC's designation of the FKEC Resources shall include the name, operational status and rating of each generating unit (in kW) based on the unit's summer capability. FKEC's designation of FKEC Resources shall not be subject to change during the Billing Year.

Section 5.1.1 In the event FKEC contemplates constructing or owning a generating facility located off its system or entering into a long-term contract for the purchase of capacity and energy, and desires to designate such power

FKEC Resources (for the purpose of supplying FKEC's Load above the Base Energy) upon thirty (30) minutes notice from FPL, in the event FPL determines, in FPL's sole judgement, that FPL can no longer continue the delivery of Alternate Economic Energy to FKEC for any reason.

ARTICLE VII

CHARGES

Section 7.1 - Formula Rate: FPL and FKEC recognize that the cost of supplying the capacity and energy to be provided under this Agreement may change during the term of this Agreement. In order to equitably compensate FPL for the cost of supplying capacity and energy under this Agreement, certain of the demand and energy charges shall be determined using the formulae contained in Appendices I, II and III. These formulae allow periodic revision of certain of the demand and energy charges to reflect changes in the cost of providing such services. FPL will furnish FKEC with such documentation as is reasonably necessary to calculate any periodic revision of the demand and energy charges that reflect changes in FPL's cost of providing service under this Agreement, including any true-up to calculations and adjustments. Such documentation shall be furnished at the same time that FPL notifies FKEC of any change in the demand and energy charges, or of any true-up calculations or adjustments.

Section 7.2 - Demand Charges:

Section 7.2.1 - Base Demand Charge: No later than July 1 of each year FPL shall provide to FKEC the Base Demand Charge, in \$/kW, for use in the next Billing Year. FPL shall also provide, at the same time, the estimated Base Demand Charge for the

the provisions of Article V of this Agreement. FPL agrees to give FKEC at least thirty (30) minutes notice prior to interrupting the delivery of Alternate Economic Energy to FKEC.

The amount of Alternate Economic Energy provided to FKEC shall be the amount of energy supplied to FKEC on a kilowatt-hour (kWh) basis which is over and above the amount of energy supplied to FKEC as Base Energy, Unavailable FKEC Resource Energy and Deficient FKEC Resource Energy.

Section 6.2 - Dispatch for FKEC Resources: FKEC shall initially provide FPL, as required by FPL, with the most accurate and up-to-date data regarding FKEC Resources so that FPL can include this data in its System Control Center. FKEC shall provide to FPL updates to such data as such information becomes available. FPL will incorporate on an ongoing basis the data regarding FKEC Resources into FPL's System Control Center as a service to FKEC to determine if energy from FKEC Resources would be more economical than Alternate Economic Energy to meet FKEC's Load requirements above the Base Energy supplied by FPL.

In the event FPL projects that energy from FKEC Resources will be more economical than Alternate Economic Energy and FKEC's Load will exceed the Base Demand for any clock hour, FPL agrees to notify FKEC, at least one day in advance if possible. Provided further, if at any time FPL determines that energy from FKEC Resources is more economical than Alternate Economic Energy, FPL will notify FKEC at least thirty (30) minutes prior to such occurrence, if possible, and at FKEC's sole option, FKEC may elect to put on-line FKEC Resources to supply such energy needs in lieu of Alternate Economic Energy.

Pursuant to the provisions of Article V, FKEC will stand ready to start up and place on-line

Attachment A

COMPLIANCE STATEMENT

Attachment A

MARATHON GENERATING PLANT

Compliance Statement

"I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this construction/operation permit application is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete."

A handwritten signature in black ink, reading "Charles A. Russell", written over a horizontal line.

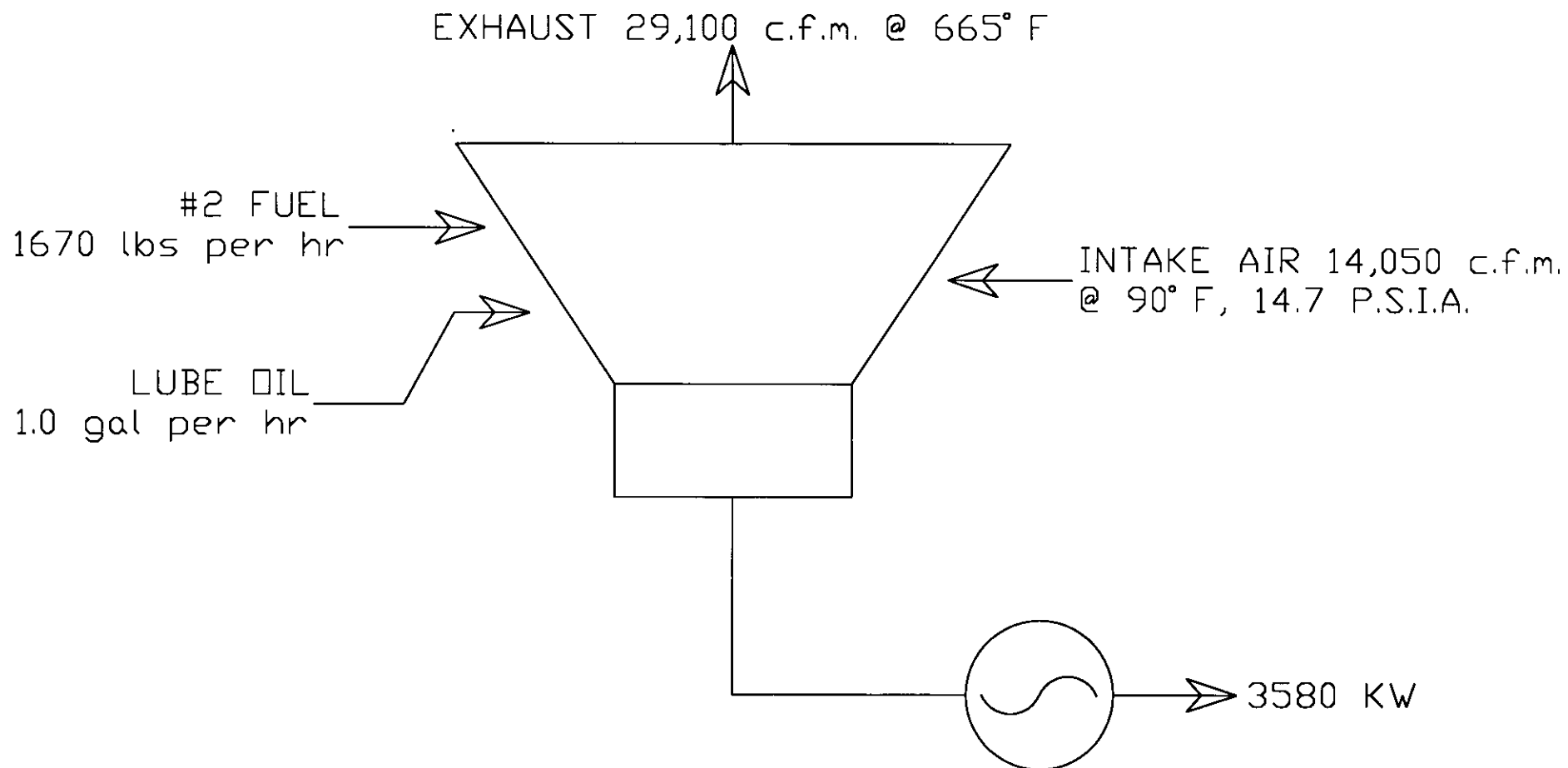
Charles A. Russell
Chief Executive Officer and General Manager

Attachment B

PROCESS FLOW DIAGRAM

PROCESS FLOW DIAGRAM

MARATHON HIGH SPEED DIESEL UNIT #8



FLORIDA KEYS ELECTRIC COOP
MARATHON, FLORIDA
DATE: 12-31-96

Attachment C

FUEL ANALYSIS FOR NO. 2 FUEL OIL

D 975

TABLE 1 Detailed Requirements for Diesel Fuel Oils^a

Property	ASTM Test Method ^b	Grade Low Sulfur No. 1-D	Grade Low Sulfur No. 2-D	Grade No. 1-D ^c	Grade No. 2-D ^c	Grade No. 4-D ^c
Flash Point, °C, min.	D 93	38	52 (125)	38	52	55
Water and Sediment, %vol, max	D 1796	0.05	0.05	0.05	0.05	0.50
Distillation Temperature, °C 90 % %vol Recovered	D 86					
min		...	282 ^d	...	282 ^d	...
max		288 (550)	338	288 (550)	338	...
Kinematic Viscosity, mm ² /S at 40°C	D 445					
min.		1.3	1.9	1.9	1.9	5.5
max		2.4	4.1	2.4	4.1	24.0
Ash % mass, max	D 482	0.01	0.01	0.01	0.01	0.10
Sulfur, % mass, max ^e	D 2622 ^f	0.05	0.05
	D 129	0.50	0.50	2.00
Copper strip corrosion rating max 3 h at 50°C	D 130	No. 3	No. 3	No. 3	No. 3	...
Cetane number, min ^g	D 613	40 ^h	40 ^h	40 ^h	40 ^h	30 ^h
One of the following properties must be met:						
(1) Cetane index, min.	D 976 ^o	40	40
(2) Aromaticity, %vol, max	D 1319 ^f	35	35
Cloud point, °C, max	D 2500
Ramsbottom carbon residue on 10 % distillation residue, % mass, max	D 524	0.15	0.35	0.15	0.35	...

^a To meet special operating conditions, modifications of individual limiting requirements may be agreed upon between purchaser, seller and manufacturer.

^b The test methods indicated are the approved referee methods. Other acceptable methods are indicated in 4.1.

^c Grades No. 1-D, No. 2-D and No. 4-D are required to contain a sufficient amount of 1,4-dialkyl amino anthraquinone (blue dye) so its presence is visually apparent.

^d When a cloud point less than -12°C is specified, the minimum viscosity at 40°C shall be 1.7 mm²/s and the minimum 90 % recovered temperature shall be waived.

^e Other sulfur limits can apply in selected areas in the United States and in other countries.

^f These test methods are specified in CFR 40 Part 80.

^g Where cetane number by Test Method D 613 is not available, Test Method D 4737 can be used as an approximation.

^h Low ambient temperatures as well as engine operation at high altitudes may require the use of fuels with higher cetane ratings.

ⁱ It is unrealistic to specify low temperature properties that will ensure satisfactory operation at all ambient conditions. However, satisfactory operation should be achieved in most cases if the cloud point (or wax appearance point) is specified at 6°C above the tenth percentile minimum ambient temperature for the area in which ambient temperatures for U.S. locations are shown in Appendix X2. This guidance is general. Some equipment designs or operation may allow higher or require lower cloud point fuels. Appropriate low temperature operability properties should be agreed upon between the fuel supplier and purchaser for the intended use and expected ambient temperatures.

Attachment D

EMISSION REDUCTION EQUIPMENT DESCRIPTION

Attachment D

EMD PROCESS AND EQUIPMENT FOR EMISSIONS REDUCTION

Electro-Motive Diesel (EMD), states the following about FKEC's emissions reduction package:

1. Retarding fuel injector timing, reduces firing pressure and combustion temperature.
2. Separately cooling the 4 pass after coolers increases combustion air density, therefore, increasing the ratio of air to fuel, reducing the output of NO_x by 36% and PM by 4%.

Attachment E

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment E

MARATHON GENERATING PLANT STARTUP PROCEDURES FOR MINIMIZING EMISSIONS

Each of the seven (7) existing diesel engines used for generation are constantly kept at operating temperatures through the use of immersion heaters and electrically heated oil filter units. This practice allows the engine to "come on line" with an absolute minimum of idle, or warm-up time. Further, engines are shut down completely when the requirements for electrical generation no longer is present. The eighth engine will be operated under the same protocols.

Regularly scheduled inspection and maintenance of each engine provides both economical and efficient operation.

Attachment F

**FKEC'S CONTRACTURAL OBLIGATION TO PROVIDE
POWER WHEN FP&L CANNOT SUPPLY
THE FLORIDA KEYS**

**Excerpts from: Longterm Agreement to Provide Capacity and Energy by Florida Power
and Light to Florida Keys Electric Cooperative Association, Inc.**

Attachment G

Supplemental Information for Construction Permit Application

**MARATHON GENERATING PLANT ACTUAL ANNUAL OPERATING
HOURS AND FUEL CONSUMPTION
1992 - 1996**

Note: Longterm FP&L contract became effective May, 1992.

MARATHON GENERATING PLANT OPERATING HOURS AND FUEL CONSUMPTION**1992**

Engine No.	Total Running Hours	Fuel consumption (gals)
1	278	33,274
2	288	41,193
3	319	48,788
4	292	47,261
5	302	45,816
6	315	57,599
7	361	70,591
Totals	2,155*	344,527*

* 1631 hours and 257,478 gals were accumulated during the months of August and September. (Hurricane Andrew era)

1993

Engine No.	Total Running Hours	Fuel consumption (gals)
1	92	10,335
2	111	16,745
3	109	17,247
4	76	11,694
5	74	8,662
6	108	19,525
7	111	20,882
Totals	681	105,090

1994

Engine No.	Total Running Hours	Fuel Consumption (gals)
1	100	11,174
2	94	13,810
3	33	4,313
4	44	4,957
5	35	3,407
6	93	17,662
7	97	18,954
Totals	496	74,277

1995

<u>Engine No.</u>	<u>Total Running Hours</u>	<u>Fuel Consumption (gals)</u>
1	85	6,923
2	85	9,419
3	58	8,719
4	124	17,376
5	76	8,320
6	86	14,514
7	97	15,402
Totals	611	80,673

1996

<u>Engine No.</u>	<u>Total Running Hours</u>	<u>Fuel Consumption (gals)</u>
1	59.2	6,545
2	58.6	8,474
3	56.3	9,781
4	65.0	10,867
5	56.1	10,759
6	63.0	11,121
7	57.0	9,389
Totals	415.2	66,936

Attachment H

Supplemental Information for Construction Permit Application

**PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED
PARTICULATE MATTER**

Attachment H

MARATHON GENERATING PLANT PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The only potential source of unconfined particulate matter emissions associated with operation of the facility are fugitive emissions from vehicular traffic providing fuel deliveries. Paved fuel delivery areas and roads are used as precautions taken to prevent and control unconfined emissions of particulate matter.