

R.W. BECK
AND ASSOCIATES

Bank One Building, Suite 1900 ■ 1125 Seventeenth Street ■ Denver, Colorado 80202-2615 ■ USA
Telephone (303) 299- 5200 ■ Fax (303) 297-2811

CC-5801-EG1-AF

July 20, 1993

Mr. Clair Fancy
Florida Department of Environmental Protection
2600 Blairstone Road
Tallahassee, Florida 32399

RECEIVED

JUL 26 1993

Division of Air
Resources Management

Subject: **Impact Assessment for High Speed Diesels**

Dear Mr. Fancy

R. W. Beck and Associates (Beck) has prepared a PSD application for the relocation of the gas turbine from the Key West power plant to Stock Island. During the preparation of the application, Beck modeled the Stock Island high speed diesels (HSD) which are used minimally for peak load demand. By including the effects of building downwash attributed to the recently-constructed building for the medium-speed diesels (MSD), it was determined that certain meteorological conditions could result in high ground-level concentrations from the HSDs.

In a letter dated May 6, 1993, Mr. Carl R. Jansen, Jr. of City Electric System (CES) notified you of this situation. The purpose of this letter is to clarify the situation, to demonstrate that the MSDs had minor impacts prior to the installation of the MSD building, and to present the alternatives available to CES to reduce the predicted ground-level concentrations to the prior levels. It should be noted that CES is currently operating the HSDs only between the hours of 9:00 a.m. and 5:00 p.m., which, as demonstrated below, is predicted to result in acceptable ambient air quality impacts.

The attached figure shows the location of the HSDs with respect to the MSD building. Dispersion modeling has been performed to predict the ground-level concentrations of sulfur dioxide from the facility without the MSD building. The receptor grid, meteorological data, and modeling methods are consistent with the analysis presented in the PSD application and the FDEP-approved modeling protocol used for the PSD application. The results are as follows:

Table 1		
Facility Impacts Without MSD Building Ground-Level Sulfur Dioxide Concentrations		
<u>Averaging Interval</u>	<u>Highest High</u>	<u>Highest Second-High</u>
3-hour	48	2
24-hour	8	0.3

We have considered three options for CES to operate the HSDs consistent with the impacts in Table 1. Those options are:

- (1) Operation of HSDs only between 9:00 a.m. and 5:00 p.m.;
- (2) Construction of a taller stack for the HSDs
- (3) Moving the HSDs out of the wake of the MSD building.

Note that our modeling evaluation of these options has not considered feasibility issues such as operating flexibility or site limitations. The dispersion modeling results are presented in tables 2 through 4.

Table 2		
High-Speed Diesels With MSD Building Ground-Level Sulfur Dioxide Concentrations Operation Restricted to 9:00 a.m. to 5:00 p.m.		
<u>Averaging Interval</u>	<u>Highest High</u>	<u>Highest Second-High</u>
3-hour	0	0
24-hour	0	0

Table 3		
High-Speed Diesels With MSD Building Ground-Level Sulfur Dioxide Concentrations New Stack - 50 Feet High		
<u>Averaging Interval</u>	<u>Highest High</u>	<u>Highest Second-High</u>
3-hour	24	17
24-hour	3	2

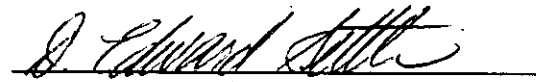
<u>Averaging Interval</u>	<u>Highest High</u>	<u>Highest Second-High</u>
3-hour	40	2
24-hour	7	0.3

As the results show, either of the three scenarios results in impacts approximately equivalent to those prior to the installation of the MSD building. Until such time that a feasible option is selected, CES will be operating the HSDs only during the hours from 9:00 a.m. to 5:00 p.m. If necessary, permit modification will be sought at that time.

If you have any questions or comments related to the impacts of the HSDs, please call me at 303/299-5280.

Sincerely,

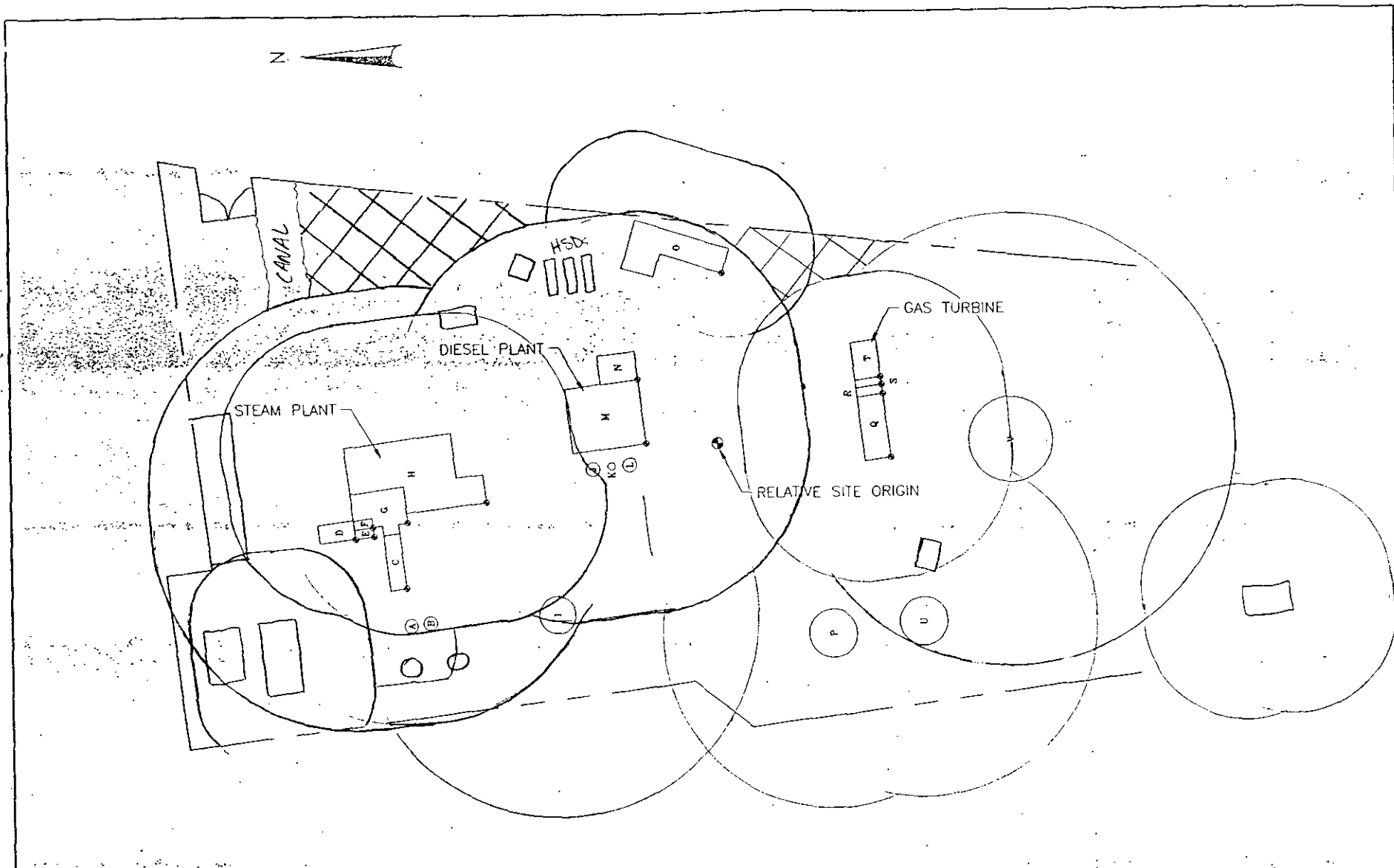
R. W. BECK AND ASSOCIATES



D. Edward Settle
Senior Engineer/Scientist

DES:tlh F:\CC5801.EG1\TLH005ES.LTR

c: Jim Greenshields
Diane Tremor
Skip Jansen
Mike Henderson



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REVISIONS	DATE	BY	CHKD	APP	APP

DRAWN	
CHECKED	
APPROVED	
DATE	

R.W. BECK
AND ASSOCIATES

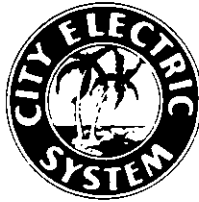
STOCK ISLAND
GENERATING FACILITY

Figure 2-2
FACILITY STRUCTURES

SCALE	
NO.	
3068-SK-2	
REV	

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100
May 6, 1993



TELEPHONE: (305) 294-5272
TELECOPIER: (305) 294-3685

RECEIVED
MAY 17 1993
Division of Air
Resources Management

Mr. Clair Fancy
Department of Environmental Regulations
Twin Towers Office Building
2600 Blairstone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

During the PSD application (PSD-FL-135) process for the Medium Speed Diesel Units (AC-44-152197) at the Stock Island Power Plant in 1988, R.W. Beck and Associates identified the peaking diesels at Stock Island (AO-44-175804). However, "R.W. Beck" failed to include them in the impact modeling since they were not considered a major source. It was felt that if they were modeled their impact would be insignificant.

Subsequent to preparation of the PSD application in connection with the relocation of the combustion turbine from the Key West Power Plant to the Stock Island Power Plant additional modeling was performed.

One part of the analysis, the downwash analysis, included modeling the effects of building wakes on stack emission impacts. Inclusion of the high speed diesels in the downwash analysis revealed the three hour and twenty-four hour impacts unacceptable. The significant impact of the emissions from the high speed diesels appears to be related to two major factors; the low stack configuration and the relative location of the high speed diesels to the medium speed diesel building and the No. 6 oil tank.

R. W. Beck's modeling indicates that an acceptable impact could be achieved by limiting operating hours on all Stock Island high speed diesels to the hours of 9:00 a.m. to 5:00 p.m. C.E.S. will implement this schedule and is currently exploring the costs associated with relocating the high speed diesels.

If I can be of further assistance, please do not hesitate to call.

Sincerely,

UTILITY BOARD - CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Robert R. Padron, General Manager

Carl R. Jansen, Jr.
Production Manager

CRJ/dh

cc:

R. Padron, General Manager
J. Greenshields, Environmental Supervisor
File (2)

UTILITY BOARD MEMBERS:

William T. Cates, Chairman • Marty Arnold, Vice-Chairman
Otha P. Cox, Member • Leonard H. Knowles, Member • John H. Robinson, Jr., Member

UTILITY BOARD OF THE CITY OF KEY WEST

Clair
2/23

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 294-5272
TELECOPIER: (305) 294-3685

February 16, 1993

Ms. Valerie Hall
Key West Citizen
3420 Northside Drive
Key West, Florida 33040

RE: Publication of DER's "Notice of Intent to Issue Permit"

Dear Ms. Hall:

In accordance with Florida Statutes', City Electric System is required to publish the Florida DER's "Notice of Intent to Issue Permit" in the legal ad section of a newspaper of general circulation in the area to be affected.

Please find attached a copy of this notice to be published at your earliest convenience.

If you have any questions, please do not hesitate to call.

Sincerely,

UTILITY BOARD-CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Robert R. Padron, Manager

Jim Greenshields
Environmental Services Supervisor

JG/me

cc:
R. Padron
C. Jansen, Jr.
D. Tremor, Rose, Sundstrom & Bentley
H. Rhodes, FDER-Tallahassee

File
Attachment

RECEIVED

FEB 19 1993

Division of Air
Resources Management

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue two air pollution permits to Key West City Electric System for its two diesel generators located at the Stock Island Power Plant on Stock Island in Monroe County. Permit number AC44-221256 will authorize a minor increase in the allowable emission rates. Permit number AO44-207419 will authorize continued operation of the diesel generators.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition at the time of filing to Mr. Robert R. Padron, Manager, Key West City Electric System, 1006 James Street, Key West, Florida 33041. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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

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

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Regulation, South District, 2295 Victoria Avenue, Suite 364, Fort Myers, Florida. It is also available at the South District Branch Office, 11400 Overseas Highway, Suite 123, Marathon, Florida 33050.

In the folder labeled as follows there are documents, listed below, which were not reproduced in this electronic file. That folder can be found in one of the file drawers labeled Supplementary Documents Drawer. Folders in that drawer are arranged alphabetically, then by permit number.

Folder Name: Key West City Electric

Permit(s) Numbered:

AC	44	-	152197
AC	44	-	152198
PSD	FL	-	135

Period during
which document
was received:

		Detailed Description
APPLICATION 15 JULY 1988	1.	24"×36" BLUEPRINT: PLOT PLAN CITY ELECTRIC PROPERTY JAMES AND GRINNELL ST. (DRAWING NUMBER: M-46 A
15 JULY 1988	2.	24"×36" BLUEPRINT: DIESEL ENGINE GENERATING STATION PLOT PLAN DEVELOPMENT PLAN
15 JULY 1988	3.	24"×36" BLUEPRINT: MAP OF KEY WEST
24 AUG 1988	4.	MODELING DATA
20 SEP 1988	5.	MODELING DATA

R.W. BECK
AND ASSOCIATES

Denver National Bank Building, Suite 1900 ■ 1125 Seventeenth Street ■ Denver, Colorado 80202-2615 ■ USA
Telephone (303) 299-5200 ■ Fax (303) 297-2811

CC-5801-DB6-AB

January 29, 1993

Mr. Cleve Holladay
Florida DER
2600 Blair Stone Road
Tallahassee, Florida 32399

RECEIVED

FEB 08 1993

Subject: Ambient Air Monitoring Exemption

DIVISION OF AIR
Resources Management

Dear Mr. Holladay:

This letter presents preliminary calculations to support a monitoring exemption for the relocation of the gas turbine from the Key West Power Plant to the Stock Island Power Plant. Under FAC 17-2.500(3)(e), FDER has the discretionary authority to waive the preconstruction monitoring requirements for a project which is subject to the provisions of Prevention of Significant Deterioration (PSD). The calculations herein are based on: (1) currently available exhaust parameters and emission rates representing full load and 2888.5 hours of operation per year, and (2) meteorological data collected in Miami from 1981 through 1985. Although the final air quality analysis supporting the PSD permit application will be more extensive than the analysis presented herein, we do not anticipate that the final analysis will affect the conclusions supporting the monitoring exemption.

The pollutants for which PSD will likely apply for this project on the basis of annual emissions are nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM₁₀) as shown in Table 1. The impacts for each of these pollutants and the appropriate averaging intervals are presented in Table 2 and compared to the PSD *de minimis* monitoring thresholds. As the table shows, the impacts from the gas turbine are predicted to be well within the *de minimis* concentrations and, therefore, this project should be granted a waiver from the preconstruction monitoring requirements.

It should be noted that the gas turbine is being relocated from a site approximately four miles from the Stock Island Power Plant. Therefore, it is expected that the impact from the gas turbine on the regional air quality will not be substantially different than its current impact. This further supports the conclusions that a monitoring exemption should be granted for this project.

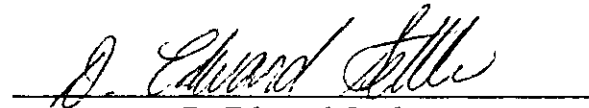
Mr. Cleve Holladay
Page 2

January 29, 1993

Based on the results presented herein, please issue a letter stating your concurrence with a monitoring exemption. Should you require further information to complete your determination, please call me at 303/299-5280.

Sincerely,

R. W. BECK AND ASSOCIATES



D. Edward Settle
Senior Scientist
Environmental Services

DES:lef (F:\CC5801.DB\6\LEF002ES.LTR)

cc: M. Henderson
S. Jansen
J. Greenshields
D. Tremor

R.W. BECK
AND ASSOCIATES

Table 1

TURBINE EMISSIONS ESTIMATES

Pollutant	Significant Emission Rates (TPY)	Estimated Emission ⁽¹⁾ (TPY)
SO ₂ ⁽²⁾	40	250
NO _x	40	150
PM ⁽³⁾	25/15	20
CO	100	14
UHC ⁽⁴⁾	40	6

⁽¹⁾ Based on preliminary data and 2888.5 hours of full load operation.

⁽²⁾ Based on 0.5%S fuel oil.

⁽³⁾ All PM emissions assumed to be PM₁₀, significant rates for PM and PM₁₀, respectively.

⁽⁴⁾ UHC represents total hydrocarbons, whereas non-methane hydrocarbons are regulated.

Table 2

PREDICTED GAS TURBINE IMPACTS

Pollutant	Averaging Interval	<i>de minimis</i> ⁽¹⁾ Concentration (µg/m ³)	Turbine Impact (µg/m ³)
SO ₂	24-hr	13	1.1
NO _x	Annual	14	0.1
PM	24-hr	10	0.1

⁽¹⁾ Source: Table 500-3, Florida Air Pollution Rules.

.2

called @ 8:59

**R.W. BECK
AND ASSOCIATES**

Denver National Bank Building, Suite 1900 ■ 1125 Seventeenth Street ■ Denver, Colorado 80202-2615 ■ USA
Telephone (303) 299-5200 ■ Fax (303) 297-2811

FAX SHEET

WO #: 11 5801 DB6 AB

DATE: 1/29/93

TO: Cleve Holladay

PHONE #: 904/922-6979

FROM: Ed Settle

NUMBER OF PAGES (INCLUDING COVER): 5

MESSAGES: _____

Please call operator at (303)299-5200 if you have any problem receiving this transmission or did not receive the number of pages listed above.

**R.W. BECK
AND ASSOCIATES**

Denver National Bank Building, Suite 1900 ■ 1125 Seventeenth Street ■ Denver, Colorado 80202-2615 ■ USA
Telephone (303) 299-5200 ■ Fax (303) 297-2811

Tom R. says OK to use 1981 to 1985 data

CC-5801-DB6-AB

January 29, 1993

Mr. Cleve Holladay
Florida DER
2600 Blair Stone Road
Tallahassee, Florida 32399

Subject: Ambient Air Monitoring Exemption

Dear Mr. Holladay:

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The pollutants for which PSD will likely apply for this project on the basis of annual emissions are nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM₁₀) as shown in Table 1. The impacts for each of these pollutants and the appropriate averaging intervals are presented in Table 2 and compared to the PSD *de minimis* monitoring thresholds. As the table shows, the impacts from the gas turbine are predicted to be well within the *de minimis* concentrations and, therefore, this project should be granted a waiver from the preconstruction monitoring requirements.

It should be noted that the gas turbine is being relocated from a site approximately four miles from the Stock Island Power Plant. Therefore, it is expected that the impact from the gas turbine on the regional air quality will not be substantially different than its current impact. This further supports the conclusions that a monitoring exemption should be granted for this project.

*Long letter
in hand letter to submit to the board
of ...*

**R.W. BECK
AND ASSOCIATES**

January 11, 1993

FACSIMILE TRANSMISSION

TO: Diane Tremor
Cleve Holladay
Skip Jansen, Jim Greenshields
David Knowles

FAX #: 904/656-4029
904/922-6974
305/294-3685
813/332-6969

FROM: Ed Settle

TOTAL NUMBER OF PAGES: 4

CC-5801-DB6-AB

SUBJECT: Key West Gas Turbine
PSD Application

Following is the proposed outline for PSD application for relocation of the Key West Gas Turbine. Comments and questions are welcome. We should plan to discuss this at our meeting in early February at the DER offices in Tallahassee.

If you have any questions regarding this transmission, please contact Tricia Hinman at 303/299-5320.

**PREVENTION OF SIGNIFICANT DETERIORATION
PERMIT APPLICATION
COMBUSTION TURBINE RELOCATION
UTILITY BOARD OF THE CITY OF KEY WEST**

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1.3	Laws and Regulations	
1.4	Best Available Control Technology Summary	
1.5	Air Quality Analysis	
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**PREVENTION OF SIGNIFICANT DETERIORATION
 PERMIT APPLICATION
 COMBUSTION TURBINE RELOCATION
 UTILITY BOARD OF THE CITY OF KEY WEST**

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**PREVENTION OF SIGNIFICANT DETERIORATION
PERMIT APPLICATION
COMBUSTION TURBINE RELOCATION
UTILITY BOARD OF THE CITY OF KEY WEST**

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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED

UTILITY BOARD OF THE CITY OF
KEY WEST (CITY ELECTRIC SYSTEM),

Petitioner,

vs.

OGC CASE NO. 92-1471

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION,

Respondent.

JAN 08 1993
DIVISION OF AIR
Resources Management

ORDER GRANTING REQUEST FOR EXTENSION
OF TIME TO FILE PETITION FOR HEARING

This cause has come before the Florida Department of Environmental Regulation (Department) on receipt of a request made by Petitioner UTILITY BOARD OF THE CITY OF KEY WEST (CITY ELECTRIC SYSTEM), under Florida Administrative Code rule 17-103.070, to grant an extension of time to file a petition for an administrative hearing on Application No.A044-207419. See Exhibit 1 attached.

Counsel for Petitioner has discussed this request with counsel for Respondent State of Florida Department of Environmental Regulation, which has no objection to it. Therefore,

IT IS ORDERED:

The request for an extension of time to file a petition for administrative proceeding is granted. Petitioner shall have until February 4, 1993, to file a petition in this matter. Filing shall

Department of Environmental Regulation
Routing and Transmittal Slip

To: (Name, Office, Location)

1. Clair Fancy - FLH - Air Rm 306A
2. Quality
3.
4.

Remarks:

RECEIVED

JAN 08 1993

Division of Air
Resources Management

From

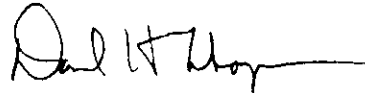
Date

Phone

be complete upon receipt by the Office of General Counsel,
Department of Environmental Regulation, 2600 Blair Stone Road,
Tallahassee, Florida 32399-2400.

DONE AND ORDERED on this 7th day of January, 1993 in
Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



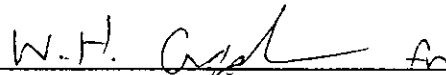
Daniel H. Thompson
General Counsel

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-4805

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to Diane
Tremor, attorney for Petitioner, Rose, Sundstrom & Bentley, 2548
Blairstone Pines Drive, Tallahassee, Florida 32301, on this 7th
day of January, 1993.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



Claire E. Lardner
Assistant General Counsel

2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

R.W. BECK
AND ASSOCIATES

Bank One Building, Suite 1900 ■ 1125 Seventeenth Street ■ Denver, Colorado 80202-2615 ■ USA
Telephone (303) 299- 5200 ■ Fax (303) 297-2811

CC-5801-DB6-AB

5 January 1993

Mr. Cleve Holladay
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Subject: Relocation of Key West Gas Turbine

Dear Mr. Holladay:

The City Electric System (CES) in Key West is planning to relocate a combustion turbine generator (CTG) from the Key West Power Plant to the Stock Island Power Plant. The CTG is currently operating under Permit Number AO44-55430 issued 13 May 1983. Based on a determination by Florida Department of Environmental Regulation (FDER), the relocation of the CTG to the Stock Island Plant will require review and approval under the requirements for Prevention of Significant Deterioration (PSD).

An integral part of the information required for a PSD application is the air quality assessment. Air quality impact modeling will be performed to verify compliance with ambient air quality standards (AAQS) and PSD increments during operation of the Plant. This letter describes the general procedures which we intend to follow to perform the air quality modeling and will serve as a modeling protocol. Please review our approach and let us know if you concur with our dispersion modeling methods as applied to the proposed project.

The modification will involve installation of the CTG which is a General Electric Frame 5 simple cycle turbine with a nominal generating capacity of 24 MW at ISO conditions and an hourly heat input of approximately 322 million Btu (MMBtu) at maximum continuous rated operation. Natural gas is not available at the Plant, and, therefore, the CTG will continue to burn No. 2 distillate fuel oil with a maximum sulfur content of 0.5 percent. The unit will also continue to operate as a peaking source limited to the current permit limit of approximately 2900 hours of operation per year.

The USEPA Air Quality Modeling Guidelines stipulate that the land use within the total area circumscribed by a 3-km radius about the source be classified using Auer's scheme of meteorological land use typing proposed in the *Journal of Applied Meteorology* (1976). A USGS 7.5-minute series topographical map was used to determine that more than 50 percent of the land use around the plant is classified as "A5: Water Surfaces". On this basis, rural dispersion coefficients will be used as an indicator of surface roughness.

The air quality analysis will include a discussion of conformance with good engineering practice (GEP) stack height considerations. Additionally, the effects of building

downwash on the units at the plant will be included in the modeling through the appropriate downwash algorithms.

The modeling analysis will consist of three primary components:

- OK (1) A screening analysis of the CTG only to determine the unit's worst-case operating load and the significance of the ambient impacts.
- OK (2) A refined analysis of the CTG only to assess the area of significance and to define receptor grids for any applicable interactive analysis, and
- OK (3) An interactive analysis of those pollutants for which the CTG is predicted by the modeling to exceed the regulatory modeling levels of significance. The interactive analysis will assure compliance with AAQS and PSD increments.

EPA SCREEN will be used for the screening analysis to calculate one-hour concentration averages using "worst-case" meteorological assumptions and regulatory default options. The one-hour averages will be converted to averages representing other averaging intervals by using the following factors:

Averaging Interval	Factor
1-hour	1.0
3-hour	0.9
8-hour	0.7
24-hour	0.4
Annual	0.1

OK ISCST2 will be used for the refined analysis and the interactive analysis. The terrain around the site is nearly flat, therefore, the use of a complex terrain model is not necessary and receptor elevations will not be included. The refined analyses will use real-time meteorological data collected in Miami in 1981 through 1985. This data was used in a previous analysis for the site (PSD review for two diesel engine generators approved 6 June 1989 as Permit Numbers AC 44-152197, PSD-FL-135) and is readily available for use. Regulatory default options will be selected, and the refined analyses will proceed from a coarse grid to a fine grid with a resolution of 100 meters.

OK Interactive analyses will be conducted if the CTG is predicted by the modeling to exceed the regulatory modeling levels of significance. If the impacts from the CTG are

Mr. Cleve Holladay
Page 3

4 January 1993

OK predicted to be below the levels of significance, the demonstration that the CTG will not cause or contribute to a violation of AAQS or PSD increments will be deemed complete and no further modeling will be conducted. Modeling parameters representing interactive sources will be obtained through FDER.

Impacts from the CTG on the Everglades National Park will be compared to the PSD Class I levels of significance (USEPA Memorandum, Calcagni to Maslany, September 10, 1991). If the CTG's impacts exceed the levels of significance, an interactive increment analysis will be conducted.

NPS

As we have discussed over the phone, we are tentatively planning on a meeting the morning of 19 January 1993 at the FDER offices in Tallahassee. Skip Jansen from City Electric System and Mike Henderson and I from Beck will attend the meeting. We hope to discuss the overall PSD application, the modeling protocol presented herein, the approach to the best available control technology determination, and a preconstruction monitoring exemption. Please call me (303/299-5280) or Mike Henderson (303/299-5234) if you have any questions or comments.

Very truly yours,

R. W. BECK AND ASSOCIATES



D. Edward Settle
Scientist
Environmental Services

DES:lcf (F:\CC5801.D\6\LEF001ES.LTR)
cc: Skip Jansen
Mike Henderson

First week of February

Called MS @ 8:29

call back next week
Ed Settle to ^{to set up}
set up meeting ^{the} mty

**R.W. BECK
AND ASSOCIATES**

Denver National Bank Building, Suite 1900 @ 1125 Seventeenth Street @ Denver, Colorado 80202-2615 @ USA
Telephone (303) 299-5200 @ Fax (303) 297-2811

will send a title
of contents

FAX SHEET

WO #: CC 5801 DBL6 AB
TO: Cleve Holladay

DATE: 1/5/93
PHONE #: 904/922-6979

FROM: Ed Settle
303/299-5280

NUMBER OF PAGES (INCLUDING COVER): 4

MESSAGES: Cleve, Please call me to confirm we
can hold a meeting at your offices
the morning of Jan 19! Thanks,
Ed
If they have supply problem - they need letters

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED
DEC 29 1992

UTILITY BOARD OF THE CITY OF
KEY WEST (CITY ELECTRIC SYSTEM),

Dept. of Environmental Reg.
Office of General Counsel

Petitioner,

vs.

OGC CASE No. 92-1471

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION,

Respondent.

PETITIONER'S THIRD REQUEST FOR EXTENSION OF TIME

Pursuant to Rule 17-103.070, Florida Administrative Code, the Petitioner, UTILITY BOARD OF THE CITY OF KEY WEST (CITY ELECTRIC SYSTEM), by and through its undersigned counsel, requests a third extension of time to petition for an administrative hearing in connection with the Department of Environmental Regulation's Notice of Intent to issue a permit to operate two 100 MMBtu/hour heat input Fairbanks Morse diesel generators. In support of this third request for an extension of time, Petitioner states:

(1) By "Notice of Permit Issuance" dated August 6, 1992, filed August 7, 1992, and received by the Petitioner on August 11, 1992, the Department of Environmental Regulation notified Petitioner of its intent to issue Permit Number A044-207419 for the operation of two 100 MMBtu/hour heat input Fairbanks Morse diesel generators at the Stock Island Power Plant in Key West, Monroe County, Florida. The DER's Identification Number is 52FTM44000305. The DER's Permit/Certification Number is A044-207419 PSD-FL-135.

(2) The Petitioner disputes several of the emission limitations set forth in the Specific Conditions of the proposed permit. In order to discuss and resolve these issues with the appropriate personnel within the Department, Petitioner timely requested an extension of time to petition for hearing regarding the proposed permit. By Order filed on September 2, 1992, the request for extension of time until October 2, 1992, was granted.

(3) After discussions and correspondence with personnel within the Permitting and Standards Section of the Division of Air Resources Management, the Petitioner was advised by letter dated September 30, 1992, that the issues of concern could only be resolved through the submission of "a new application for permit to construct (modify)." While the Petitioner does not believe that the applicable rules require a modification to the construction permit in order to effectuate the requested changes in the operation permit, particularly in light of the documentation already contained within the Petitioner's application file, Petitioner did submit an application for a minor modification of its construction permit in order to reach an amicable resolution of the permit conditions.

(4) It was initially estimated by personnel within the Department's Bureau of Air Quality that the construction permit modification process would take approximately ninety (90) days to complete. Accordingly, Petitioner filed a Second Request for Extension of Time to file a Petition for Hearing until January 4, 1993. This request was granted by Order dated October 19, 1992.

(5) The undersigned counsel made inquiry of the status of the modification application to David Knowles with the South Florida District and was informed that the application had been assigned to Mr. Gary Maiers, who was then on vacation until January 4, 1993. Mr. Knowles was of the opinion that the matter would be acted upon shortly after Mr. Maiers' return, but certainly no later than thirty (30) days. The filing of this Third Request for Extension of Time was discussed with Mr. Knowles, and he agreed that the requested period of extension should be thirty (30) days. Petitioner does dispute the existing terms of the proposed operating permit and does not intend to waive its right to contest the proposed permit through the formal administrative hearing process should such action be necessary. At this time, however, a petition for formal administrative hearing would not serve the interests of either the Petitioner or the Department.

(5) The undersigned counsel has attempted to contact Claire Lardiner, counsel for the DER, but was unable to reach her to ascertain whether she concurred with this Third Request for Extension of Time to petition for an administrative hearing for a period of thirty (30) days, in order to provide an opportunity for the parties to resolve their differences.

WHEREFORE, the Petitioner, UTILITY BOARD OF THE CITY OF KEY WEST, requests an extension of time until February 3, 1993, in which to file its petition for a formal administrative hearing.

Respectfully submitted this 29th day of December, 1992.

ROSE, SUNDSTROM & BENTLEY
2548 Blairstone Pines Drive
Tallahassee, Florida 32301
(904) 877-6555



DIANE D. TREMOR

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Hand Delivery to the Clerk, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; Daniel Thompson, Esquire, Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; Clair Lardiner, Esquire, Office of General Counsel, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by U.S. Mail to Phil Edwards, Department of Environmental Regulation, South Florida District, 2295 Victoria Avenue, Fort Myers, Florida 33901, this 29th day of December, 1992.



DIANE D. TREMOR

**R.W. BECK
AND ASSOCIATES**

Denver National Bank Building, Suite 1900 @ 1125 Seventeenth Street @ Denver, Colorado 80202-2615 @ USA
Telephone (303) 299-5200 @ Fax (303) 297-2411

FAX SHEET

WO#: CC 5801 DB6 AB
TO: Cleve Holladay

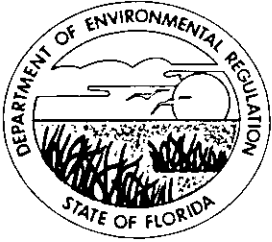
DATE: 12/29/92
PHONE #: 904/922-6979

FROM: Ed Settle
303/299-5280 (direct)

NUMBER OF PAGES (INCLUDING COVER): 3

MESSAGE:

Please call page one of this sheet if you have any problem receiving this transmission or did not receive the number of pages listed above.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

October 28, 1992

Mr. R. Williams
Key West Electric System
1006 James Street
Key West, Florida 33041

Dear Mr. Williams:

The application processing fee for a plant modification that will increase air emissions by 5 or more tons per year, but less than 25 tons per year, of any single pollutant is \$1,000.00 per F.A.C. Rule 17-4.050(4).

Sincerely,

Willard Hanks

Willard Hanks
Air Permit Review Engineer

MESSAGE CONFIRMATION

OCT-28-1992 WED 11:39

TELE ID: DIV OF AIR RES. MGMT F-2666

TEL NO: 904-922-8975

NO.	DATE	ST. TIME	TOTAL TIME	ID	DEPT CODE	CH	PG
881	10-28	11:27	00:00:47	3052942392		01	00



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

September 30, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert R. Padron
Key West Electric System
1006 James Street
Key West, Florida 33041

Dear Mr. Padron:

Re: DER File Nos. AC44-152197/PSD-FL-135/AO44-207419
Rose, Sundstrom & Bentley File No. 20708.03

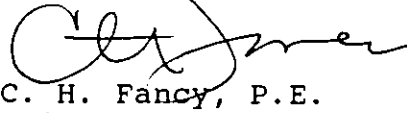
The Department has reviewed your attorney's August 26, 1992, letter requesting that the emission standards for NO_x, CO, and VOC in the proposed operation permit No. AO44-207419 for the two diesel engine electric generators near Key West be increased to adjust for the 97% generator efficiency. Approval of your request would result in an increase in the allowable emissions for these sources. An increase in allowable emissions is a modification by definition (F.A.C. Rule 17-2.100(136)) which requires a new construction permit. Regulations prohibit the emission standards in an operation permit from being less stringent than those in the applicable construction permit for the source (F.A.C. Rule 17-2.210(2)). Thus, the emission standards in the proposed operation permit cannot be relaxed unless the construction permits are modified.

If you desire and can justify higher allowable emission rates for these sources, please have your engineer submit a new application for permit to construct (modify) and another processing fee (based on the change in allowable emissions) to the Bureau of Air Regulation in Tallahassee. If the information is available, show where the 97% generator efficiency was noted in the original application and where the error was made in not using this efficiency in the evaluation.

If you would like additional information on this matter, please write to me or call Willard Hanks, review engineer, or Cleve Holladay, meteorologist.

Mr. Robert R. Padron
September 30, 1992
Page 2 of 2
Request to Increase Emission Standards

Sincerely,



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

CHF/WH/plm

Attachment: Rose, Sundstrom & Bentley August 26, 1992, letter

cc: D. Knowles, SFD
| B. Beals, EPA
| C. Shaver, NPS
| D. Trenor, Attorney

LAW OFFICES

ROSE, SUNDBSTROM & BENTLEY

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

2548 BLAIRSTONE PINES DRIVE

TALLAHASSEE, FLORIDA 32301

(904) 877-6555

ROBERT A. ANTIETA
CHRIS H. BENTLEY, PA
T. MARSHALL DETERDING
MARTIN S. FRIEDMAN, PA
JOHN R. JENKINS
ROBERT M. C. ROSE, PA
WILLIAM E. SUNDBSTROM, PA
DIANE D. TREMOR, PA
JOHN I. WHARTON

JOHN H. WODRASKA
SPECIAL CONSULTANT
SINCE A MEMBER OF THE FLORIDA BAR

*Willard
Car of Mr. Bentley
Preston
8/17/92*

MAILING ADDRESS
POST OFFICE BOX 1567
TALLAHASSEE, FLORIDA 32302-1567

TELECOPIER (904) 656-4029

August 26, 1992

VIA HAND DELIVERY

RECEIVED

AUG 26 1992

Division of Air
Resources Management

Mr. Preston Lewis
Department of Environmental Regulation
Division of Air Resources Management
Permitting and Standards Section
Twin Towers Office Building, 3rd Floor
2600 Blair Stone Road
Tallahassee, Florida 32399

*9-28-92
Greg Woods, EPA,
said handle as
modification, EPA
would not require
DACT models to be
revised. WCB*

Re: Key West Utility Board, Air Permit
DER's Permit/Cert. No.: A044-207419
Our File No. 20708.03

Dear Mr. Lewis:

Pursuant to our telephone conversation this morning, I am transmitting a copy of the DER's Notice of Intent to Issue Permit Number A044-207419; a letter dated July 8, 1992, from Michael Henderson, R.W. Beck and Associates, to Mr. Kenneth Tucker (DER, Ft. Myers); a follow-up letter dated July 10, 1992; correspondence dated August 28, 1991, from Coltec Industries to R. W. Beck; and a Request for Extension of Time filed on behalf of the Utility Board of the City of Key West.

As I explained, we are requesting that the maximum allowable emissions for NOx, CO and VOC, as contained within Specific Condition 4, page 6 of the proposed permit, be modified to reflect the three percent (3%) generator efficiency factor. The efficiency factor was mistakenly not accounted for during the construction permit process. We request that the "Maximum Allowable Per Engine" and the "Emissions Facility Total" figures for NOx, CO and VOC contained within proposed Specific Condition 4, be modified as follows:

Mr. Preston Lewis
August 26, 1992
Page 2

	Maximum Allowable Per Engine lb/hour	Emissions Facility Total TPY
NOx	161	301
CO	53.6	100
VOC	26.8	50

These modifications will correctly reflect the 97% generator efficiency in computing lb/hr, and the increases are not significant in terms of annual *de minimis* values under Rule 17-2.500, Florida Administrative Code.

Your assistance and cooperation in effectuating the above changes in the proposed permit are greatly appreciated. Please do not hesitate to contact me should you have any questions or concerns regarding this request for modification.

Very sincerely yours,



Diane D. Tremor
For the Firm

DDT:sn

Enclosures

cc: Robert Padron
Skip Jansen
Michael Henderson
David Knowles, DER, Ft. Myers

P 062 921 890



Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sender's Name Robert Padron	
Sender's Address Key West Elec. Sys	
City, State and ZIP Code Key West, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	9-30-92
AC 44-152197	
PSD-FI-135	
AO 44-207419	

PS Form 3800, June 1991

PS Form 3811, July 1983 447-645

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

- Show to whom, date and address of delivery.
- Restricted Delivery.

3. Article Addressed to:
Robert R. Padron
Key West Electric Sys.
POB Jarnio St.
Key West, FL 33041

4. Type of Service:	Article Number
<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	P062 921 890

Always obtain signature of addressee or agent and DATE DELIVERED.

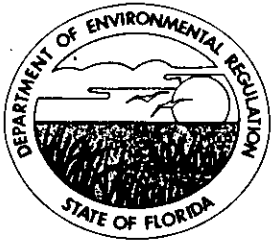
5. Signature - Addressee
X

6. Signature - Agent
X *[Signature]*

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

DOMESTIC RETURN RECEIPT



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

December 4, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert R. Padron, General Manager
Utility Board - City of Key West
City Electric System
Post Office Drawer 6100
Key West, Florida 33041-6100

Dear Mr. Padron:

Re: Expiration Date Extension for Construction Permit
AC 44-152197 (PSD-FL-135)

The Department has reviewed the above request contained in Ms. Diane D. Tremor's letters received October 30 and November 21, 1991, of which the latter included the appropriate processing fee. The request is acceptable and the following will be changed and added:

1. Expiration Date

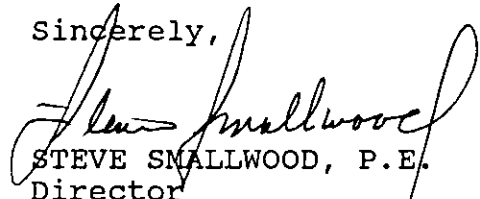
From: December 31, 1991
To: May 1, 1992

2. Attachments to be Incorporated

- o Ms. Diane D. Tremor's letter received October 30, 1991.
- o Ms. Diane D. Tremor's letter and processing fee received November 21, 1991.

This letter must be attached to the construction permit, No. AC 44-152197 (PSD-FL-135), and shall become a part of the permit.

Sincerely,



STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

Mr. Robert R. Padron
Page Two

SS/EM/rbm

Attachments

cc: D. Knowles, SD
R. Helbling, SDBO
J. Harper, EPA
C. Shaver, NPS
D. Tremor, Esq., RS&B

P 617 884 130



Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to <i>Robert Padron</i>	
Street & No. <i>Utility Board - City of</i>	
P.O., State & ZIP Code <i>Key West, FL</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date <i>12-16-91</i>	
<i>AC 44-152197</i>	
<i>PSD-FI-135</i>	

Key West

PS Form 3800, June 1990

LAW OFFICES

ROSE, SUNDBSTROM & BENTLEY

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

2548 BLAIRSTONE PINES DRIVE
TALLAHASSEE, FLORIDA 32301

(904) 877-6555

RECEIVED
DER - MAIL ROOM

1991 NOV 21 AM 11:00

ROBERT A. ANTISTA
CHRIS H. BENTLEY, PA
F. MARSHALL DETERDING
MARTIN S. FRIEDMAN, PA.
JOHN R. JENKINS
ROBERT M. C. ROSE, PA.
WILLIAM E. SUNDBSTROM, PA.
DIANE D. TREMOR
JOHN L. WHARTON

MAILING ADDRESS
POST OFFICE BOX 1567
TALLAHASSEE, FLORIDA 32302-1567

TELECOPIER (904) 658-4029

November 20, 1991

JOHN R. WODRASKA
SPECIAL CONSULTANT
(NOT A MEMBER OF THE FLORIDA BAR)

Mr. Clair H. Fancy
Deputy Chief
Bureau of Air Quality Management
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Key West Utility Board, Stock Island Power Plant;
Fee for Request for Extension of Permit Expiration Date
AC 44-152197 and PSD-FL-135

Dear Mr. Fancy:

In accordance with instructions from Patty Adams, I am enclosing a check in the amount of \$50.00 in connection with the request of Key West Utility Board, by correspondence dated October 30, 1991, for an extension of the expiration date of the referenced construction permit for the diesel generator project at the Stock Island Power Plant in Key West, Florida.

It is my understanding that, effective October 30, 1991, a \$50.00 fee is now required for requests for extension of permit expiration dates.

Please advise me if any further documentation is necessary in order to process our request for extension of the expiration date from December 31, 1991, to May 1, 1992.

Very sincerely yours,



Diane D. Tremor
For the Firm

DDT:sa
Enclosure
cc: Mr. Robert Padron
Mr. Robert Wallace
Bruce Mitchell, DER, Bureau of Air Quality

001023
1031

ROSE, SUNDSTROM & BENTLEY 04-87

7215

ATTORNEYS AT LAW
P. O. BOX 1567 PH. 877-6555
TALLAHASSEE, FL 32302-1567

November 20 19 91

63-66
631

PAY TO THE ORDER OF Department of Environmental Regulation

\$ *50.00*

Fifty and 00/100-----DOLLARS

FIRST FLORIDA

FIRST FLORIDA BANK, N.A.
Downtown Tallahassee Office 901
215 South Monroe Street
Tallahassee, Florida 32301

Juliusa Firdman
Jeppia Green

FOR Key West Utility Board, Stock Island Power Plant, AC 44-152197
PSD-FL-135

⑈007215⑈ ⑆063100662⑆ 612128053⑈

SPECIAL CONSULTANT
(NOT A MEMBER OF THE FLORIDA BAR)

Mr. Clair H. Fancy
Deputy Chief
Bureau of Air Quality Management
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Key West Utility Board, Stock Island Power Plant;
Fee for Request for Extension of Permit Expiration Date
AC 44-152197 and PSD-FL-135

Dear Mr. Fancy:

In accordance with instructions from Patty Adams, I am enclosing a check in the amount of \$50.00 in connection with the request of Key West Utility Board, by correspondence dated October 30, 1991, for an extension of the expiration date of the referenced construction permit for the diesel generator project at the Stock Island Power Plant in Key West, Florida.

It is my understanding that, effective October 30, 1991, a \$50.00 fee is now required for requests for extension of permit expiration dates.

Please advise me if any further documentation is necessary in order to process our request for extension of the expiration date from December 31, 1991, to May 1, 1992.

Very sincerely yours,

Diane D. Tremor

Diane D. Tremor
For the Firm

DDT:sa
Enclosure
cc: Mr. Robert Padron
Mr. Robert Wallace
Bruce Mitchell, DER, Bureau of Air Quality

001033
1031

LAW OFFICES

ROSE, SUNDSTROM & BENTLEY

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

2548 BLAIRSTONE PINES DRIVE
TALLAHASSEE, FLORIDA 32301

(904) 877-6555

RECEIVED

OCT 30 1991

Division of Air Resources Management

ROBERT A. ANTISTA
CHRIS H. BENTLEY, P.A.
F. MARSHALL DETERDING
MARTIN S. FRIEDMAN, P.A.
JOHN R. JENKINS
ROBERT M. C. ROSE, P.A.
WILLIAM E. SUNDSTROM, P.A.
DIANE D. TREMOR
JOHN L. WHARTON

MAILING ADDRESS
POST OFFICE BOX 1567
TALLAHASSEE, FLORIDA 32302-1567
TELECOPIER (904) 656-4029

October 30, 1991

JOHN R. WODRASKA
SPECIAL CONSULTANT
(NOT A MEMBER OF THE FLORIDA BAR)

Mr. Clair H. Fancy
Deputy Chief
Bureau of Air Quality Management
Department of Environmental
Regulation
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Re: Utility Board of the City of Key West
Extension of Permit Expiration Date
AC 44-152197 and PSD-FL-135

Dear Mr. Fancy:

Pursuant to our telephone conversation, this letter is to confirm the request of the Utility Board of the City of Key West for a further extension of the expiration date of the referenced construction permit for the diesel generator project at the Stock Island Power Plant. The requested extension is from December 31, 1991, to May 1, 1992.

The reason for this current request is our initial dissatisfaction with the results of the long-term performance testing conducted on behalf of the contractor. We do not believe it would be appropriate to apply for an operating permit until we are provided greater assurance that the diesel units will perform in full compliance with all applicable laws and regulations, and in accordance with the terms of our contract.

Testing to ensure that the diesel units meet all performance guarantees pursuant to the terms of our contract was conducted in August. While the results from the beginning portion (the first 100 hours) of the required 360-hour performance testing indicated compliance with our DER construction permit conditions, the results near the end of the 360-hour test period indicated increasing opacity or visual emissions from one of the units. We have discussed this situation with the contractor and it was agreed that additional testing will be performed during the first full week of

*The permit
- 14 pp
12/31 & The
is timely,*

November, 1991. We intend to submit to the DER a new report containing the results of the upcoming compliance testing.

In order to meet the requirements of our construction permit with regard to the timely submission of an application for an operating permit, and to obtain assurance that the units will be in full compliance with all applicable regulations, we are requesting an extension of the expiration date of the construction permit to May 1, 1992. This should afford us sufficient time to complete whatever modifications may be required, complete the new testing and timely submit an application for an operating permit for this project. Within 45 days from the completion of any required modifications and successful compliance testing, or 90 days prior to the requested extended expiration date of the construction permit, whichever first occurs, the Utility Board will submit its operating permit application.

Your continued assistance and cooperation is greatly appreciated. Should you need additional information regarding this extension request, please feel free to contact me.

Very sincerely yours,

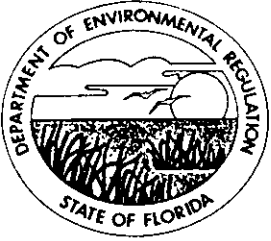


Diane D. Tremor
For the Firm

DDT:sa

cc: Mr. Robert Padron, General Manager, City Electric System
Mr. Robert W. Wallace, City Electric System
Mr. Marc K. Anderson, City Electric System
Mr. Skip Jansen, City Electric System
Mr. Dale Finigan, City Electric System
Ms. Becky Pattinson, R. W. Beck and Associates, Inc.
Mr. Garry Cornish, R. W. Beck and Associates, Inc.
Mr. R. J. Helbling, DER, Marathon office
Mr. D. M. Knowles, DER, Fort Myers

M. Baig
B. Mitchell



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

July 19, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert R. Padron, General Manager
Utility Board - City of Key West
City Electric System
1006 James Street
P. O. Drawer 6100
Key West, Florida 33041-6100

Re: Permit Expiration Date Extension
Two Diesel Generators
AC 44-152197 and PSD-FL-135

Dear Mr. Padron:

The Department is in agreement with your request dated June 12, 1991, for an extension of the expiration date of the above permit. The following shall be changed and added to the permit:

Expiration Date:

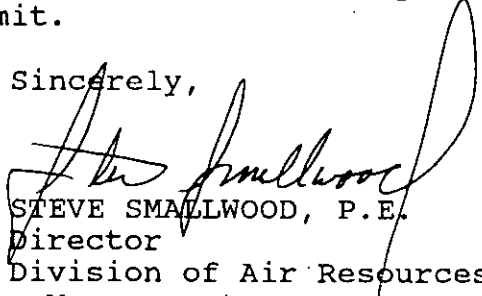
From: August 31, 1991
To: December 31, 1991

Attachment to be Added:

- Diane D. Tremor's letter received June 12, 1991.

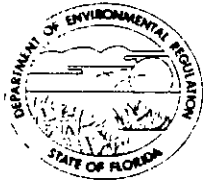
This letter must be attached to the above mentioned permit and shall become a part of that permit.

Sincerely,


STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/MB/plm

c: D. Knowles, SD



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Steve Smallwood
FROM: Clair Fancy *CF*
DATE: July 18, 1991
SUBJ: Amendment to Construction Permit AC 44-152197/PSD-FL-135
Key West City Electric System
Two Diesel Generators

Attached for your approval and signature is a letter extending the expiration dates for the above referenced construction permit.

The Bureau recommends approval of this amendment.

CF/MB/plm

Attachment

OK / Thank you
[Signature]
7-29-91

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Robert R. Padon, G.M.
 Utility Board - City of Key West
 1006 James St
 P.O. Drawer 6100
 Key West, Fl 33044-6100

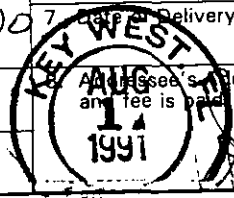
4a. Article Number
P 832 539 829

- 4b. Service Type
- | | |
|---|---|
| <input type="checkbox"/> Registered | <input type="checkbox"/> Insured |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD |
| <input type="checkbox"/> Express Mail | <input type="checkbox"/> Return Receipt for Merchandise |

7. Restricted Delivery

5. Signature (Addressee)

6. Signature (Agent)



PS Form 3811, October 1990

U.S. GPO: 1990-273-861

DOMESTIC RETURN RECEIPT

P 832 539 829

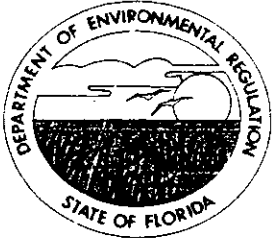


Certified Mail Receipt

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to	Robert Padon
Street & No	Utility Board - Coz KW
P.O., State & ZIP Code	Key West, Fl
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	7-26-91 AC 44-152197 PSD-FI-135

PS Form 3800, June 1990



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

June 25, 1991

Mr. L. T. Curry, Jr.
Utility Board of the City
of Key West
Post Office Drawer 6100
Key West, FL 33041-6100

Dear Mr. Curry:

Re: Relocation of Your General Electric Frame 5 (22 MW) Gas Turbine

This letter responds to your informal inquiry as to whether a construction permit is required to relocate your General Electric Frame 5 (22 MW) gas turbine from your Key West Power Plant to your Stock Island Power Plant. I concur with the oral opinion given to you by Cleve Holladay that the relocation of the turbine cannot be accomplished by amending the present air operating permit. Therefore, a construction permit is required.

Based on our calculations and information in our permitting files, the installation of the gas turbine at the Stock Island Plant would be a major modification as a result of significant net emission increases of SO₂ and NO_x. Based on information contained in our permit files, the Stock Island Plant is a major facility. Since the installation of the gas turbine is projected to be a major modification to a major facility, it would then be subject to Prevention of Significant Deterioration (PSD) requirements under Rule 17-2.500, F.A.C. In order to be exempt from the PSD rules, the turbine would have to be owned by the Utility Board and located on property contiguous or adjacent to the Stock Island Plant. Based on the information provided in your April 8, 1991 letter, the distance between the turbine's present location at the Key West Power Plant and the Stock Island Plant is approximately four miles and the facilities are not adjacent or contiguous.

For your convenience, I am enclosing copies of Chapter 17-2, F.A.C.; Chapter 17-4, F.A.C.; and a construction permit application. For PSD and BACT requirements, please refer to Rules 17-2.500 and 17-2.630, F.A.C. See Rule 17-4.050(4)(a), F.A.C., regarding our construction permit fees. It is expected that these fees will increase around November 1, 1991, so you should file your

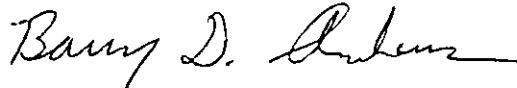
Mr. L. T. Curry, Jr.
Page Two
June 25, 1991

construction permit before that time. Please include all calculations, assumptions, and reference materials used in preparing the application and provide us six sets of the application. All required air dispersion modeling should be provided to us in both paper format and computer disk format. A professional engineer (PE) registered in Florida will have to seal the permit application and all technical information associated with it.

Because you did not seek a declaratory statement from the Department under Section 120.565, F.S. and Part III of Chapter 17-103, F.A.C., this opinion is not binding on you, the public, or the Department. Therefore, this letter does not constitute final agency action.

If you have any questions please call me or Cleve Holladay at (904)488-1344 or Gary Smallridge at (904)488-9730.

Sincerely,



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

CHF/CH/kt

enclosures

cc: D. Knowles, SF District
G. Smallridge, OGC

LAW OFFICES

ROSE, SUNDSTROM & BENTLEY

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

2548 BLAIRSTONE PINES DRIVE

TALLAHASSEE, FLORIDA 32301

(904) 877-6555

ROBERT A. ANTISTA
CHRIS H. BENTLEY, P.A.
F. MARSHALL DETERDING
MARTIN S. FRIEDMAN, P.A.
JOHN R. JENKINS
ROBERT M. C. ROSE, P.A.
WILLIAM E. SUNDSTROM, P.A.
DIANE D. TREMOR
JOHN L. WHARTON

MAILING ADDRESS
POST OFFICE BOX 1587
TALLAHASSEE, FLORIDA 32302-1587

TELECOPIER (904) 856-4029

June 12, 1991

RECEIVED

JUN 12 1991

Division of Air
Resources Management

Mr. Clair H. Fancy
Deputy Chief
Bureau of Air Quality Management
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Utility Board of the City of Key West
Request for Permit Expiration Date Extension
Permit No. AC 44-152197 and PSD-FL-135

Dear Mr. Fancy:

On behalf of the Utility Board of the City of Key West, I am again requesting an extension of the expiration date of the referenced construction permit for the diesel generator project at the Stock Island Power Plant in Key West. The requested extension is from August 31, 1991, to December 31, 1991.

This request is necessary due to delays which have occurred on the part of the contractor and not as a result of the activities of the Utility Board of the City of Key West. You will recall that our last request for an extension resulted from contractor delays in deliveries of equipment and essential parts for the construction of our diesel units, and consequent delays in the scheduling of performance testing. Thereafter, an error in design resulted in a turbocharger bearing failure, again delaying performance testing. Approximately one week prior to the rescheduled performance testing in May, notice was received from the DER that the request submitted in February for approval of alternative test procedures had been denied. This caused yet another delay in the scheduled testing until the end of May and first of June.

Preliminary testing indicated that the cooling systems equipment will need to be modified in order to assure compliance with air quality limitations. The contractor anticipates that the modifications can be completed and performance testing conducted by the end of June, 1991. Our general consultant, R. W. Beck and Associates, Inc., has recommended that we request a 90-day extension on the construction permit to allow for completion of the equipment modifications and air quality and performance testing.

Mr. Clair H. Fancy
June 12, 1991
Page Two

While the Utility Board strongly desires to expeditiously complete the diesel generator project for the Stock Island Power Plant, in an abundance of caution and in order to avoid the necessity for any additional extension requests, an extension until December 31, 1991, for the expiration date of its construction permit is hereby requested. Should the modifications and successful performance testing occur as now scheduled, the Utility Board will submit its operating permit application to the DER within 45 days after the completion of compliance testing.

For the foregoing reasons, the Utility Board respectfully requests an extension of the expiration date of Permit No. AC 44-152197, PSD-FL-135, from August 31, 1991, to December 31, 1991.

Should you need additional information regarding this extension request, please do not hesitate to contact me.

Very sincerely yours,



Diane D. Tremor
For the Firm

DDT:sa

cc: Mr. Robert Padron, General Manager, City Electric System
Mr. Robert W. Wallace, City Electric System
Mr. Marc K. Anderson, City Electric System
Mr. Skip Jansen, City Electric System
Mr. Dale Finigan, City Electric System
Ms. Becky Pattinson, R. W. Beck and Associates, Inc.
Mr. Garry Cornish, R. W. Beck and Associates
Mr. Syed Arif, DER, Bureau of Air Quality
Mr. R. J. Helbling, DER, Marathon Office
Mr. D. M. Knowles, DER, Fort Myers

B. Anderson
M. King

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100

KEY WEST, FLORIDA 33041-6100

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



TELEPHONE: (305) 294-5272

TELECOPIER: (305) 294-3685

F - 0 - 1
APR 12 1991
DER-BAQM

April 08, 1991

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

Subject: Relocation of the General Electric Frame 5 (22 MW) Gas Turbine from the Key West Power Plant to the Stock Island Power Plant Facility

Dear Mr. Clair Fancy,

In accordance with our telephone conversation on Friday, April 05, 1991, this is to confirm our discussion on the above subject.

As discussed, it is our intention to relocate the Gas Turbine in an effort to facilitate the production operations of the City Electric System. As you are aware we are progressing in the process of decommissioning the Key West Power Plant Facility.

The plans are to move the Gas Turbine in late fall of 1991 or the winter of 1992. But it is necessary to build the foundation prior to the moving. Now, is the optimum time to install the foundation, due to the fact that we presently have a building expansion in progress to the Stock Island Steam Plant. As explained, all the facilities in that area have to be set on subterranean pile due to the soil conditions.

We plan to have a contractor on site in five (5) to seven (7) weeks to install piling for the Steam Plant expansion, at which time the piling for the Gas Turbine should also be installed. This would create a cost savings to the City Electric System as well as to our customers.

Also, as discussed there will be no change to the air operating permit.

The following is a list of attachments for your information:

1. Plan view of the Key West Facility showing the Gas Turbine in the existing location.
2. Plan view of the Stock Island Facility showing the Gas Turbine in the proposed

move 4 miles

Page 2 of 2

new location.

3. Plan view of the Island of Key West and Stock Island showing the over all distance of the move.
4. A copy of the existing air permit.

As we discussed it is hoped that this will be sufficient to satisfy the requirements necessary to execute this relocation move.

We are proceeding towards a May 10, 1991 date for the installation of the foundation of the Gas Turbine and would greatly appreciate your response prior to that time.

Thanking you in advance for your attention in this matter and if any other information is required, please let me know.

Very truly yours,

UTILITY BOARD-CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Robert R. Padron, Manager



L. T. Curry, Jr.
Special Projects Coordinator

LTC/me

cc:

R. Padron
C. Jansen
E. Baker
R. Wallace
Jim Greenshields, D.E.R.
David Knowles, D.E.R.

File

Attachments

Greg Wsley

operating as separate plants

Go through pre construction review

Look into PSD Rules

building structure, facility
SIC Code

not same or adjacent

probably have separate staffs

have 2 out of 3 but need all 3

of substantial amount

How long to disassemble
How long to reassemble

What would be specific details
vis a vis the old location

CF thinks there is a way but GS doesn't
think there is according to 17-103.152

Design for recovery

305-294-5272

X1403

old power plant

Please leave a message with person at switchboard

L.T. Curry

De commission 3

More gas turbine
no change to permit

help the air

moving in four sections
Accessory Equipment
Generator
Turbine
Central Cop

Take them by barge and
put it on foundation

Adding on to Stock Island - ground out these
subterranean grout injection
34

October or November

Scout off foundation
Actual move

Can move anywhere up and down
latitude to move almost to
No.

Decommission
whole Key West
to help air environment

very clean permit
can't pick up VE
on them.
got all NOx anti
pollution equipment

L.T. Curry
exactly what
we want to
next.

Air Quality
letter addressed
either
write

April 30, 1991

Interoffice Memo

To: Clair Farney

From: Chris Holladay
7270: Barry Lindgren

Subject: Relocation of the General Electric Frame 5
(22 MW) Gas Turbine from the Key West Power
Plant to the Stock Island Power Plant facility

The applicant intends to relocate the gas turbine ^{two} miles to the east of the Key West Power Plant, which is in the process of being decommissioned. I consulted with Barry Smallbridge of OGC about how to handle the proposed relocation. He and I both agree that the air permitting rules as we understand them do not allow a simple amendment to the air operating permit. The proposed move would be a modification to an existing major facility (Stock Island Power Plant). Therefore, at the least an ^{air} construction permit would be required under Rules 17-2.210(1) and 17-2.520. The applicant could also be subject to the PSD rules in 17-2.500. Since the applicant is not proposing that this turbine would be in operation for less than two years, the applicant could not claim an exemption to the PSD rules via the relocatable facilities exemption (17-2.500(3)(a)).

another island

Doesn't fall within
Exemption 15 17-4.040

17-4.030 states that any such
installation can't be operated who
permits

They The two diesel located there were
subject to PSD in 1988 (PSD-FL-135)

Talked
to Carol
for 10 min

Re notice

17-4.080 If it was not under the rule, by 17-2.100(125) it
could not increase actual
notice

We would ^{not} accept of application to modify 17-103.150
They would presumably publish in newspaper in that area
notice would be published one time with complete application file

1st
notice
of 1st
notice
of 1st
notice

Indicate whether to grant or deny
within

Reasonable assurance: 1) Emission wouldn't go up
2) Not a substantial part of construction

ROSE, SUNDSTROM & BENTLEY

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS
2548 BLAIRSTONE PINES DRIVE
TALLAHASSEE, FLORIDA 32301
(904) 877-6555

CHRIS H. BENTLEY, P.A.
F. MARSHALL DETERDING
MARTIN S. FRIEDMAN, P.A.
JOHN R. JENKINS
ROBERT M. C. ROSE, P.A.
WILLIAM E. SUNDSTROM, P.A.
DIANE D. TREMOR
JOHN L. WHARTON

MAILING ADDRESS
POST OFFICE BOX 1567
TALLAHASSEE, FLORIDA 32302-1567
TELECOPIER (904) 658-4029

February 11, 1991

RECEIVED

FEB 12 1991

DER-BAQM

Mr. Clair H. Fancy
Deputy Chief
Bureau of Air Quality Management
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Utility Board of the City of Key West's Extension of Time for
Expiration Date of Construction Permit No. AC 44-152197, PSD-
FL-135 (Diesel Generator Project - Stock Island Power Plant)

Dear Mr. Fancy:

This letter will confirm our telephone conversation of this date regarding an extension of time for the expiration date of the construction permit for the two diesel generators at the existing Stock Island Power Plant in Key West, Monroe County, Florida.

The current expiration date of our construction permit is April 1, 1991. By letter dated December 27, 1990, a copy of which is attached, the Utility Board of the City of Key West requested a 60-day extension of the expiration date. That extension request was occasioned by delays in deliveries of equipment and essential parts on the part of our contractor for the construction of the diesel units. At the time we requested that 60-day extension, we were advised by the contractor that performance testing of the engines would occur between January 30 and February 19, 1991.

We have now been advised by our contractor that source testing is scheduled for the week of March 11, 1991. A copy of the Test Protocol has been previously forwarded to you by letter dated February 8, 1991. Provided this schedule is adhered to by the contractor and the testing firm, we believe that we would be in a position to submit our application for an operating permit within 45 days after the completion of compliance testing.

However, Specific Condition No. 9 of our current construction permit requires that the operating permit application be submitted to the DER at least 90 days prior to the expiration date of the construction permit, or within 45 days after completion of compliance testing, whichever occurs first. Accordingly, and in

Mr. Clair H. Fancy
February 11, 1991
Page Two

order to assure compliance with that condition, we respectfully request an additional 45-day extension of the construction permit to extend the expiration date to July 15, 1991.

It is the ongoing intention and strong desire of the Key West Utility Board to complete the diesel generator project for the Stock Island Power Plant in compliance with permit conditions. The delays which have occurred have been entirely beyond its control, and have resulted from changing schedules from the contractor.

Should you need additional information regarding this request for extension of the expiration date of our construction permit until July 15, 1991, please do not hesitate to contact me.

Very sincerely yours,



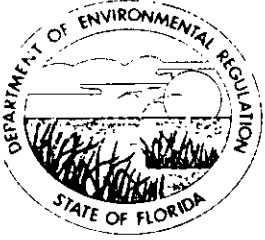
Diane D. Tremor
For the Firm

DDT:sa

Enclosure

- cc: Mr. Robert Padron, General Manager, City Electric System
Mr. L.T. Curry, City Electric System
Mr. Robert W. Wallace, City Electric System
Mr. Marc K. Anderson, City Electric System
Mr. F. Donovan, R. W. Beck and Associates, Inc.
Mr. R. M. Pattinson, R. W. Beck and Associates, Inc.
Mr. Garry Cornish, R. W. Beck and Associates, Inc.
Mr. Syed Arif, DER, Bureau of Air Quality
Mr. R.J. Helbling, DER, Marathon Office
Mr. D. M. Knowles, DER, Fort Myers

BAICHF 2-13-91 RRM



Florida Department of Environmental Regulation

Twin Towers Office Bldg • 2600 Blair Stone Road • Tallahassee, Florida 32399 2-400

Lawton Chiles, Governor

Carol M. Browner, Secretary

February 14, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Robert R. Padron, General Manager
Utility Board - City of Key West
City Electric System
1006 James Street
P. O. Drawer 6100
Key West, Florida 33041-6100

Re: Permit Expiration Date Extension
Two Diesel Generators
AC 44-152197 and PSD-FL-135

Dear Mr. Padron:

The Department is in agreement with your request dated December 27, 1990, for an extension of the expiration date of the above permit. The following shall be changed and added to the permit:

Expiration Date:

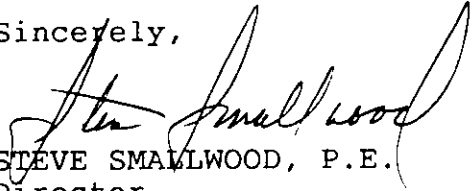
From: April 1, 1991
To: August 31, 1991

Attachment to be Added:

- Robert W. Wallace's letter received December 31, 1990.

This letter must be attached to the above mentioned permit and shall become a part of that permit.

Sincerely,


STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/MB/plm

c: D. Knowles, SF District



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To _____	Location: _____
To _____	Location: _____
To _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Steve Smallwood
FROM: Clair Fancy *CF*
DATE: February 13, 1991
SUBJ: Amendment to Construction Permit AC 44-152197
and PSD-FL-135
Key West City Electric System
Two Diesel Generators

Attached for your approval and signature is a letter extending the expiration dates for the above referenced construction permit.

The Bureau recommends approval of this amendment.

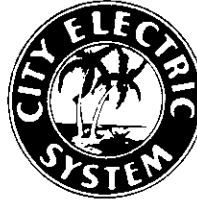
CF/MB/plm

Attachment

ok / [Signature]

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100
KEY WEST, FLORIDA 33041-6100



TELEPHONE: (305) 294-5272

TELECOPIER: (305) 294-3685

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RECEIVED

January 24, 1991

JAN 31 1991

DER - BAQM

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

Subject: Revised Schedule for Source Testing, Construction Permit No. AC
44-152197

RE: Our Letter, January 14, 1991

Dear Mr. Fancy,

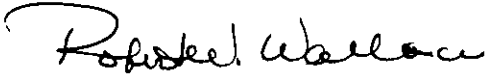
Due to delays in systems checkout by our Contractor, we are behind on our scheduled date for source testing of our new Diesels.

Currently we expect that first run of the Diesels can occur February 6 thru 10. We should be able to begin Source Testing on February 11, 1991.

If I maybe of further assistance regarding this matter, or additional information is required please call me.

Sincerely,

UTILITY BOARD-CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Robert R. Padron, Manager


Robert W. Wallace
Results Supervisor

RWW/me

cc:
R.R. Padron
L. T. Curry, Jr.
M. Anderson
T. Donovan, R. W. Beck and Associates
B. Pattinson, R. W. Beck and Associates
D. M. Knowles, FDER, Ft. Myers
R. J. Helbling, FDER, Marathon Office

File

UTILITY BOARD OF THE CITY OF KEY WEST

POST OFFICE DRAWER 6100

KEY WEST, FLORIDA 33041-6100

CERTIFIED MAIL
RETURN RECEIPT REQUESTED



TELEPHONE: (305) 294-5272

TELECOPIER: (305) 294-3685

December 27, 1990
RECEIVED
DEC 31 1990
DER-BAQM

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

Subject: Extension of time to expiration date for construction Permit
No. AC 44-152197, PSD-FL-135

Dear Mr. Fancy,

Our contractor for the above referenced permit is behind in his construction schedule. The contractor claims late deliveries of equipment and essential parts as the reason for an 8 week delay in the completion of his contract.

The expiration date of our construction permit is April 01, 1991. We would appreciate an extension of 60 days to the scheduled date of expiration on this permit to allow our contractor time to complete the job.

If I maybe of further assistance in this matter, or additional information is required please call me.

Sincerely,

UTILITY BOARD-CITY OF KEY WEST
"CITY ELECTRIC SYSTEM"
Robert R. Padron, Manager

Robert W. Wallace
Results Supervisor

RWW/me

cc:

R.R. Padron
L. T. Curry, Jr.
M. Anderson
T. Donovan, R.W. Beck and Associates
B. Pattinson, R. W. Beck and Associates
D. M. Knowles, FDER, Ft. Myers
R. J. Helbling, FDER, Marathon Office

File

J. [unclear] [unclear]

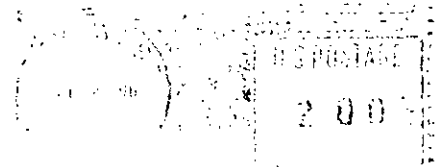
UTILITY BOARD



OF THE CITY OF

KEY WEST, FLORIDA

33041-6100



Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fl 32399-2400

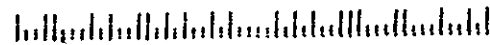
*Fold at line over top of envelope to the right
of the return address*

CERTIFIED

P 506 006 077

MAIL

**RETURN RECEIPT
REQUESTED**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUL 11 1990

4APT-AEB

Mr. Clair H. Fancy, P.E.
Division of Air Resources Management
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
JUL 16 1990
DER-BAQM

Re: Permit AC 44-152197, PSD-135
Key West City Electric System, Key West, Florida
Diesel Engine Generators

Dear Mr. Fancy:

By the July 2, 1990, letter (enclosed) from Mechanical Systems, Incorporated, to Paul Reinermann of my staff, we were requested to evaluate the proposed opacity CEM locations for the two diesel engine generators under construction by the Key West City Electric System. Since your agency has jurisdiction in this matter, we believe that you should respond to their request. However, the following comments on their proposal are provided for your consideration.

1. We believe that their proposal is reasonable and should be approved. The installation of one opacity CEM on the combined stack appears to be prohibitive due to the high stack gas temperature. In addition, the two opacity CEMs should better allow the source operator to determine which diesel engine is malfunctioning.
2. Their request to assume maximum flow rate when converting NO_x CEM data to an emission rate in lb/h is acceptable since it will result in a conservative estimate of NO_x emissions.

If you have any questions regarding this letter, please contact Paul Reinermann at 404/347-2904.

Sincerely,

Jewell A. Harper, for
Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division

Enclosure

C: S.A.M.

FAX (608) 249-7425

3610 LEXINGTON AVENUE (53714) • POST OFFICE BOX 7335 • MADISON, WISCONSIN 53707-7335 • PHONE (608) 249-6633

July 2, 1990

Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

Attn: Mr. Paul Reinermann
4th Floor Air Division

Re: Permit AC 44-152197, PSD-FL-135
Diesel Engine Generators
Key West City Electric System
Key West, Florida

Dear Mr. Reinermann:

Attached is a proposed layout of the opacity monitors and stack sample probes for the above referenced project. We would appreciate your review and comment.

We have tentatively planned to locate the instruments to monitor the diesel engine exhaust gases in the outlet tube on the inside of the mufflers. This unusual installation was a result of being unable to find any other satisfactory location that would guarantee accuracy and allow system accessibility for performing quarterly audits and routine maintenance. The manufacturer of the monitoring equipment refused to warranty the opacity monitors if the transmissometers and retroreflectors were located on the common stack. They believe from past experience that convective heat from the uninsulated stack operating at 750°F would damage the instruments in a short period of time. This could occur from heat rising from below on calm days or from being on the downstream side of the stack on windy days.

This heat would not only jeopardize the accuracy and operation of the instruments but would also make routine maintenance difficult if not impossible. Guaranteeing the safety of personnel attempting to reach the stack mounted instruments became an overriding issue. We found no satisfactory method to protect an individual attempting to climb the stack access ladder within one foot of the 750°F stack. Limiting access to the opacity monitors to times when the engines were not running was considered but was rejected as being unacceptable from a regulatory standpoint and impractical from an operational standpoint. Locating the monitoring instruments on the outside of the muffler heat shield as shown became the only viable option.

The decision to locate the monitoring equipment on the mufflers will require expensive field modification of the mufflers which are already onsite as well as the addition of four new access platforms to service the CEM equipment. Two new platforms will be supplied for each muffler as shown on the drawings. We have

Environmental Protection Agency
July 2, 1990
Page 2

indicated to the equipment supplier that unless another acceptable option is found, there would be no choice in the matter. Marginal installations of continuous emission monitoring equipment which cannot be serviced are not likely to be accepted or remain in compliance. If you see any other options that would help make the system operate better or be easier to service, please let us know.

We would appreciate your guidance on one item which we need to resolve as soon as possible. The permit for this facility requires reporting emissions on a time basis. Would it be acceptable to assume a maximum flow velocity for exhaust gas flow regardless of the actual velocity? This maximum flow rate will be established very precisely since the engines in question will be extensively shop tested prior to delivery to the site. We would use this value for all calculations. This would assume a worst case situation for all engine loads.

Shop testing will also accurately document fuel flow versus exhaust gas flow. As an alternate to assuming maximum exhaust flow at all times, we could use a fuel flow signal to accurately express variable exhaust gas flow rates. Please let us know which if either of these methods to generate flow signals is acceptable.

We have placed two test ports on each muffler at elevation 22'-3". This location is between the gas sample port at elevation 21'-7" and the opacity monitor at elevation 23'-6". We have also requested that the equipment supplier install an extra 4" sample port for future monitoring equipment at elevation 21'-0". Even though this additional sample port adds some expense at this time, the additional cost is relatively minor if all modifications to the muffler are made at one time. Given the uncertainty concerning future monitoring requirements, we would like to be safe and avoid additional muffler modifications. In this regard we would appreciate knowing if you believe other sample locations would be justified or beneficial.

Thank you for your cooperation on this project.

Sincerely,

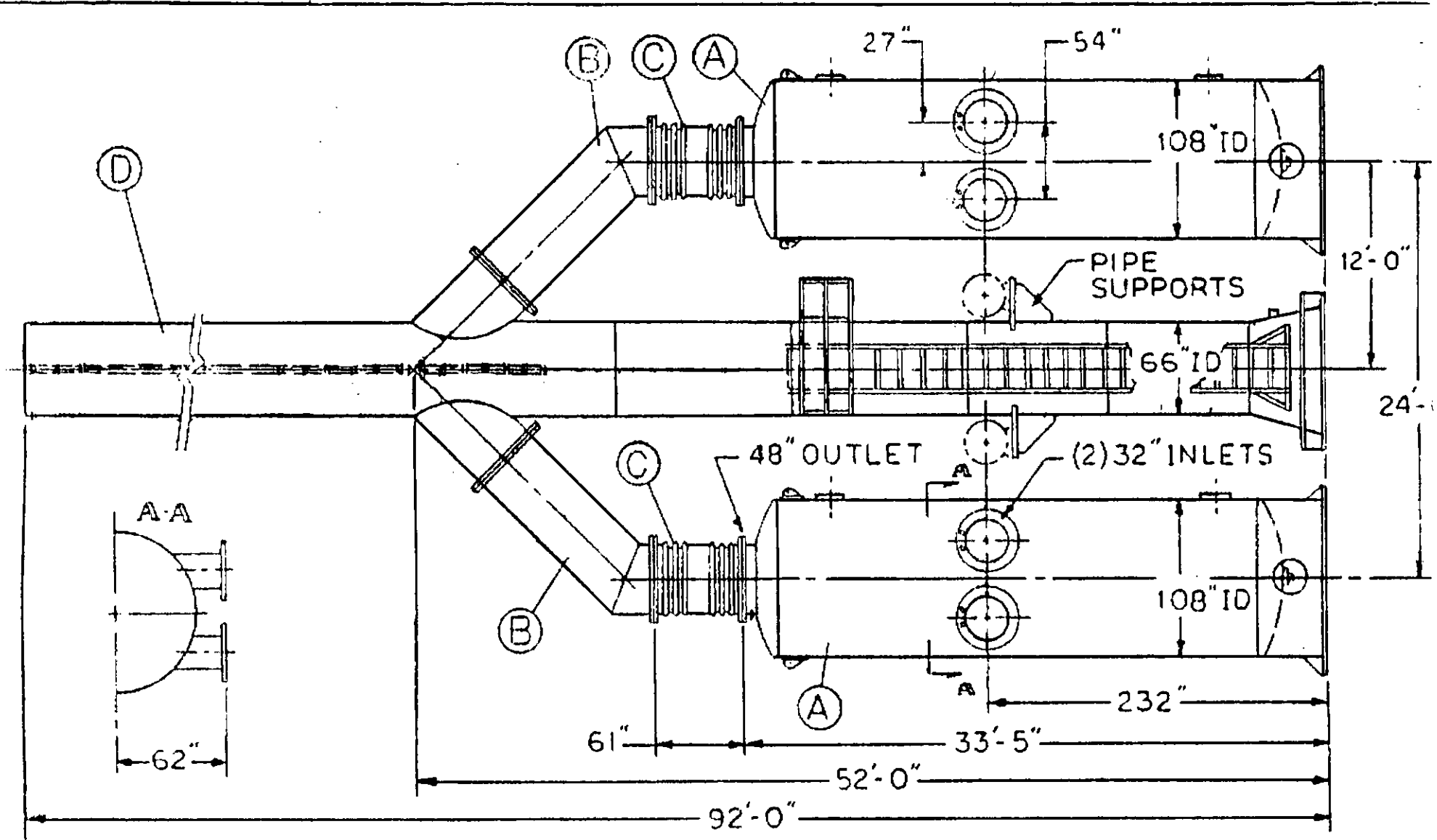
MECHANICAL SYSTEMS, INC.



John L. Arnold

JLA/cs

cc: M. Weiss, Coltec
J. Wood, Coltec



REF. DRAWINGS
NOTED

DIMENSIONS ARE CERTIFIED
FOR COLT INDUSTRIES

P.O. NO. 928845-H

MOUNTING BRACKETS YES NO

INSPECTION PORT YES NO

NOTES

INSTALL IN VERTICAL POSITION
EXTERNAL FINISH GRAY PRIMER
SCALE $\frac{1}{8}'' = 1'-0''$

TOLERANCES SHOWN ARE MAX.
FLANGE TOLERANCES ARE AS FOLLOWS:

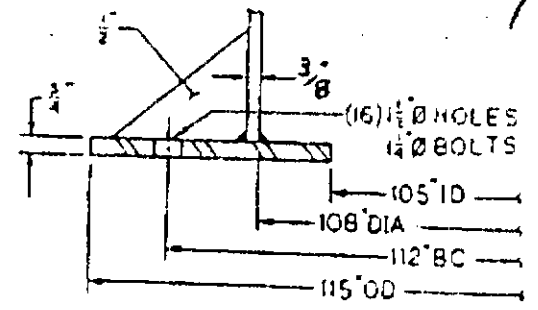
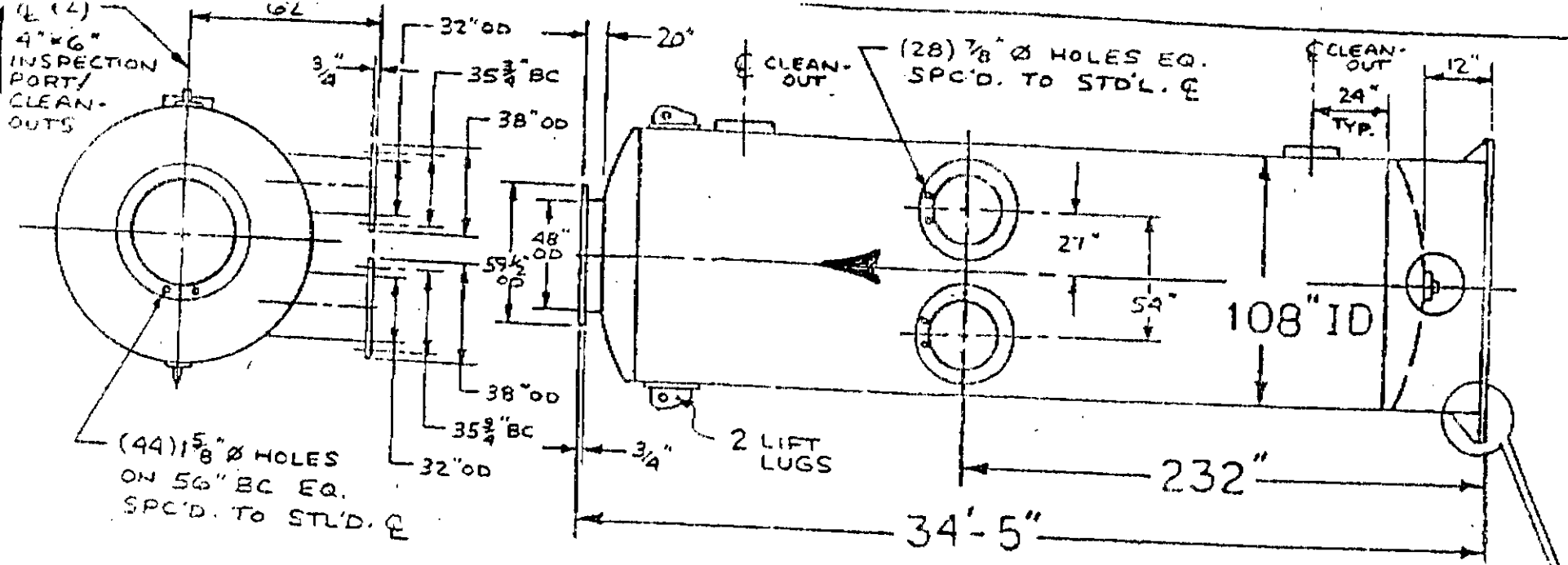
BOLT HOLE CIRCLE	.0625
BOLT HOLE SPACING	.0625
BOLT HOLE LOCATION W/RESPECT TO PART CENTER LINE	.0625

2	REVISED PER CUST.	11/14 '89	E
1	REVISED PER CUST.	10/17 '89	TC

BURGESS-MANNING

EXHAUST SILENCER AND STACK ASS'Y.

OWN. TC	S.O. NO.
CK. <i>cmf</i>	68164-A
DATE 9-14-89	



FLOW : 157,000 LBS/HR EXHAUST AIR
 TEMP : 745 F EXHAUST
 TOTAL EXHAUST SYSTEM PRESSURE DROP : 7.0" W.C.

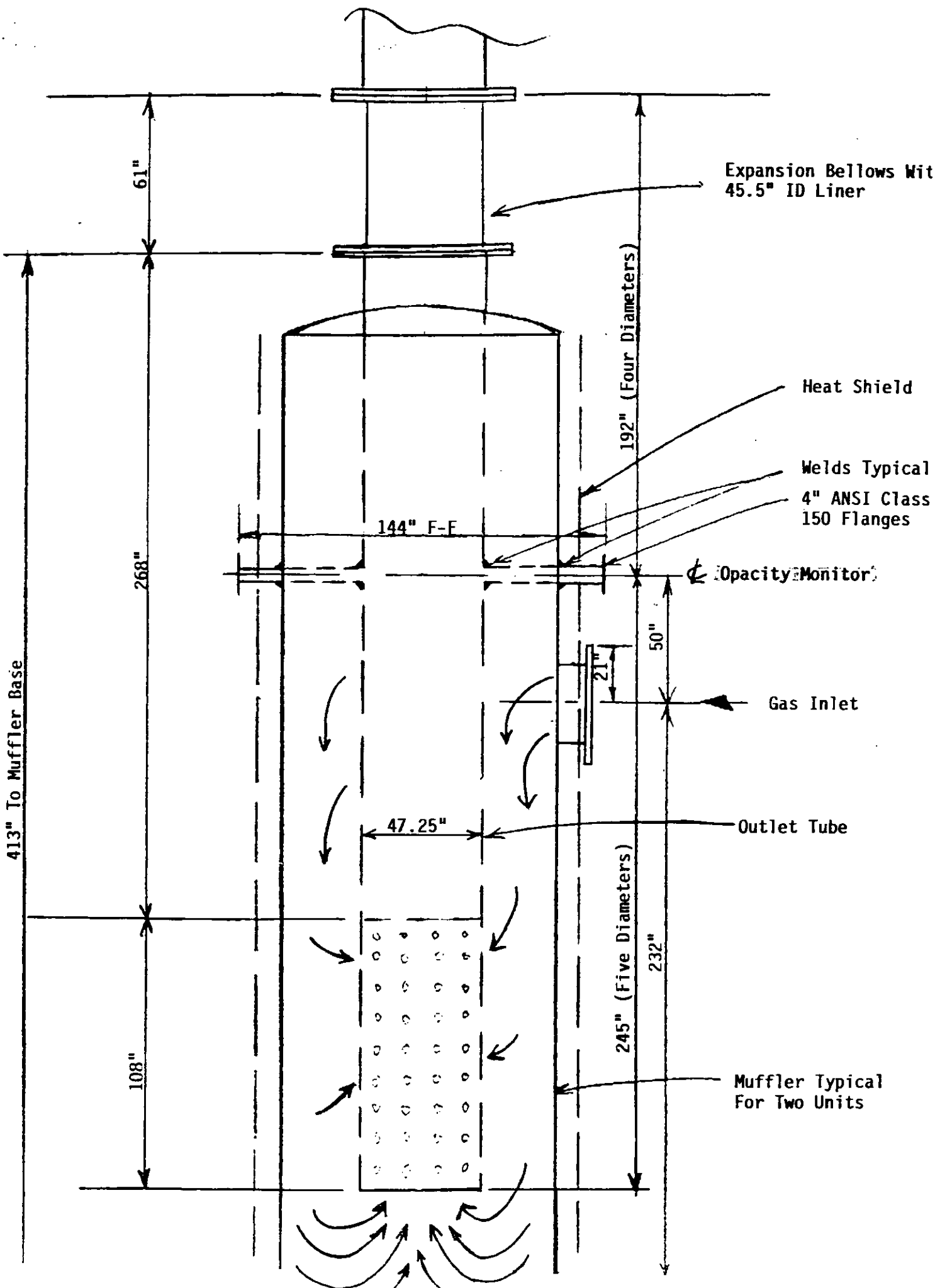
REF DRAWINGS 10000-1104
 5165-4248A-0
 5101-4248A-0
 DIMENSIONS ARE CERTIFIED
 FOR COLT INDUSTRIES
 P.O. NO. 928845-H
 MOUNTING BRACKETS YES NO
 INSPECTION YES NO
 DATE 10/6/89 BY TC

NOTES
 QTY. REQ'D. : TWO (2)
 INSTALL IN VERTICAL POSITION
 EXTERNAL FINISH SHOP GRAY PRIME
 EST. WT. 20,166# EA.
 TOLERANCES SHOWN ARE MAX.
 FLANGE TOLERANCES ARE AS FOLLOWS:
 BOLT HOLE CIRCLE .0625
 BOLT HOLE SPACING .0625
 BOLT HOLE LOCATION W/RESPECT TO PART CENTER LINE .0625
 FACE VARIATION TO INDICATED PLANE WITH A MAX VARIATION OF 1/4"

2	OAL WAS 33.5"	3.6	TC
1	WERE (4) LIFT LUGS & CLEAN-OUTS ADDED	11.14	TC
NO	REVISION		

BURGESS-MANNING
 BMA-H-48 EXHAUST SILENCER - W/ SKIRT & DUAL 32" HI-SIDE INLETS
 DWN. TC S.D.NO.
 CK. *ant*
 DATE 10/6/89 68164-1
 PART NO. MOD/RI

413" To Muffler Base



Expansion Bellows With 45.5" ID Liner

Heat Shield

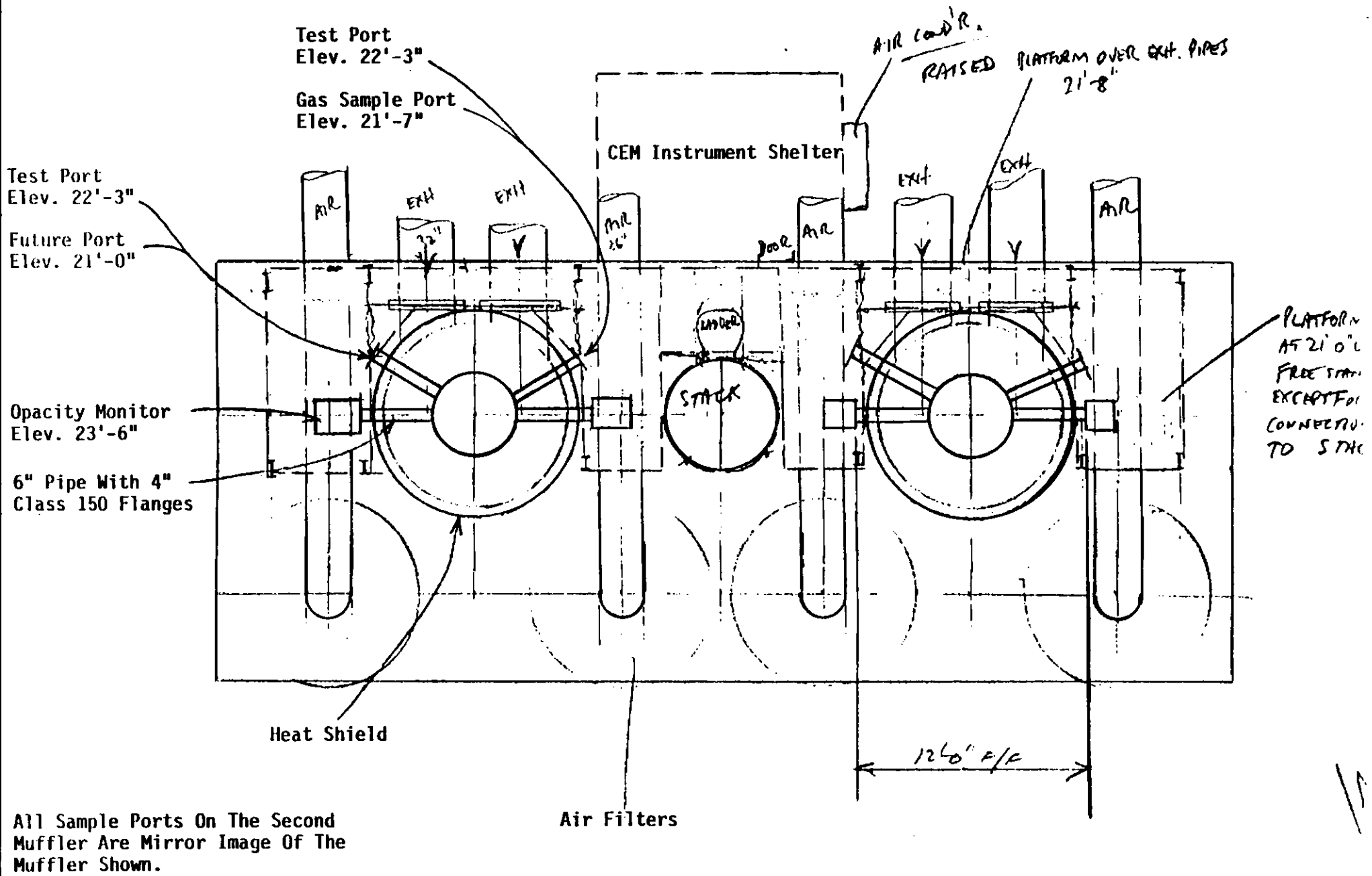
Welds Typical 4" ANSI Class 150 Flanges

Opacity Monitor

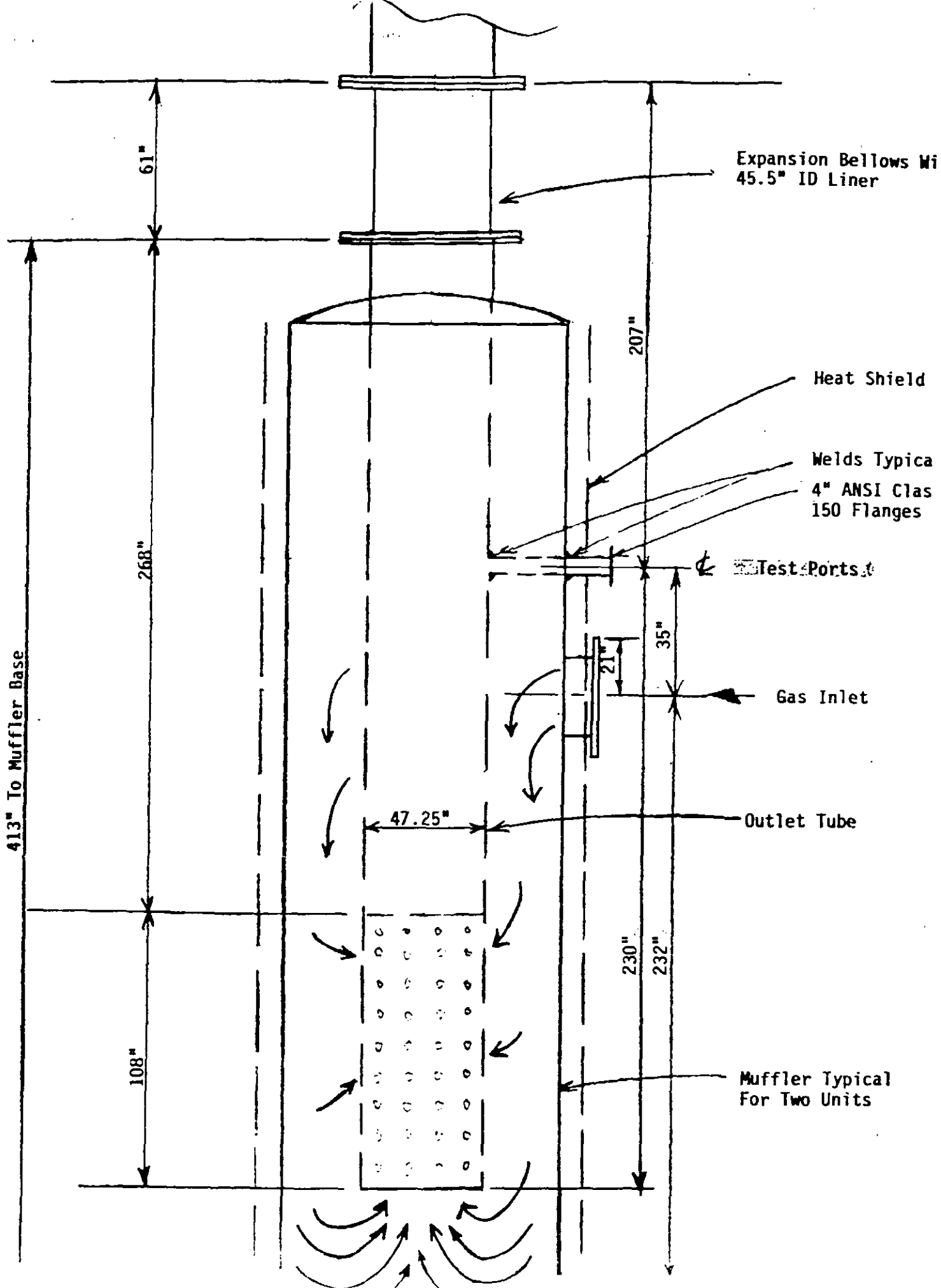
Gas Inlet

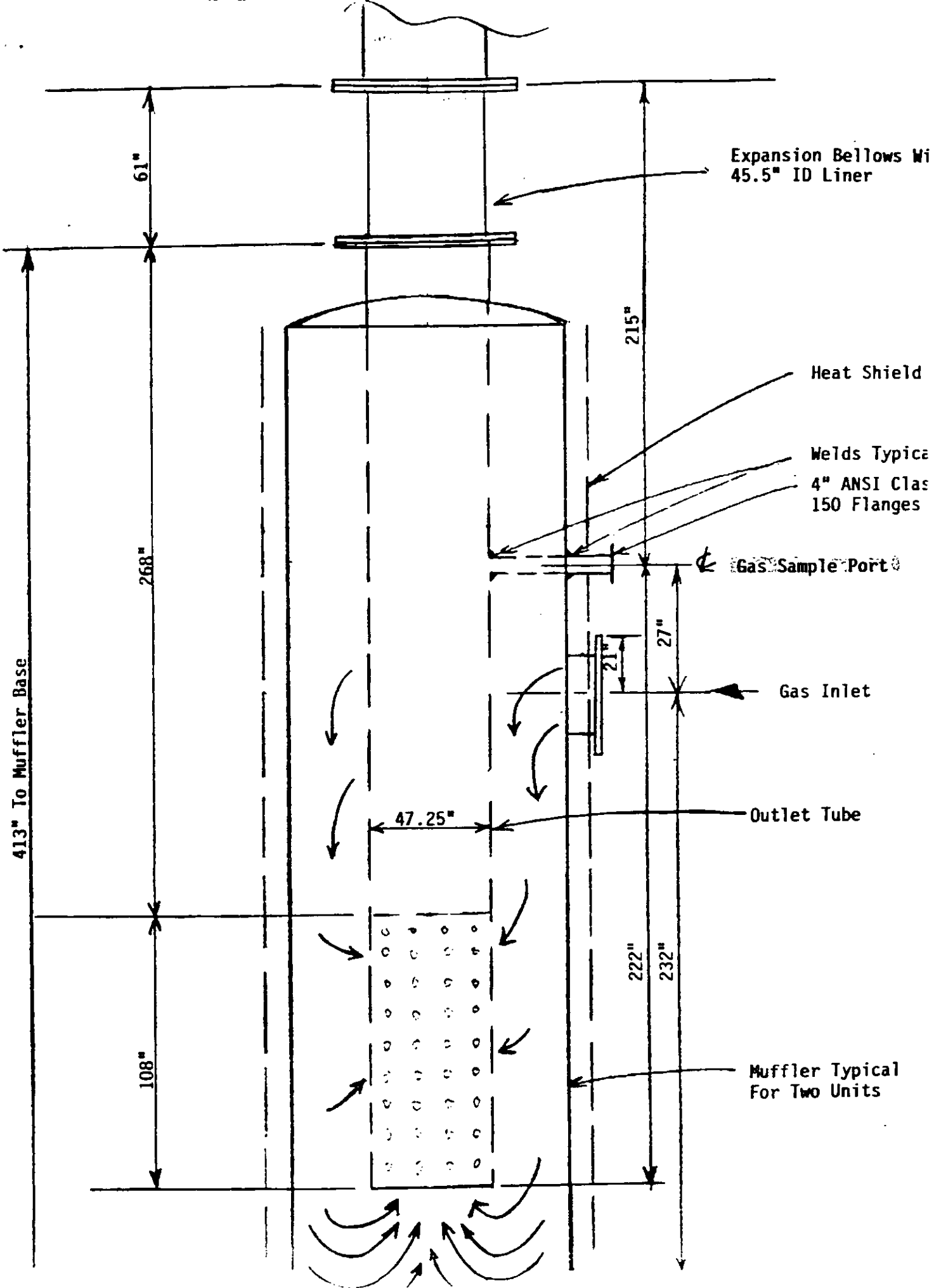
Outlet Tube

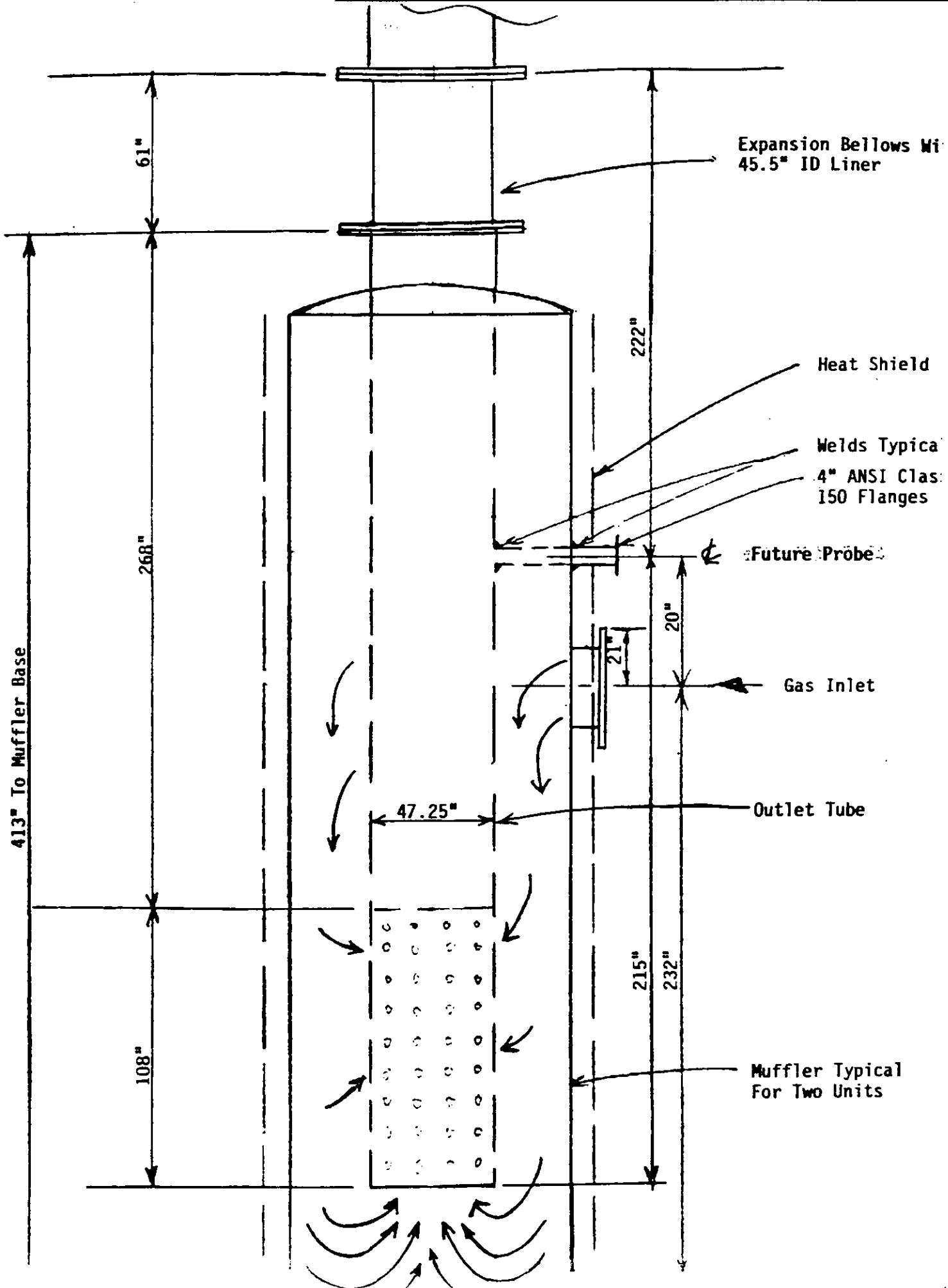
Muffler Typical For Two Units



J. G. L. FROM [unclear]









UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 19 1989

4APT/APB-aes

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

JUN 22 1989

DER-DAQM

Re: Key West Electric System (PSD-FL-135)

We have reviewed your June 6, 1989, letter containing the final determination and permit for the proposed construction of two diesel generators to be located at the Stock Island facility in Monroe County, Florida. We concur with Florida's evaluation of this project.

Sincerely yours,

Bruce P. Miller

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

cc: Mr. Robert R. Padron
Key West Electric System
1006 James Street
Key West, Florida 33041

*cc: P. R. ...
B. ...
L. ...
...*

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AIR-4

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

