

**Florida
Power**
CORPORATION

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OCT 8 1993
Division of Air
Resources Management

Certified Mail P 627 945 283

October 5, 1993

Mr. Alexander Alexander, P.E.
Director, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

Dear Mr. Alexander:

Re: Compliance Test Notification for New Combustion Turbines at Intercession City
DEP Permit Number AC49-203114

As required by 40 CFR 60.8 and Specific Condition 14. of the permit referenced above, Florida Power Corporation (FPC) is providing the Department of Environmental Protection (DEP) notification of the commencement of compliance testing of the new combustion turbines at FPC's Intercession City electric generating station. The testing will begin on November 8, 1993.

FPC is also submitting a testing protocol to Mr. Charles Collins and Mr. Garry Kuberski with their copies of this letter. A pre-test meeting has been scheduled for 2:30 pm on October 19, 1993 at the Central District office to review the protocol and discuss any questions which may arise. FPC, and as I understand it, the Central District are both awaiting a written response from the Tallahassee DEP office regarding FPC's permit modification request. The test protocol has been written to accommodate either approval or disapproval of the requested test method changes. Hopefully the outcome will be made clearer by the time the October 19 meeting is held. FPC will maintain close contact with the Tallahassee and Central District offices on this issue.

Please feel free to contact me at (813) 866-4344 if you have any questions.

Sincerely,

J. Michael Kennedy
Senior Environmental Specialist

cc: Mr. Charles Collins, DEP Central District w/enclosure
Mr. Garry Kuberski, DEP Central District w/enclosure
Mr. John Brown, DEP Tallahassee }

Memorandum

Florida Department of
Environmental Protection

*Potter
File*

TO: Preston Lewis

FROM: Mike Harley *MH*

DATE: September 15, 1993

SUBJ: Florida Power Corporation, Intercession City - Construction Permit
Modification

Teresa Heron asked us to provide comments about the source sampling issues associated with Florida Power Corporation's request for an amendment to the construction permits for the above referenced facility. Our comments are as follows:

1. If the permit review engineer decides it is necessary to limit the particulate emissions from the gas turbines, Florida Power Corporation will have to use either EPA Method 5 or 17 to measure the emissions. EPA Methods 5 and 17 are isokinetic procedures that require the sample to be extracted at a velocity that is equal to the velocity of the gas in the duct. Both particulate methods incorporate EPA Method 2 for the measurement of stack gas velocity as an integral part of the procedure. Any deviation from the required EPA procedures will require the owner to request and obtain approval of an alternate sampling procedure pursuant to Rule 17-297.620, F.A.C.

The cause of the transient conditions that would prevent the use of EPA Method 2 is not clear. There are several physical changes that could be used to create a measurable steady-state flow condition. These physical changes include the installation of straightening vanes and the extension of the stack with the subsequent relocation of the sampling ports. For almost 20 years, the federal regulations have clearly stated that the optimum sampling location in a duct is usually located at least 8 diameters downstream and 2 diameters upstream of any entrance, exit, bend, or other disturbances. It is the owner's responsibility to design and construct the source so that the emissions of regulated pollutants can be measured with the methods required by the permit. For example, if the owner selects poor sampling locations then it is the owner's responsibility to make the physical changes necessary to correct the problem.

2. In this case, the use of EPA Method 3A in lieu of EPA Method 3 for gas analysis may be approved through a permit amendment.

TO: Preston Lewis
DATE: September 15, 1993
PAGE: 2

3. Both 40 CFR 60.335 [Subpart GG] and the permit require nitrogen oxides emission measurements to be corrected to ISO standard day conditions. The equation to be used for the ISO correction is specified in 40 CFR 60.335(c)(1). Pursuant to 40 CFR 60.335(f)(1), the manufacturer is required to obtain federal approval of any alternate correction factors prior to the initial performance test. The federal regulation requires EPA to publish approval in the Federal Register. Following federal approval, Florida Power Corporation would also be required to obtain approval of an alternate correction factor prior to the compliance test pursuant to Rule 17-297.620, F.A.C.

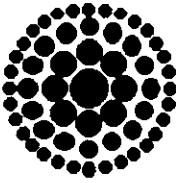
Florida Power Corporation's argument that the BACT determination did not include a reference to ISO conditions might have some merit if it could be unmistakably proven that the BACT was based on uncorrected values. However, it would still be necessary for the company to correct the measured concentrations to ISO conditions in order to show that the BACT limitation is not less restrictive than the federal NSPS.

4. Federal regulations require the affected sources to be operated at a water-to-fuel ratio that is at or above the water-to-fuel ratio where compliance was measured. The ratio should be monitored in accordance with 40 CFR 60.335(c)(2).

Please call Ramesh Menon or me if you have any questions.

MH/rm

cc: J. Pennington
J. Brown
T. Heron



**Florida
Power**
CORPORATION

*Patty
File w/permit on desk.*

Certified Mail P 627 945 183

September 7, 1993

Mr. Alexander Alexander, P.E.
Director, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

Dear Mr. Alexander:

Re: Initial Startup of New Combustion Turbine at Intercession City - Unit P9
DEP Permit Number AC49-203114

As required by 40 CFR 60, Florida Power Corporation (FPC) is providing the Department of Environmental Protection (DEP) notification of the initial startup of one of the new combustion turbines at FPC's Intercession City electric generating station. The initial startup of Unit P9 occurred on September 2, 1993.

Please feel free to contact me at (813) 866-4344 if you have any questions or if you need additional information.

Sincerely,

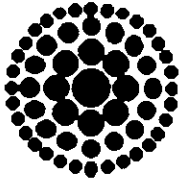
J. Michael Kennedy
Senior Environmental Specialist

cc: Mr. Charles Collins, DEP Central District
Mr. John Brown, DEP Tallahassee

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Division of Air
Resources Management



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CORPORATION

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SEP 3 1993

Division of Air
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Certified Mail P 627 945 182

August 31, 1993

Mr. Alexander Alexander, P.E.
Director, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

Dear Mr. Alexander:

Re: Initial Startup of New Combustion Turbine at Intercession City
DEP Permit Number AC49-203114

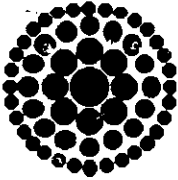
As required by 40 CFR 60, Florida Power Corporation (FPC) is providing the Department of Environmental Protection (DEP) notification of the initial startup of one of the new combustion turbines at FPC's Intercession City electric generating station. The initial startup of Unit P7 occurred on August 19, 1993. FPC will notify your office of the initial startup of Unit P9 within 15 days of its occurrence.

Please feel free to contact me at (813) 866-4344 if you have any questions or if you need additional information.

Sincerely,

J. Michael Kennedy
Senior Environmental Specialist

cc: Mr. Charles Collins, DEP Central District
Mr. John Brown, DEP Tallahassee ✓



**Florida
Power**
CORPORATION

August 19, 1993

Mr. Clair Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

0000322

Dear Mr. Fancy:

Re: Construction Permit Modification Processing Fee
DEP Permit Number AC49-203114 ; PSD-FL-180

On August 5, 1993 Florida Power Corporation (FPC) your letter requesting a \$250.00 processing fee for the above-referenced permit modification submittal. I have enclosed a check for that amount made payable to the Florida Department of Environmental Protection.

Please contact me at (813) 866-4344 if you have any questions.

Sincerely,

J. Michael Kennedy
Senior Environmental Specialist

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1993 AUG 23 AM 10:07

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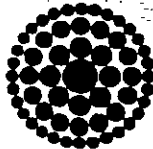
ACCOUNTS PAYABLE DEPT. B3F
 P. O. BOX 14042
 ST. PETERSBURG, FL 33733-4042 REMITTANCE ADVICE
 (813) 888-5257

CHECK DATE 08/16/93 VENDOR FLA DEPT OF ENVIRONMENTAL VENDOR NO. 272500 CHECK NO. 1560499

INVOICE NO.	DATE	OUR ORDER NO.	VOUCHER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
FL0805250	08/05/93		9308136226	250.00	.00	250.00
	CK097274				TOTAL	250.00

THE ATTACHED REMITTANCE IS IN FULL SETTLEMENT OF ACCOUNT AS STATED. IF NOT CORRECT PLEASE RETURN TO ABOVE ADDRESS.

Accounts Payable Department B3F
 P.O. Box 14042
 St. Petersburg, FL 33733-4042



Florida Power
 CORPORATION

DATE 08/16/93 CHECK NO. 1560499
 0000322
 83-658
 831

PAY: \$250*DOLLARS AND 00 CENTS

\$*****250.00

Sun Bank of Tampa Bay
 Tampa, Florida

TO
 THE
 ORDER
 OF

FLA DEPT OF ENVIRONMENTAL
 PROTECTION
 2600 BLAIR STONE RD
 TALLAHASSEE FL 32399-2400

Void after 60 days

Jeffrey N. Heinich
 Treasurer

⑈ 1560499⑈ ⑆063 106569⑆ ⑆03 203 202 2500⑈



**Florida
Power**
CORPORATION

ACCOUNTS PAYABLE DEPT. B3F

P. O. BOX 14042

ST. PETERSBURG, FL 33733-4042

(813) 866-5257

REMITTANCE ADVICE

89

CHECK DATE 08/16/93 VENDOR FLA DEPT OF ENVIRONMENTAL VENDOR NO. 272500 CHECK NO. 1560499

INVOICE NO.	DATE	OUR ORDER NO.	VOUCHER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
FL0805250	08/05/93		9308136226	250.00	.00	250.00
	CK097274				TOTAL	250.00

THE ATTACHED REMITTANCE IS IN FULL SETTLEMENT OF ACCOUNT AS STATED. IF NOT CORRECT PLEASE RETURN TO ABOVE ADDRESS.



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

August 2, 1993

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P., Manager
Environmental Programs
Florida Power Corporation
P. O. Box No. 14042
St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: Florida Power Corporation
Request for Permit Modification
AC49-203114, PSD-FL-180

The Bureau of Air Regulation received your July 26, 1993, request for the above referenced project. On October 30, 1991, Rule 17-4.050(4)(o), F.A.C., was changed to require a \$250 processing fee for a permit amendment; therefore, we will not be able to take action on your request until the fee is received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

Patricia G. Adams

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

CHF/pa

cc: Teresa Heron

P 230 523 748



Receipt for Certified Mail

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

PS Form 3800, June 1991

Sent to W. Jeffrey Pardue, C.E.P.	
Street and No. P. O. Box 14042	
P.O., State, and ZIP Code St. Petersburg, FL 33733	
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 Mailed: 8-3-93 Permit: AC49-203114	

Is your RETURN ADDRESS completed on the reverse side?

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 below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

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:
Mr. W. Jeffrey Pardue, C.E.P., Mgr.
Environmental Programs
Florida Power Corporation
P. O. Box No. 14042
St. Petersburg, Florida 33733

4a. Article Number
P 230 523 748

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
AUG 5 1993

5. Signature (Addressee)

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

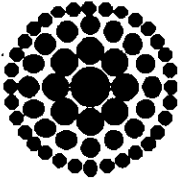
6. Signature (Agent)

PS Form 3811, December 1991

U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.



**Florida
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JUL 30 1993

Division of Air
Resources Management

Certified Mail P 627 945 155

July 26, 1993

Mr. John Brown, P.E.
Administrator, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Brown:

Re: Request for Construction Permit Modification
DEP Permit Number AC49-203114 ; PSD-FL-180

On August 17, 1992 the Florida Department of Environmental Protection (DEP) issued the above-referenced construction permit to Florida Power Corporation (FPC) for construction of six simple-cycle combustion turbines at its Intercession City electric generating station. Construction of the first four turbines is nearing completion. Emissions compliance testing will be performed in the near future. FPC requests that DEP make the modifications and amendments to the permit which are described below. This request is based on recent experience obtained at FPC's DeBary facility, at which identical turbines have been constructed and tested.

Specific Conditions 8. and 9.

These conditions summarize the compliance test methods to be used. As provided by DEP Rule 17-297.620, FPC requests that EPA Method 19 be specified in place of Method 2 for determination of volumetric flow rate. Because of extremely turbulent flow in the exhaust gas stream of these combustion turbines, the pitot tube system of measurement specified in Method 2 is inaccurate. Method 2 is designed and intended to be used under laminar flow conditions, which do not exist in the exhaust stream from these turbines when operating at peak load. The International Organization for Standardization, in Section 12.2.2.2 of "Measurement of Fluid Flow in Closed Conduits - Velocity Area Method Using Pitot Static Tubes" (ISO 3966), describes the error of the method due to turbulent flow. It states "The error increases with the increasing degree of turbulence of the measured fluid flow and is always positive, i.e. the measured velocity value is always greater than the actual flow velocity."

Method 19 results in a more accurate and precise measurement of the gas flow in cases in which turbulent flow conditions exist. Please refer to the attached report from GE, which is the manufacturer of the turbines for both the DeBary and Intercession City sites.

Mr. John Brown
July 26, 1993
Page Two

Since Method 5 also uses a pitot tube for measurement of particulate, it is impossible to perform accurate Method 5 sampling at peak load. Therefore, FPC requests that the requirement to perform Method 5 testing for particulate be removed from the permit, and that particulate compliance be determined by opacity only.

Method 3, which is specified in the permit to be used for gas analysis, is the Orsat analysis method, which is not an instrumental method. Because of this, Method 3 cannot be calibrated against a certified calibration gas. This method is also time consuming and is less accurate than Method 3A, which is an instrumental method. Method 20, which is used for NO_x and diluent gas measurements, requires gas measurements by calibrated analyzers. In a letter dated June 30, 1993 from Mr. Howard Rhodes of DEP to Mr. Kent Hedrick, P.E. of FPC, DEP allowed Method 3A to be used for testing at the DeBary facility. FPC requests that the required test method for gas analysis be changed to Method 3A in the Intercession City construction permit.

Method 8 is specified for determination of sulfuric acid emissions, but sulfuric acid emissions testing is not required in the first sentence of Specific Condition 8. FPC requests that the Method 8 specification be deleted from the permit.

Specific Condition 13.

This condition establishes the method by which NO_x emissions measured during the compliance tests will be adjusted to ISO ambient atmospheric conditions. The adjustment to ISO conditions is specifically required for testing units which have a NO_x limit established under Subpart GG of 40 CFR 60. Since the NO_x limit established for the Intercession City turbines is a BACT determination, correction to ISO ambient atmospheric conditions is not required. Because the ISO correction is not part of the BACT determination and associated emission limit, FPC requests that this condition be deleted from the permit.

Specific Condition 15.

The third sentence in this condition states *The water to fuel ratio at which compliance is achieved shall be incorporated into the operation permit and shall be continuously monitored.*

This implies that a single water to fuel ratio will apply. The water to fuel ratio necessary to maintain compliance varies with ambient temperature and humidity. One of the benefits of the automatic controls is that they continuously optimize the ratio by automatically performing the ISO correction and the associated adjustments. FPC requests that the sentence be changed to the following:

The water to fuel ratio shall be continuously monitored.

Specific Condition 6.

This condition states as follows: *Any change in the method of operation, equipment or operating hours shall be submitted to DER's Bureau of Air Regulation.*

The language of this condition is ambiguous. The operating hours will change from year to year, depending on the demand for the units. FPC assumes that the condition is intended to refer to proposed changes in the allowable hours of operation. If this is the case, FPC requests that the language be changed to the following:

Any proposed change in equipment, method of operation, or allowable hours of operation shall be submitted to the Department of Environmental Protection for review and approval.

Specific Condition 10.

ASTM Method D4292 is specified for determining the sulfur content of the fuel oil. This reference should be changed to ASTM D4294.

Specific Condition 23.

The term steam injection is incorrectly stated as the method of NOx emissions control. This should be changed to water injection.

Fuel-Bound Nitrogen

As given in Section II A of the permit application form for the new units, the estimated NOx emissions and the proposed NOx limit of 42 ppm were based on a fuel-bound nitrogen (FBN) content of 0.015% or less. The DeBary facility is encountering FBN which is consistently greater than 0.015% and approaches 0.03%. Because it will be using a similar #2 fuel oil supply, FPC anticipates similar results for Intercession City. On page 5 of the permit application for the Intercession City facility, it was indicated that the typical FBN would be 0.03%. In addition, Section III C of the permit application form contains a footnote stating that an FBN allowance would be requested, if actual FBN levels were greater than 0.015%.

Since water injection has no effect on NOx resulting from FBN, as FBN increases, NOx emissions will increase accordingly. Based on this information, FPC requests that the DEP modify the allowable NOx emissions in the permit to account for the additional FBN. FPC requests that the change be based on the FBN allowance which is contained in 40 CFR 60, Subpart GG. Using this method, the additional FBN above the level of 0.015%, on which the 42 ppm limit is based, would result in an additional 6 ppm of NOx emissions (based on an FBN level of 0.03%), resulting in a total NOx emission limit of 48 ppm. This would be an increase of 26 lbs./hr. and 44 tons/yr. per unit for the four 92.9 MW turbines currently being constructed. This is based on the operation of each unit at peak load for 3390 hr./yr. No other pollutant emissions would increase as a result of the proposed allowance.

Mr. John Brown
July 26, 1993
Page Four

Since the relationship between emissions changes and predicted ambient pollutant concentrations in Gaussian air quality dispersion models (such as the ISC model used in the analysis for the new units) is linear, the maximum predicted NO₂ concentrations for the new units can be ratioed accordingly. The maximum predicted NO₂ impact of the six new units, from page 3-14 in the PSD permit application, is 0.34 ug/m³. The revised maximum concentration resulting from the FBN allowance is $(48/42) * 0.34 = 0.39$ ug/m³. This assumes an increase from all six permitted units and is well below the PSD significance level of 1 ug/m³. Since the predicted maximum ambient NO₂ impact from the new units is less than the significance threshold, no additional modeling analysis is necessary.

Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions or if you need additional information.

Sincerely,



W. Jeffrey Pardue, C.E.P., Manager
Environmental Programs

cc: Mr. Alexander Alexander, DEP Central District

J. Deon

C. Holladay

J. Harper, EPA

J. Bunyak, NPS

EXHAUST GAS FLOW DETERMINATION

GE- PPSD Environmental Engineering has been responsible for conducting emission compliance tests at a significant number of gas turbine installations including more than 30 sites over the past several years. In nearly all cases where GE has directed the testing process, EPA Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate- Type S Pitot Tube) has not been used to assess volumetric flow rates. Alternatively, Method 19 which calculates volumetric flow rates stoichiometrically, has been proposed and has generally been accepted in the test protocol. The principle objection to use of Method 2 for simple-cycle gas turbine flow assessments stems from the wide variability of the exhaust gas velocities measured across the plane of the high temperature exhaust stack at the test port locations. This wide variation in velocity tends to skew the statistical flow measurement results (see attached velocity profiles plots taken from similar gas turbine units). Indicated flow values obtained by this test method, in GE's experience, are typically greater than predicted flow values calculated from detailed thermodynamic computer models run at corresponding test operating conditions by as much as +25%. Flow increases on this order if accurate, would produce proportionate increases in the thermal performance characteristics (i.e. output and fuel consumption) which are not observed at test conditions.

Test Method 19 has been successfully used by GE and others in the emission testing industry to more accurately assess gas turbine exhaust flow rates for emission compliance assessments. Consequently GE's test experience to date centers primarily on the use of Method 19 for flow determinations, whereas Method 2 has been utilized for establishing iso-kinetic sampling conditions during particulate test measurements where required. For those installations where regulators have insisted on the use of Method 2 (e.g. state of New Jersey), GE has incorporated both Method 2 and Method 19 within the test protocol due to concerns over measurement accuracy. Under specific Base load test conditions Method 2 flow values have been found to compare within 10% of Method 19 values at some installations, however, these results can be influenced by machine operating load conditions which alters the exhaust velocity profile of the unit. The following table presents a comparison of three different installation sites where comparative flow measurement data was recorded using the above mentioned test methods on similar GE MS7001E gas turbine units operating in a simple cycle configuration. For the New Jersey installations, exhaust flow % differences have been calculated relative to the "inlet airflow method" which GE feels is the most accurate field measurement assessment.

**VOLUMETRIC EXHAUST FLOW COMPARISONS FOR GE HEAVY DUTY GAS
TURBINE INSTALLATIONS**

<u>Site Install.</u>	<u>BASE Load Pt. RUN #</u>	<u>Airflow Method DSCFH x10⁶</u>	<u>Method 19 DSCFH x10⁶</u>	<u>Percent Differ. %</u>	<u>Method 2 DSCFH x10⁶</u>	<u>Percent Differ. %</u>
NJA	1	28.4	30.6	7.7	31.5	10.9
NJA	2	28.6	30.6	7.0	31.6	10.5
NJA	3	29.3	30.9	5.5	32.1	9.6
NJB	1	27.9	29.8	6.8	33.6	20.4
NJB	2	28.4	28.9	1.8	33.7	18.7
NJB	3	28.1	28.7	2.1	33.4	18.9

NOTE: The Airflow Method using Mark IV measurements were used as the basis for the percent difference calculations shown above for the NJ sites.

NYA	1	N/A	27.5	N/A	35.0	27.3
NYA	2	N/A	27.3	N/A	31.8	16.5
NYA	3	N/A	29.9	N/A	34.4	15.1

NOTE: The Method 19 measurements were used as the basis for the percent difference calculations shown above for the NY sites.

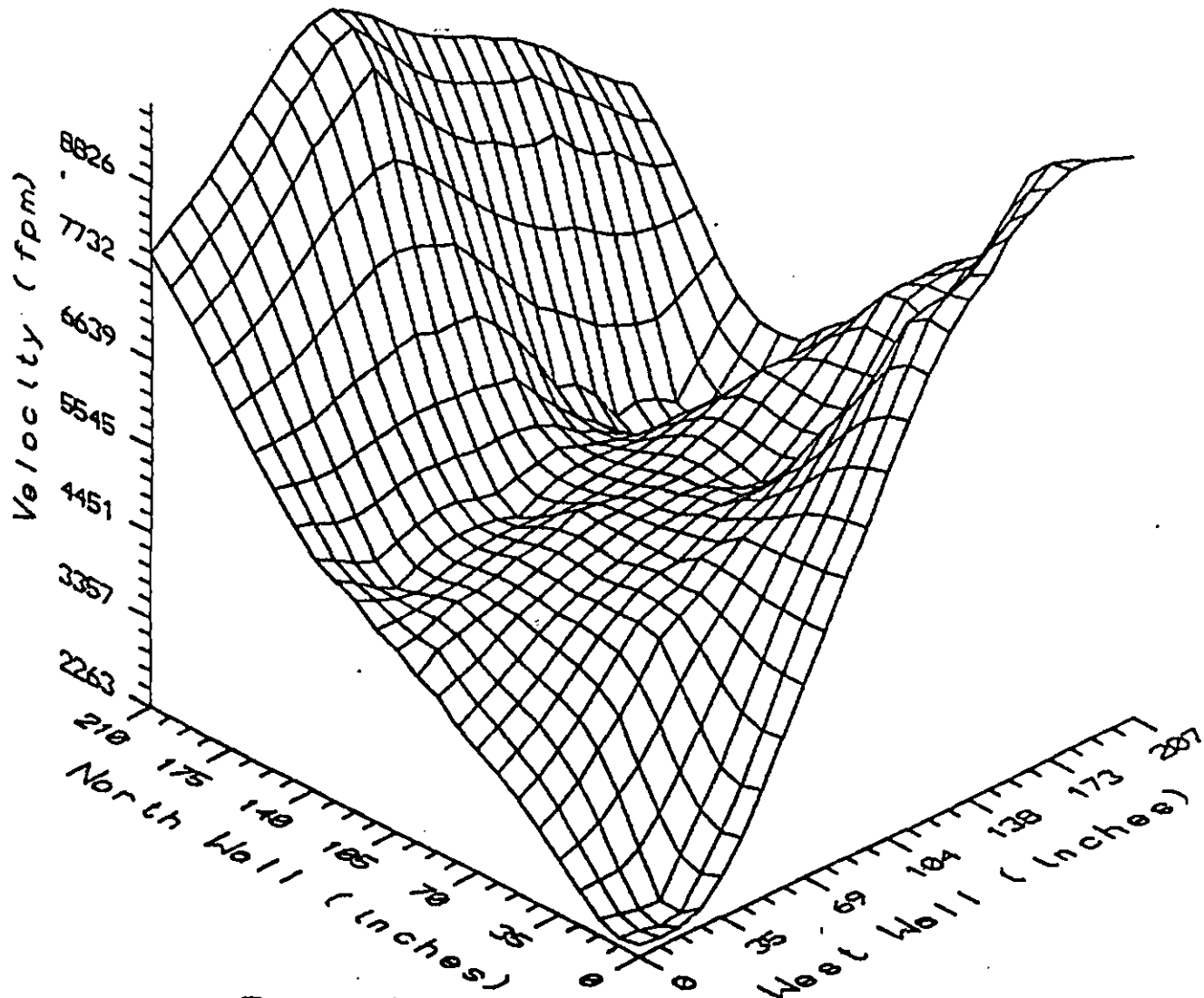
For part load operation, some additional comparisons are shown below which were recorded at the NJ sites.

VOLUMETRIC EXHAUST FLOW COMPARISONS AT PART LOAD OPERATING CONDITIONS

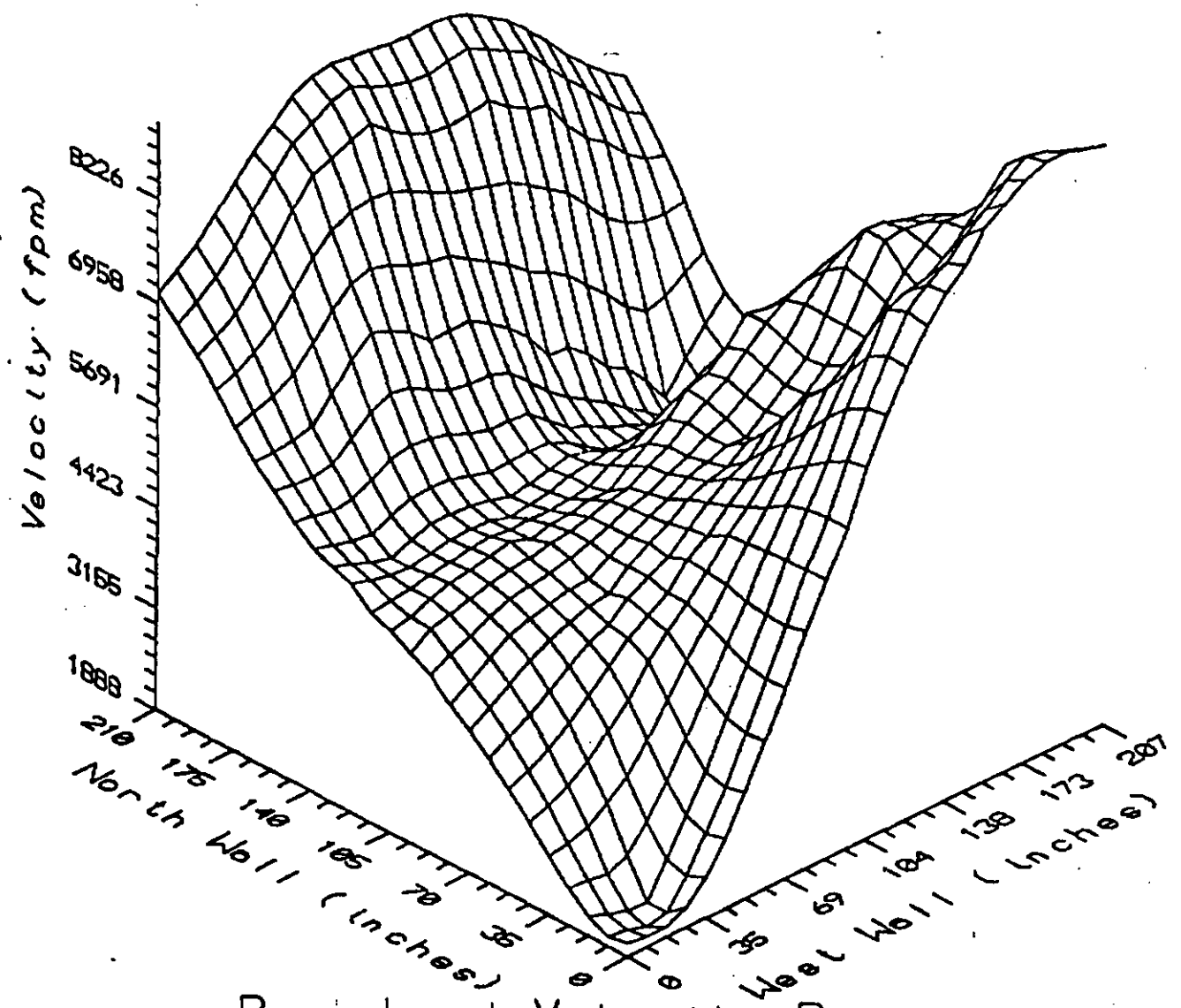
Site Install.	Part Load Pt. RUN #	Airflow Method DSCFH x10 ⁶	Method 19 DSCFH x10 ⁶	Percent Differ. %	Method 2 DSCFH x10 ⁶	Percent Differ. %
NJB	1	28.4	30.0	5.6	31.3	10.2
NJB	2	28.1	29.8	6.1	32.5	15.7
NJB	3	27.9	29.7	6.5	31.4	12.5
NJB	4	27.8	27.9	0.4	32.7	17.6
NJB	5	27.9	27.7	0.0	32.9	17.9
NJB	6	28.2	28.2	0.0	33.0	17.0

NOTE: The Air Flow measurements were used as the basis for the percent difference calculations shown above for the NJ site. The part load condition for runs 1-3 was approx. 54.4 MW, and 65 MW for runs 4-6.

As shown above, use of the calibrated bellmouth airflow method and US EPA 40 CFR 60 Method 19 provide the most accurate airflow measurements and are GE's preferred methods. Comparisons with US EPA 40 CFR 60 Method 2 show unacceptably high variability.



Peak Load Velocity Profile



Base Load Velocity Profile

FUEL BOUND NITROGEN ADJUSTMENT

We note that at DeBary Station, fuel bound nitrogen in distillate is approximately 0.02% which is above the 0.015% used to establish NOx guarantees. To allow for some flexibility in this area, we recommend that permits include a provision to adjust NOx emissions as allowed by EPA 40CFR60, Subpart GG, Section 60.332.

ISO CORRECTIONS

Another common problem we are finding with the air permits from a number of states is the insistence on correcting NOx emissions levels to ISO conditions. The NOx controls furnished with GE units compensate for humidity and ambient temperatures such that further correction to ISO is not required.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

SEP 18 1992

4APT-AEB

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

RE: Florida Power Corporation/Intercession City Facility
(PSD-FL-180)

Dear Mr. Fancy:

This is to acknowledge receipt of your final determination and Prevention of Significant Deterioration (PSD) permit for the above referenced facility's proposed construction, dated August 17, 1992. The facility will consist of six simple-cycle combustion turbines, with an output power of 92.9 megawatts (four turbines) and 185.5 megawatts (two turbines). The turbines will be fired with No. 2 distillate fuel oil. Intercession City will be permitted as a peaking power facility, with an operating limitation of 3390 hours of operation per year for each turbine.

Your determination proposes to limit NO_x emissions through the use of maximum water injection, to limit SO₂ and H₂SO₄ mist emissions through limiting the sulfur content of the No. 2 distillate fuel oil, to limit CO and VOC emissions through the use of efficient combustion, to limit PM/PM₁₀ emissions through efficient combustion and the use of clean fuel, and to limit Be and As emissions through fuel quality.

We have reviewed the package as submitted and have no adverse comments. Thank you for the opportunity to review and comment on this package. If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,

Brian L. Beals, Chief
Source Evaluation Unit
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: J. Nelson
C. Kalladay, Dist
C. Williams, NPS
B. Mitchell, NPS

RECEIVED

SEP 25 1992

Division of Air
Resources Management