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## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

**VIA FEDERAL EXPRESS**

December 24, 1992

Ms. Patty Adams  
Bureau of Air Regulation  
Florida Department of  
Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Permit No. AC05-193720, PSD-FL-173  
Combustion Turbines C & D  
Request for Extension of Permit dated November 24, 1992

Dear Ms. Adams:

Enclosed is a check for \$50 as required for the permit extension requested on November 24, 1992. I appreciate the Department's co-operation in processing our request.

If you need additional information, please call me at 407/423-9133.

Very truly yours,

Robert F. Hicks  
Sr. Environmental Engineer

RFH:rc  
Enclosure

001031



# Orlando Utilities Commission

ORLANDO, FLORIDA

"Where Electricity Powers Progress"

63-215  
631

FIFTY DOLLARS & .00/100

No. 90979

PAY TO THE  
ORDER OF:

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION  
BUREAU OF AIR REGULATION  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FL 32399-2400

NOT VALID  
AFTER 180 DAYS

DATE

DEC. 24 '92

50.00

*John L. Dean*  
*Troy W. Todd*

AUTHORIZED SIGNATURE

SUN BANK, N.A.  
MAIN OFFICE:  
ORLANDO, FLORIDA 32801

⑈090979⑈ ⑆063102152⑆0215100140805⑈



QUESTIONS? CALL 800-238-3355 TOLL FREE.

AIRBILL  
PACKAGE  
TRACKING NUMBER

2184509075

2184509075

RECIPIENT'S COPY

From (Your Name) Please Print <b>Robert F. Hicks</b>		Your Phone Number (Very Important) <b>(407) 423-9100</b>		To (Recipient's Name) Please Print <b>MS. PATTY ADAMS</b>		Recipient's Phone Number (Very Important) <b>904 488-1344</b>	
Company <b>ORLANDO UTILITIES COMMISSION</b>		Department/Floor No. _____		Company <b>FLA. DEPT. OF ENVIRONMENTAL REGULATION</b>		Department/Floor No. <b>BUREAU OF AIR REGULATION</b>	
Street Address <b>500 S ORANGE AVE</b>				Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes) <b>2600 BLAIR STONE ROAD</b>			
City <b>ORLANDO</b>		State <b>FL</b>		City <b>TALLAHASSEE</b>		State <b>FL</b>	
ZIP Required <b>32801</b>		ZIP Required <b>32399-2400</b>					
YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.)							
PAYMENT 1 <input checked="" type="checkbox"/> Bill Sender 2 <input type="checkbox"/> Bill Recipient's FedEx Acct No 3 <input type="checkbox"/> Bill 3rd Party FedEx Acct No 4 <input type="checkbox"/> Bill Credit Card				IF HOLD FOR PICK-UP, Print FEDEX Address Here			
3 <input type="checkbox"/> Cash / <input type="checkbox"/> Check				Street Address City State ZIP Required			
4 SERVICES (Check only one box)		5 DELIVERY AND SPECIAL HANDLING (Check services required)		6 PACKAGES WEIGHT in Pounds Only YOUR DECLARED VALUE		Emp No. Date	
Priority Overnight (Delivery by next business morning) 11 <input type="checkbox"/> YOUR PACKAGING 51 <input type="checkbox"/> YOUR PACKAGING 16 <input checked="" type="checkbox"/> FEDEX LETTER 56 <input type="checkbox"/> FEDEX LETTER * 12 <input type="checkbox"/> FEDEX PAK * 52 <input type="checkbox"/> FEDEX PAK * 13 <input type="checkbox"/> FEDEX BOX 53 <input type="checkbox"/> FEDEX BOX 14 <input type="checkbox"/> FEDEX TUBE 54 <input type="checkbox"/> FEDEX TUBE		1 <input type="checkbox"/> HOLD FOR PICK-UP (Fill in Box #) 2 <input checked="" type="checkbox"/> DELIVER WEEKDAY 3 <input type="checkbox"/> DELIVER SATURDAY (Extra charge) (not available to all locations) 4 <input type="checkbox"/> DANGEROUS GOODS (Extra charge) 5 <input type="checkbox"/> DRY ICE _____ Lbs 7 <input type="checkbox"/> OTHER SPECIAL SERVICE 8 _____ 9 <input type="checkbox"/> SATURDAY PICK-UP (Extra charge) 10 _____ 11 _____ 12 <input type="checkbox"/> HOLIDAY DELIVERY (is offered) (Extra charge)		Total Total Total DIM SHIPMENT (Chargeable Weight) <input type="checkbox"/> _____ lbs 1 <input type="checkbox"/> Priority Slip 3 <input type="checkbox"/> Direct Box 2 <input checked="" type="checkbox"/> Call Slip 4 <input type="checkbox"/> SSC 5 <input type="checkbox"/> Station		Federal Express Use Base Charges Declared Value Charge Other 1 Other 2 Total Charges REVISION DATE 6/91 PART # 3234 FEM 2 92 FORMAT #099 <b>099</b> © 1990-91 FEDEX PRINTED IN U.S.A.	
Economy Two-Day (Delivery by second business day) 30 <input type="checkbox"/> ECONOMY		Government Overnight (Reference to advanced users only) 46 <input type="checkbox"/> GOVT LETTER 41 <input type="checkbox"/> GOVT PACKAGE		Freight Service (For Extra Large 2' x 2' Package over 25 lbs.) 70 <input type="checkbox"/> OVERNIGHT FREIGHT ** 80 <input type="checkbox"/> TWO-DAY FREIGHT ** *Declared Value Limit \$100 **Call to delivery schedule		Received By: <input checked="" type="checkbox"/> X Date/Time Received: _____ FedEx Employee Number: _____ Release Signature: _____ Date/Time: _____	

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the matter of:	)	Permit No.	AC 05-193720
	)		
Orlando Utilities	)		ASP-92-O-01
Commission	)		
	)		
Petitioner.	)		
<hr/>			

ORDER ON REQUEST  
FOR  
ALTERNATE TEST PROCEDURES AND REQUIREMENTS

Pursuant to Rule 17-297.620, F.A.C., Orlando Utilities Commission petitioned for approval to use a source sampling array consisting of 50 points in lieu of the 49 points required by EPA Method 20 for the measurement of nitrogen oxide emissions from Petitioner's simple cycle combustion turbine Units C and D at the Orlando Utilities Commission Indian River Power Plant, permit number AC 05-193720, located in Brevard County.

Having considered Petitioner's written request and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. On July 1, 1992, Petitioner specifically requested approval to use source sampling array consisting of 50 points, arranged in a 5X10 matrix, in lieu of the 49 points, arranged in a 7X7 matrix, required by EPA Method 20 for the measurement of nitrogen oxide emissions from Petitioner's simple cycle combustion turbine Units C and D at the Indian River Power Plant, permit number AC 05-193720.

[Exhibit 1]

2. As justification for the waiver of the EPA Method 20 requirement for 49 test points (arranged in a 7X7 matrix), Petitioner stated, "Because of the proximity of residences to the OUC Indian River Power Plant, the combustion turbines were designed with noise reduction baffles. The baffles provide only five air passages through the stack (see Figure 1 attached). The test port locations are directly in the flow paths between the baffles. . . . Test ports associated with a seven port arrangement would not be directly within the flow paths between the baffles."

[Exhibit 1]

3. On August 3, 1992, the Region IV Office of the EPA stated, "Based on our review of the OUC submittal, we have determined that

while the proposed alternative sampling grid will be adequate for making NO<sub>x</sub> concentration measurements, the proposed sampling site is likely to cause a high bias in gas flow results. However, if the company is aware of the potential high bias at the proposed sampling location and is willing to accept the effect of this bias on their test results, we would not object to the approval of their request to use a 5X10 sampling grid." [Exhibit 2]

4. On September 21, 1992, the Orlando Utilities Commission responded to the EPA concerns about the effect of the sampling point location on emission test results. The Orlando Utilities Commission stated, "Because of this probable bias in exhaust gas flow rate measurement, OUC requests approval of an alternate exhaust gas flow determination method utilizing F-factors identified in EPA Method 19 and the fuel flow rates available in the combustion turbine control system." [Exhibit 3]

#### CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider Petitioner's request pursuant to Section 403.061, Florida Statutes, and Rule 17-297.620, F.A.C.

2. Pursuant to 17-297.340(2), F.A.C., the Department retains the right to require compliance testing in accordance with all provisions of EPA Method 20 if, after investigation, it is believed that such testing is necessary to determine whether an applicable emission standard or condition of permit number AC 05-193720 is being violated.

3. Petitioner has demonstrated that the proposed alternate compliance verification method would be adequate to verify the compliance of the unit with the emission limiting standard for nitrogen oxides.

#### ORDER

Having considered Petitioner's written request and supporting documentation, it is hereby ordered that:

1. The relief requested by Petitioner is granted;
2. Petitioner shall be allowed to calculate gas flow rates using fuel consumption data and F-factors from EPA Method 19 provided the fuel consumption measurements are as accurate EPA Method 2 measurements of gas flow rates (i.e., ±5%).
2. Petitioner shall conduct emission tests using the procedures specified in Chapter 297, F.A.C.; and,

3. Petitioner shall conduct the required emission tests for nitrogen oxides, sulfur dioxide, carbon monoxide and visible emissions within 60 days of completion of construction and during the corresponding quarter of each federal fiscal year (October 1 - September 30), thereafter; and

4. Petitioner shall submit the compliance test to the District Director for the Central District office within 45 days of completion of the test.

#### PETITION FOR ADMINISTRATIVE REVIEW

1. A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. 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 21 days of receipt of this Order. The petitioner shall mail a copy of the petition to the applicant at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

2. The petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, and the Department File Number;

(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 each petitioner, if any;

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

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

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action.

3. 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 Order. Persons whose substantial interests will be affected by any decision of the Department with regard to the applicant have the right to petition to become a party to the proceeding. The petition must conform with the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. 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.

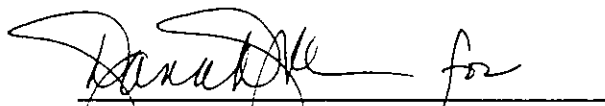
4. This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of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

RIGHT TO APPEAL

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

DONE AND ORDERED this 16<sup>th</sup> day of December, 1992 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION



CAROL M. BROWNER  
Secretary

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

(904) 488-4805

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing Order has been mailed, postage prepaid, to Gregory A. DeMuth, Director, Environmental Division, Orlando Utilities Commission, P. O. Box 3193, Orlando, Florida 32802, this 17<sup>th</sup> day of December, 1992.



E. G. ESTEVEZ  
Assistant General Counsel

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

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

Telephone (904) 488-9730


PS Form 3800, June 1985

USPS 7989-234-555 (2-17-92)

P 256 395 388

**RECEIPT FOR CERTIFIED MAIL**  
NO INSURANCE COVERAGE PROVIDED  
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(See Reverse)

Sent to <u>GREGORY A. DEMUTH</u> <u>ORLANDO UTIL. COMM</u>	
Street and No. <u>ORLANDO FL 32802</u>	
P.O., State and ZIP Code <u>P.O.B. 3193</u>	
Postage	5
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by 



ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

Certified Mail No.P 971 587 769  
Return Receipt Requested

RECEIVED

JUL 06 1992

July 1, 1992

Division of Air  
Resources Management

Messrs. Mike Harley and  
Jim Pennington  
Florida Department of  
Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Alternate Stack Test Procedure

Dear Sirs:

Orlando Utilities Commission (OUC) is currently authorized by Permit Number AC 05-193720 to construct and operate two 129 MW simply cycle combustion turbines (Units C & D) to be located at the OUC Indian River Power Plant, south of the John F. Kennedy Space Center near the city of Titusville, Brevard County, Florida. As mandated by Specific Condition Number 9, OUC must perform emissions compliance testing following reference methods described in 40 CFR 60, Appendix A.

Nitrogen Oxides (NO<sub>x</sub>) emissions testing from combustion turbines is to be performed in accordance with USEPA reference Method 20. For the rectangular stack dimensions of Units C & D, Method 20 requires a minimum of 49 sample points in a 7x7 arrangement. However, the Westinghouse stack design includes only five sample ports which could utilize a 5x10 sampling array to meet the minimum of 49 sampling points. Given that NO<sub>x</sub> concentrations will be homogeneous in the stack and that the<sup>x</sup> five test port locations are directly in the flow paths between the baffles, OUC requests approval of an alternate sampling procedure, under FAC 17-2.700(3), to allow utilization of a 5x10 sampling arrangement.

Exhibit 1





Messrs. Mike Harley and  
Jim Pennington  
July 1, 1992  
page 2

Accordingly, OUC provides the following information requested under FAC 17-2.700(3)(b):

1. Specific source and permit number, if any, for which the exception is requested.

Orlando Utilities Commission  
Two 129 simple cycle gas turbines (Units C & D)  
Permit Number AC 05-193720

2. The Specific provision of Section 17-2.700 from which an exception is sought.

Exception requested from FAC 17-2.700(6)(b)(20), USEPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen Emissions from Stationary Gas Turbines.

3. The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of Section 17-2.700.

Because of the proximity of residences to the OUC Indian River Power Plant, the combustion turbines were designed with noise reduction baffles. The baffles provide only five air passages through the stack (see Figure 1 attached). The test port locations are directly in the flow paths between the baffles.

Westinghouse's flow analysis of the stack demonstrated that the five test ports are ideally suited for all emissions testing. Test ports associated with a seven port arrangement would not be directly within the flow paths between the baffles.

4. The alternate procedure for which approval is sought and a demonstration that such alternate procedure is adequate to demonstrate compliance with the permit.

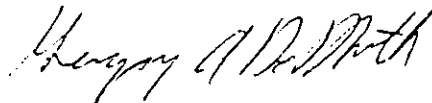
The Westinghouse five port arrangement will allow for 50 sample points for NO<sub>x</sub> emissions testing (compared to 49 as specified in Method 20). Given that NO<sub>x</sub> concentrations will be homogeneous in the stack, that the five test port

Messrs. Mike Harley and  
Jim Pennington  
July 1, 1992  
page 3

locations are directly in the flow paths between the baffles, and that the USEPA and DER are authorized in their regulations to allow alternate sampling locations to be used, OUC requests DER to approve the use of the five port arrangement (and the 5x10 array) for NO<sub>x</sub> emissions testing for Units C & D at the Indian River Facility.

If you have any questions concerning this request for approval of an alternate sampling procedure, please contact me at 407/423-9141.

Very truly yours,

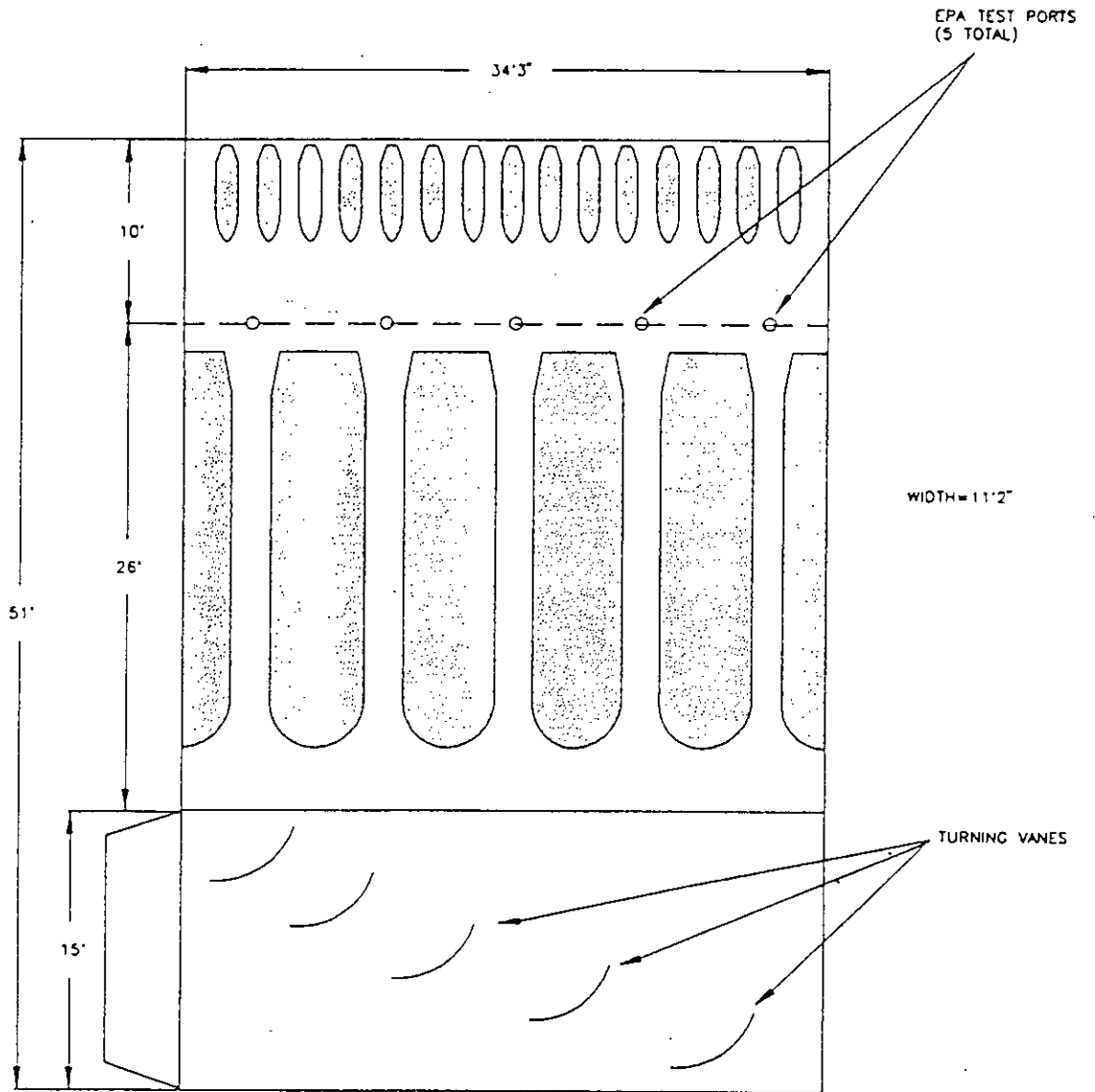


Gregory A. DeMuth  
Director  
Environmental Division

GAD:rc  
Attachments

cc: F. F. Haddad  
K. P. Ksionek  
T. D. Slepow  
R. F. Hicks  
S. M. Day

# OUC INDIAN RIVER STACK



400 hours.

4. During each federal fiscal year (October 1 — September 30), unless otherwise specified by rule, order, or permit, the owner of each source shall have a formal compliance test conducted for visible emissions, if there is an applicable standard; and for each pollutant for which the source is major, if there is an applicable emission standard for that pollutant; and for each NESHAPS pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning source that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For sources electing to conduct particulate emission compliance testing quarterly pursuant to Rule 17-2.600(5)(b)1., F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period coinciding with the term of its air operating permit.

9. The owner or operator shall notify the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner. The Department may waive the 15 day notice requirement on a case by case basis.

(b) Special Compliance Tests.

When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in this chapter or in a permit issued pursuant to this chapter is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirement.

1. If the owner or operator of a source that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Section 17-2.700(3), that the compliance of the source with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate sources equipped with a bag house, or specifying a fuel analysis for sulfur dioxide

emissions, the Department may waive the compliance test requirements for such sources and order that the alternate means of determining compliance be used.

2. Such waiver may be issued for an indefinite period of time or for a specific time period provided, however, that the Department may require a conventional compliance test for such sources pursuant to Section 17-2.700(2)(b) above.

(3) Exceptions and Approval of Alternate Procedures and Requirements.

(a) The owner or operator of any source subject to the provisions of this section may request in writing a determination by the Secretary or his designee that any requirement of Section 17-2.700 relating to source emissions test procedures, methodology, equipment, or test facilities shall not apply to such source, and shall request approval of alternate procedures or requirements.

(b) The request shall set forth the following information, at a minimum:

1. Specific source and permit number, if any, for which exception is requested.

2. The specific provision(s) of Section 17-2.700 from which an exception is sought.

3. The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of Section 17-2.700.

4. The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in Chapter 17-2 or any permit issued pursuant to that Chapter.

(c) The Secretary or his designee shall specify by order each alternate procedure or requirement approved for an individual source in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes.

(d) The Secretary or the District Manager of the District in which a minor particulate source equipped with a baghouse is located may waive the compliance test requirements for such source specified in Rule 17-2.700, Table 1, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for particulate sources equipped with a baghouse and the substitution of the visible emissions standard shall be specified in the permit issued to the source.

If the Department has reason to believe that the particulate weight emission standard applicable to a source is not being met, it shall require that compliance be demonstrated by the applicable test method specified in Rule 17-2.700, Table 1.

(4) Stack Sampling Facilities Provided by the Owner of an Air Pollution Point Source.

This section describes the minimum requirements for stack sampling facilities that are necessary to sample point sources. Sampling facilities include sampling ports, work platforms, access and electrical power. Sources must provide



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

4APT-AEB

AUG - 3 1992

RECEIVED

AUG 06 1992

Division of Air  
Resources Management

Mr. James K. Pennington, P.E., Administrator  
Compliance and Enforcement Section  
Bureau of Air Regulation  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Alternative Stack Testing Procedure Proposed for the Indian  
River Power Plant, Titusville, Florida

Dear Mr. Pennington:

As requested by Mike Harley of your staff, we have reviewed the referenced proposal from the Orlando Utilities Commission (OUC). In their proposal OUC is seeking approval to use a 5 X 10 grid rather than a 7 X 7 grid for EPA Method 20 sampling on two combustion turbines. Based upon our review of the OUC submittal, we have determined that while the proposed alternative sampling grid will be adequate for making NO<sub>x</sub> concentration measurements, the proposed sampling site is likely to cause a high bias in gas flow rate results. However, if the company is aware of the potential high bias at the proposed sampling location and is willing to accept the effect of this bias on their test results, we would not object to approval of their request to use a 5 X 10 sampling grid for testing conducted on the turbine.

The company is seeking approval to use an alternative sampling grid because a 5 X 10 grid would place the sampling points in the flow paths between the noise reduction baffles in the turbine exhaust stack. If a 7 X 7 grid is used, the traverse points would not be located in the flow channels between the noise reduction baffles. Since NO<sub>x</sub> concentrations should be essentially uniform throughout the stack, the average NO<sub>x</sub> concentration measured in the exhaust stack should be the same regardless of whether a 7 X 7 or a 5 X 10 sampling grid is used.

While NO<sub>x</sub> concentrations measured in the stack should be independent of the sampling grid utilized, the traverse point arrangement proposed by OUC is likely to cause a high bias in measured gas flow rates because the baffles in the exhaust stack will cause flue gas from the turbine to accelerate as it passes between the baffles. Since the sampling arrangement proposed by OUC would place the traverse points directly between the baffles, it is likely that the measured gas velocity will exceed the average gas velocity for the entire stack cross-sectional area.

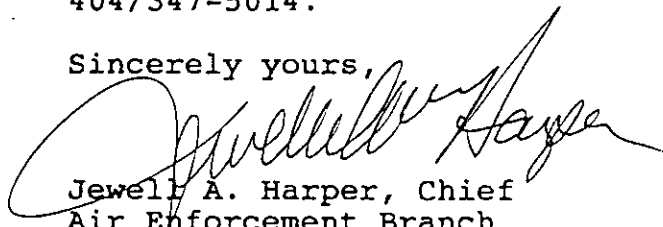
Exhibit 2

Depending upon the proportion of the exhaust stack obstructed by the noise reduction baffles, the traverse point arrangement proposed by OUC could result in a substantial high bias in measured gas flow rates. This high bias in gas flow rates would also cause a proportionally high bias in measured mass emission rates if OUC is subject to a NO<sub>x</sub> mass emission limit. However, if the company is fully aware of the potential high bias at the proposed alternative sampling site and is willing to accept the risk associated with the use of the alternative sampling grid, we would have no objections to approval of their proposal.

One option that the company does have with respect to testing their turbines is to install a stack extension that has sampling points located such that they meet at least the minimally acceptable EPA Method 1 criteria for distance from flow disturbances. A stack extension that would allow for installation of adequate sampling points would have to extend at least 42.1 feet above the noise reduction baffles in the turbine exhaust stack. The basis for this conclusion is that the baffles themselves constitute a flow disturbance and the equivalent diameter of the rectangular exhaust duct at OUC is 18.84 feet. Since the minimally acceptable location for traverse points is 2 duct diameter downstream and 1/2 duct diameter upstream of flow disturbances, a total extension of 2.5 duct diameters or 42.1 feet (18.84 feet X 2.5) would have to be added at the facility in order for the sampling site to meet EPA Method 1 criteria.

If you have any questions about the determination provided in this letter, please contact Mr. David McNeal of my staff at 404/347-5014.

Sincerely yours,



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

cc: Mr. Michael Harley  
Bureau of Air Regulation  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400



RECEIVED

SEP 22 1992

Division of Air  
Resources Management

## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE \* P. O. BOX 3193 \* ORLANDO, FLORIDA 32802 \* 407/423-9100

Certified Mail No. P 071-587-818  
Return Receipt Requested

September 21, 1992

Messrs. Mike Harley and  
Jim Pennington  
Compliance and Enforcement Section  
Florida Department of  
Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Alternate Stack Test Procedure

Dear Messrs. Harley and Pennington:

Orlando Utilities Commission (OUC) is currently authorized by Permit No. AC 05-193720 to construct and operate two 129 MW simple cycle combustion turbines (Units C & D) to be located at the OUC Indian River Power Plant, south of the John F. Kennedy Space Center near the city of Titusville, Brevard County, Florida. As mandated by Specific Condition No. 9, OUC must perform emissions compliance testing following reference methods described in 40 CFR 60, Appendix A.

To allow calculations of the mass flow rate of NO<sub>x</sub> and CO emissions, exhaust gas volumetric flow rate is to be measured in accordance with USEPA Reference Method 1 and Method 2. However, as indicated in USEPA letter to Mr. Pennington, dated August 3, 1992, the internal arrangement of the combustion turbine exhaust stacks requires a traverse point arrangement which is likely to cause a high bias in measured gas flow rates.

Because of this probable bias in exhaust gas flow rate measurement, OUC requests approval of an alternate exhaust gas flow determination method utilizing F-factors identified in USEPA Method 19 and the fuel flow rates available in the combustion turbine control system.

Exhibit 3

Messrs. Mike Harley and  
Jim Pennington  
September 21, 1992  
Page 2

Accordingly, OUC provides the following information requested under FAC 17-2.700 (3)(b):

1. Specific source and permit number, if any, for which the exception is requested.

Orlando Utilities Commission  
Two 129 simple cycle gas turbines (Units C & D)  
Permit No. AC 05-193720

2. The specific provision of Section 17-2.700 from which an exception is sought.

Exception requested from FAC 17-2.700(6)(b)(1).  
USEPA Method 1, Sample and Velocity Traverses for Stationary Sources and FAC 17-2.700 (6)(b)(2), USEPA Method 2, Determination of Stack Gas Velocity and Volumetric Flow Rate (Type 5 Pitot Tube).

3. The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of Section 17-2.700.

Because of the proximity of residences to the OUC Indian River Power Plant, the combustion turbines were designed with noise reduction baffles. The baffles provide only five air passages through the stack (see Figure 1 attached). The test port locations are directly in the flow paths between the baffles.

However, because the flow measurement traverse points will be located directly between the baffles, it is likely that the measured gas velocity will exceed the actual average gas velocity for the entire stack cross sectional area.

4. The alternative procedure for which approval is sought and a demonstration that such alternate procedure is adequate to demonstrate compliance with the permit.

Exhaust gas flow rate will be measured utilizing F-factors identified in USEPA Method 19 and the fuel flow rates available in the combustion turbine control system. The lower heating value of the fuel will be available from a certified fuel analysis. Fuel oil



Messrs. Mike Harley and  
Jim Pennington  
September 21, 1992  
Page 3

flow measurement will be performed utilizing a calibrated turbine-type flow meter. The fuel oil flow meter calibration report is attached for reference. Fuel gas flow measurement will be performed utilizing a precision orifice plate, stamped with the bore diameter, calculated in accordance with American Gas Association standards.

If you have any questions concerning this request for approval of an alternate sampling procedure, please call me at 407/423-9141 or Steve M. Day at 913/339-2880.

Very truly yours,



G. A. DeMuth  
Director  
Environmental Division

GAD:rc  
Attachments

xc: W. H. Herrington  
G. M. Standridge  
F. F. Haddad  
K. P. Ksionek  
V. F. Gallucci  
H. E. Smith (B&V)  
S. M. Day (B&V)

### OUC INDIAN RIVER STACK

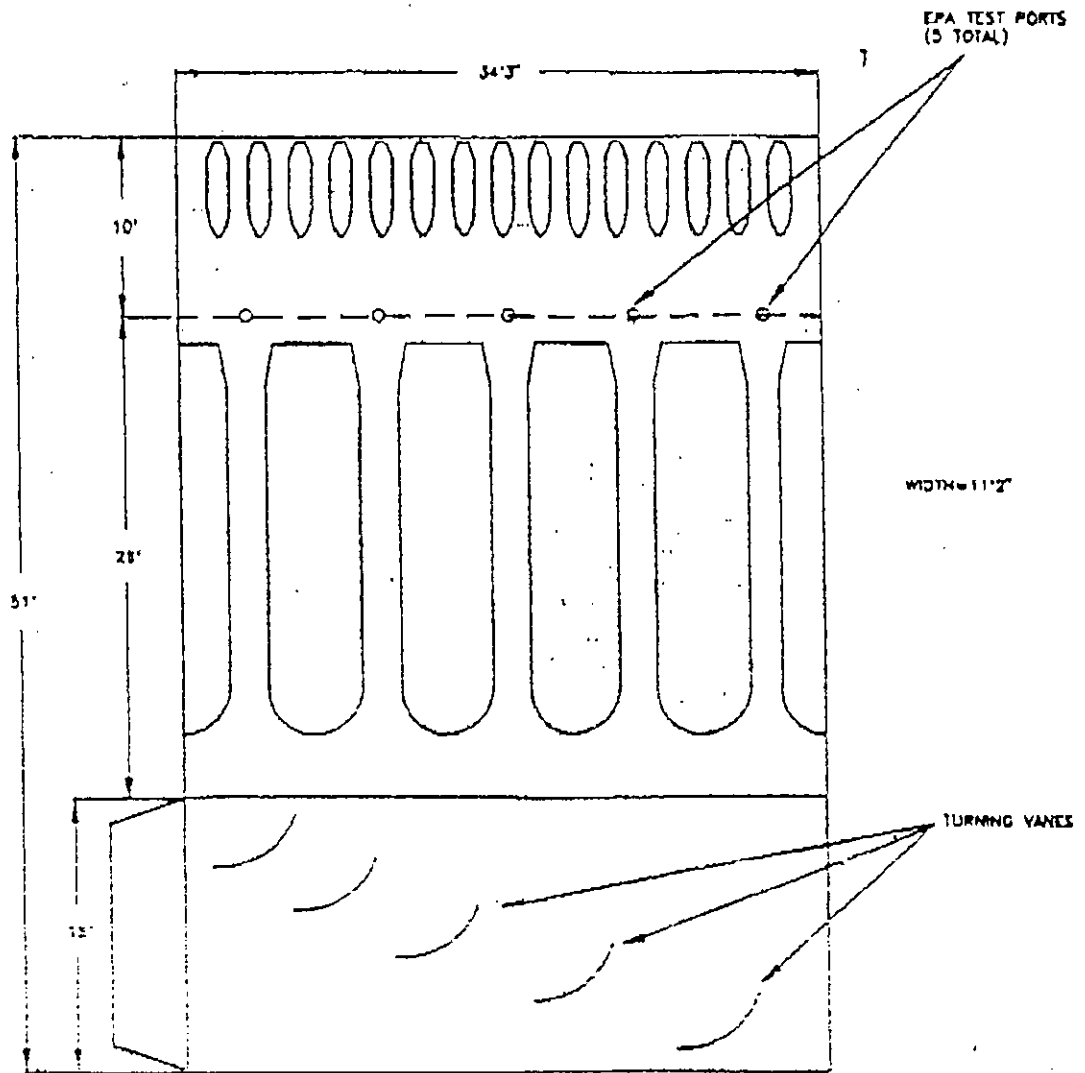



Figure 1

 Westinghouse Electric Corporation <small>Power, Automation, Electronic Systems</small>	
Date: <b>06/26/91</b> Drawn by: <b>[Signature]</b> Scale: <b>1" = 10'</b>	Date: <b>13 JUN 91</b> Checked by: <b>[Signature]</b> Title: <b>[Signature]</b>





**Technologies, Inc.**

Serial No. 202828

**FLOW CALIBRATION REPORT**

This Turbine Meter Has Been Tested And Calibrated.

Test Fluid: Water

Linear Flow Range: 50 To 560  
(U.S. Gallons / Minute)

Mean<sup>1</sup>: 7031.5

Linearity<sup>2</sup>: 1.003

K Factor (mean)<sup>3</sup>: 46.877

Model No. 3-81AF5C1

Pickup Coil P/N A20105K

Customer Unlabeled

Sales Order No. 91V-80615

Process Fluid \_\_\_\_\_

Temperature: 80 ° Min. \_\_\_\_\_ Max.

Pressure: \_\_\_\_\_ Min. \_\_\_\_\_ Max.

Tag Information \_\_\_\_\_

Frequency output at full scale or any other flowrate may be calculated by the following formula:

$$\text{Frequency (Hz)} = \frac{\text{K Factor (mean)} \times \text{Flowrate}}{60 \text{ Sec/Min.}}$$

(Pulses/U.S.Gal.) (U.S.Gal./Min.)

Operator: XO  
13 Date: 11-22-91

Inspector: XO  
5 Date: NOV 26 '91

Voltage Output<sup>4</sup> At Minimum Flow 350 mV p/p.

RUN NO.	WEIGHT (Lbs.)	TIME (Min.)	SENSOR READING (Pulses)	VOLUME (U.S. Gals.)	FREQUENCY f (C.P.S.)	FLOW RATE Q (G.P.M.)	CAL. FACTOR K (Pulses/Out)
1		2646	7009	150	441.48	566.89	46.727
2		3075	7013	1	380.10	487.80	46.753
3		3512	7019		333.10	427.11	46.795
4		4007	7020		291.99	374.34	46.800
5		4659	7022		251.20	321.96	46.813
6		5656	7026		207.04	265.21	46.840
7		7012	7031		166.96	213.72	46.873
8		9356	7040		125.40	160.32	46.933
9		1.4124	7054		83.238	106.20	47.027
10		2.6808	7647		43.665	55.766	46.980

- Notes: (Record 1, 2, & 3 on designated lines above).
1. Mean - Add the largest sensor reading (pulses) to the smallest sensor reading and divide by two.
  2. Linearity - Divide the Mean by the smallest sensor reading. The result must be between 1.000 and 1.005. (If it is not, see 12000CJ, paragraph 2.3).
  3. K Factor - Divide the Mean by the calibration Volume. For K Factors equal to or greater than 10,000, round off to the nearest whole number. For K Factors less than 10,000, round off to five significant numbers (e.g., XXXXX, XXXXX, XXXXX). The K Factor must fall within the limits specified in test procedure 12000CJ for the meter under test.
  4. See test procedure 12000CJ for required minimum.

The following conversion factors may be used to express the flowrate or K Factor (Sensitivity) in other units:

- |                                     |   |
|-------------------------------------|---|
| Multiply Flowrate In U.S. Gal./Min. | Multiply K Factor (Sensitivity) In Pulses/U.S. Gal. |
| x 1.420 = Barrels (42 gal.)/Hr.     | x 42.00 = Pulses/Barrel (42 Gal.)                   |
| x 0.8327 = Imperial Gal./Min.       | x 1.201 = Pulses/Imperial Gal.                      |
| x 3.785 = Liters/Min.               | x 0.2642 = Pulses/Liter                             |
| x 0.2271 = Cubic Meters/Hr.         | x 264.2 = Pulses/Cubic Meter                        |



**Technologies, Inc.**

28020 Avenue Stanford  
Valencia, CA. 91355.  
Telephone: (805) 257-4200  
FAX: (805) 257-2499



# Technologies, Inc.

Serial No. 205422

Model No. 3-81AF5C1

Pickup Coil P/N A20105K

Customer Solaris

Sales Order No. 91K-80615

Process Fluid \_\_\_\_\_

Temperature: 85°F Min. \_\_\_\_\_ Max.

Pressure: \_\_\_\_\_ Min. \_\_\_\_\_ Max.

Tag Information \_\_\_\_\_

## LOW CALIBRATION REPORT

This Turbine Meter Has Been Tested And Calibrated.

Test Fluid: Water

Linear Flow Range: 50 To 560

Mean<sup>1</sup>: 7213.5  
(U.S. Gallons / Minute)

Linearity<sup>2</sup>: 1.002

K Factor (mean)<sup>3</sup>: 48.090

Frequency output at full scale or any other flowrate may be calculated by the following formula:

$$\text{Frequency (Hz)} = \frac{\text{K Factor (mean)} \times \text{Flowrate}}{60 \text{ Sec./Min.}}$$

(Pulses/U.S. Gal.) (U.S. Gal./Min.)

Operator: XD 13 Date: 11/22/91

Inspector: XD 8 Date: NOV 26 '91

Voltage Output<sup>4</sup> At Minimum Flow 400 mV p/p.

RECORDED DATA				PERFORMANCE PARAMETERS				ADDITIONAL DATA			
RUN NO.	WEIGHT (Lbs.)	TIME (Min.)	SENSOR READING (Pulses)	VOLUME (U.S. Gals.)	FREQUENCY f (cps)	FLOW RATE Q (gpm)	CAL FACTOR K (Pulses/Gal.)				
		2664	7217	150	451.51	563.06	48.113				
2		3161	7222		380.79	474.53	48.144				
3		3583	7222		335.94	418.64	48.147				
4		4122	7227		292.21	363.90	48.180				
5		4821	7227		249.85	311.14	48.180				
6		5763	7223		208.89	260.28	48.153				
7		7134	7219		168.65	210.26	48.127				
8		9604	7214		125.19	156.18	48.093				
9		14207	7211		84.592	105.58	48.073				
10		28788	7200		41.684	52.105	48.000				

Notes: (Record 1, 2, & 3 on designated lines above).

1. Mean - Add the largest sensor reading (pulses) to the smallest sensor reading and divide by two.
2. Linearity - Divide the Mean by the smallest sensor reading. The result must be between 1.000 and 1.005. (If it is not, see 12000CJ, paragraph 2.3).
3. K Factor - Divide the Mean by the calibration Volume. For K Factors equal to or greater than 10,000, round off to the nearest whole number. For K Factors less than 10,000, round off to five significant numbers (e.g. XXXXX, XXXXX, XXXXX). The K Factor must fall within the limits specified in test procedure 12000CJ for the meter under test.
4. See test procedure 12000CJ for required minimum.

The following conversion factors may be used to express the flowrate or K Factor (Sensitivity) in other units:

- |                                     |   |
|-------------------------------------|---|
| Multiply Flowrate in U.S. Gal./Min. | Multiply K Factor (Sensitivity) in Pulses/U.S. Gal. |
| × 1.429 = Barrels (42 gal.)/Hr.     | × 42.00 = Pulses/Barrel (42 Gal.)                   |
| × 0.8327 = Imperial Gal./Min.       | × 1.201 = Pulses/Imperial Gal.                      |
| × 3.785 = Liters/Min.               | × 0.2642 = Pulses/Liter                             |
| × 0.2271 = Cubic Meters/Hr.         | × 264.2 = Pulses/Cubic Meter                        |



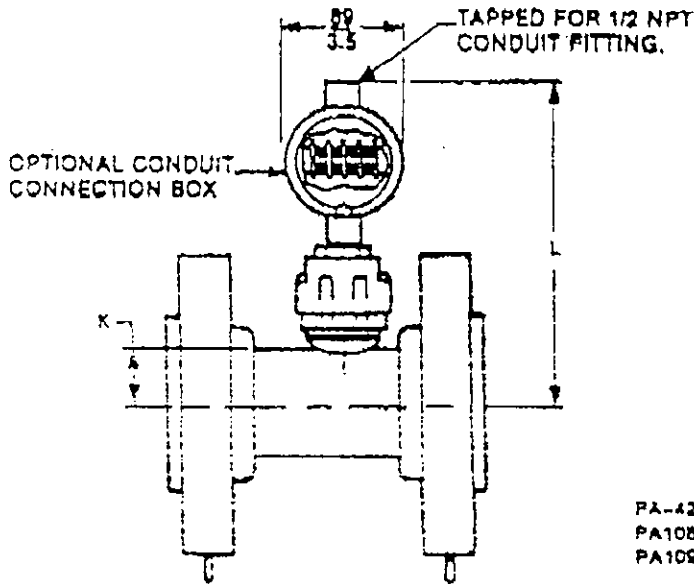
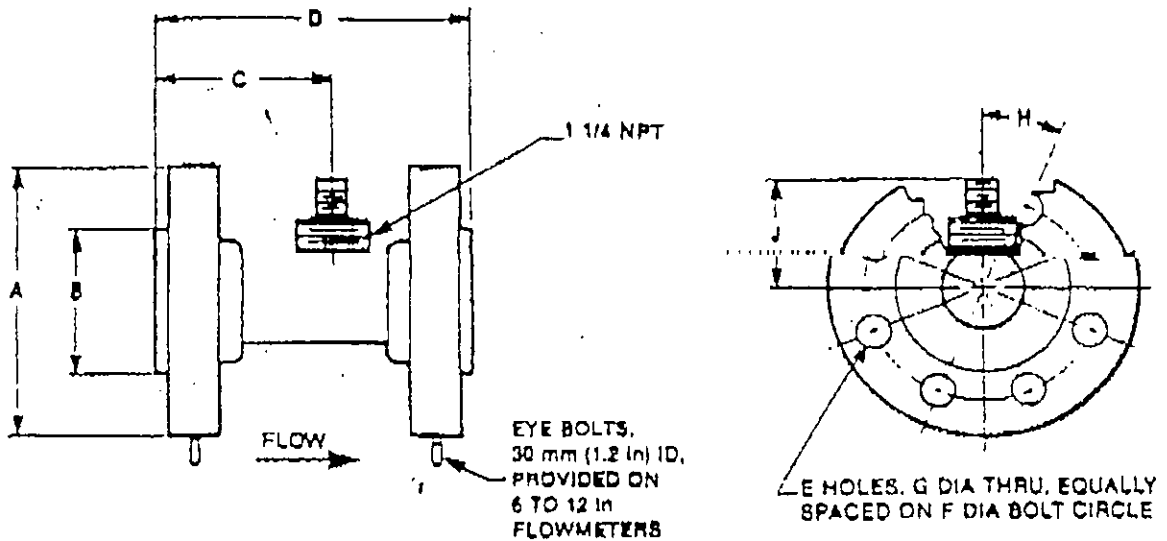
# Technologies, Inc.

28020 Avenue Stanford  
Valencia, CA. 91355.  
Telephone: (805) 257-4200  
FAX: (805) 257-2498

# Dimensional Print

DP  
019-117  
NOVEMBER 1989  
SHEET 1 of

## 81AF TURBINE FLOWMETER WITH FLANGED END CONNECTIONS



### AMPLIFIER AND PREAMPLIFIER DIMENSIONAL PRINT REFERENCES

- |                                  |            |
|----------------------------------|------------|
| PA-420 Analog Amplifier          | DP 019-216 |
| PA108 Panel-Mounted Preamplifier | DP 019-215 |
| PA109 Field-Mounted Preamplifier | DP 019-215 |

NOTE: \*SEE SHEET 2 FOR DIMENSIONS.

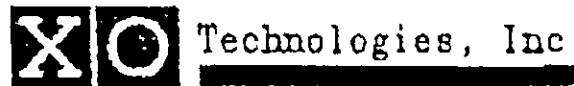
(Not for construction unless certified.)

CUSTOMER \_\_\_\_\_ I.R. Solares Florida Corp.

CUSTOMER ORDER 115871 XC ORDER 91V-80615

ITEM-TAG FT15440/FT25440

CERTIFIED BY [Signature] DATE 12/3/91



81AF Turbine Flowmeters

SIZE CODE	ANSI FLANGE RATING CLASS	APPROXIMATE MASS kg	A	B	C	D	K	F	G	H	J	K	L
1/2-2	150	2.3	68.9					80.33			89.3		
1/2-1		5.0	3.50	35.1				2.378			2.73	180	234
1/2	300	3.4	85.3	1.38				66.68	15.88		70.4	7.1	9.2
		7.5	3.75					2.825	0.825		2.77		
	150	2.3	98.6		19.0	19.0		69.85			25.7	7.2	9.3
	300	5.0	7.95					8.755	18.05				
		7.5	4.62					3.250	0.750				
	150	2.7	108.0					78.58	15.88				
	300	6.0	4.25	50.8				3.125	0.625	45°	75.9	183	238
		8.0	123.7	2.00				88.90	19.05		2.99	7.2	9.3
		8.0	4.87					3.500	0.750				
	150	4.5	127.0					98.43	15.88				
	300	10.0	5.00	72.9	78.2	152.4		3.875	0.825		81.5	188	239
		8.4	185.6	2.87	3.00	6.00		114.30	22.22		3.21	7.4	9.3
		14.0	8.12					4.900	0.875				
	150	6.8	152.4					120.85					
	300	15.0	6.00	82.0	90.9	185.1		4.750			87.6	203	257
		9.1	185.1	3.82	3.55	6.50		127.00	19.05		3.45	8.0	10.1
		20.0	6.50				8	5.000	0.750	22 1/2°			
	150	13.8	190.5					152.40					
	300	20.0	7.50	127.0	167.4	254.0		6.000		45°	105.4	208	262
		17.2	209.6	3.00	6.37	10.00		168.28	22.22		4.15	8.2	10.3
		32.0	8.25					8.825	0.875				
	150	20.4	228.8					190.50	19.05				
	300	45.0	9.00	157.2	214.1	304.8		7.300	0.750	22 1/2°	118.1	221	274
		29.5	25.0	6.19	6.42	12.00		200.03	22.22		4.57	8.7	10.8
		65.0	10.00					7.875	0.875				
	150	26.3	270.4					241.30					
	300	60.0	11.00	215.8	283.1	355.6		9.500			140.7	249	302
		54.4	217.5	8.50	10.38	14.00		269.88	22.22		5.54	9.8	11.9
		125.0	12.50				12	10.625	0.875	15°			
	150	65.8	242.9					298.45					
	300	135.0	13.50	269.8	338.3	457.2		11.750		22 1/2°	163.6	274	328
		88.5	381.0	10.82	13.32	18.00		330.20			6.45	10.8	12.9
		185.0	15.00					13.000	25.40				
	150	113.4	406.4					381.95	1.000	15°			
	300	229.7	18.00	223.8	508.3	632.0		14.250			188.7	302	356
		167.4	444.5	12.75	20.01	26.00		387.33	29.58		7.43	11.9	14.0
		328.0	17.50					15.250	1.125	11 1/2°			
	150	181.4	482.6					431.60	25.40				
	300	400.0	19.00	381.0	615.2	762.0		17.000	1.000	15°	212.1	328	381
		228.8	520.7	15.00	24.74	30.00		450.65	31.75		8.35	12.9	15.0
		500.0	20.00					17.750	1.250	11 1/2°			

\*ALSO AVAILABLE AS -A = HIGH PULSE OUTPUT



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: Carol Browner  
FROM: Howard Rhodes *[Signature]*  
DATE: December 7, 1992  
SUBJ: Approval of Alternate Standard or Procedure; ASP 92-O-01,  
Orlando Utilities Commission - Indian River Power Plant -  
Combustion Turbines C and D

Attached for your approval and signature is an Order prepared by the Bureau of Air Regulation that will authorize the above mentioned utility to collect pollutant samples at more points within each stack and determine the stack gas flow rate from the fuel consumption of the gas turbine.

The Orlando Utilities Commission has constructed two combustion turbines which are equipped with noise reduction baffles. The baffles provide only five air passages through the stack. The manufacturer of the installation included one sampling port for each passage. The Orlando Utilities Commission has requested approval to collect samples at 50 points within the stack instead of the 49 points required by EPA Method 20. The EPA has reviewed the request and recommended approval. The EPA's only concern was that the location of the sampling points could cause certain measurements to be biased high. The Orlando Utilities Commission proposed to use EPA procedures to determine the stack gas flow rate from the fuel consumption data. This proposal negates the concern about biased flow measurements.

I recommend your approval and signature.

HR/mh

Attachment





ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

Certified Mail No. P-744-600-668  
Return Receipt Requested

November 30, 1992

Mr. Charles M. Collins  
Program Administrator  
Air Section  
Florida Department of  
Environmental Regulation  
3319 Maguire Blvd., Suite 232  
Orlando, FL 32803

Re: Repeat of Initial Performance Tests  
Combustion Turbine "C"  
DER Permit No. AC05-193720

Dear Mr. Collins:

Please regard this letter as notification of compliance testing for Combustion Turbine C, located at the Orlando Utilities Commission's Indian River Plant. The retest is currently scheduled for December 9 and 10, 1992 at 8:00 a.m., and is necessary because of the installation of a new nozzle design in Combustion Turbine C. I will confirm these dates and times prior to the tests.

If you have any questions, please call me at 423-9133.

Very truly yours,

Robert F. Hicks  
Sr. Environmental Engineer

RFH:rc

xc: W. H. Herrington  
G. A. DeMuth  
V. F. Gallucci  
Tim Turba  
C. H. Fancy, FDER Tall.

RECEIVED

DEC 02 1992

Division of Air  
Resources Management





## ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

Certified Mail No. P-744-600-665  
Return Receipt Requested

November 24, 1992

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

RECEIVED

NOV 30 1992

Division of Air  
Resources Management

Re: Permit No. AC05-193720, PSD-FL-173,  
Combustion Turbines C and D  
Request for Extension of Permit

Dear Mr. Fancy:

This letter is a request for an extension of the above-referenced construction permit, which covers installation of two combustion turbines at the Orlando Utilities Commission's Indian River Power Plant. The two combustion turbines, each of which is a 129 MW Simple Cycle Gas Turbine, are located in Brevard County near Titusville, Florida.

The current construction permit will expire on December 31, 1992. This request is for an extension of six months additional time, until June 30, 1993. The circumstances leading to this request, and the details of future activities during the construction permit extension, are discussed herein.

### Background:

The construction permit was issued to Orlando Utilities Commission on September 10, 1991. Construction commenced and continued on schedule and in conformance with the General and Specific Conditions of the permit.

By letter of August 26, 1992, and subsequent letters dated September 10, September 22, October 16, and November 20, 1992 (rescheduling notices), OUC notified the Bureau of Air Regulation that construction was near completion and compliance testing was scheduled, as required by the Permit Conditions and F.A.C. Rule 17-2.700.



Mr. C. H. Fancy  
November 24, 1992  
Page 2

Problems Experienced During Compliance Testing:

During the course of compliance testing, high vibration levels were encountered in the combustion turbines during operation. This problem was first discovered on CT C. Although Westinghouse, the turbine manufacturer, had earlier made some modifications to CT D in an effort to eliminate the magnitude of the vibration, the vibration levels were not significantly reduced.

Earlier, Westinghouse had discovered problems in the manufacturing process, when performance testing was conducted on units other than the Indian River C and D combustion turbines. The problems were identified by Westinghouse as improper machining of the combustion turbine shaft and the coupling between the combustion turbine and the turbine generator.

CT D was disassembled and the shaft was returned to Westinghouse for remachining. During the remachining of CT D shaft, Westinghouse introduced a modification on their combustion can water spray nozzle on a non-OUC unit that had experienced similar problems as the OUC combustion turbines. This modification included the use of spray nozzles with an 80 degree spray pattern versus 50 degree spray pattern, which improved the vibration level of the combustion turbine, as well as reducing noise levels. There is some indication that opacity levels may also be somewhat reduced during firing of oil, with the modified nozzles. Westinghouse recommended this nozzle modification be made on CT D while the unit was down for shaft remachining. Because of the prospect of improved performance of the units, OUC agreed to the modification of nozzles for both CTs C and D.

Schedule of Current Activities:

The CT D nozzle modifications were made and the shaft was received from the Westinghouse machine shop on November 15, 1992. CT D is being reassembled with the remachined shaft and modified nozzles.

CT C will be fitted with the modified nozzles concurrently with CT D. In the interest of completing the compliance testing, OUC has determined that remachining of CT C shaft will be delayed until March 1993. This delay will provide OUC and Westinghouse the benefit of operating experience from CT D to assure that shaft remachining is the correct procedure to reduce the noise and vibration levels. Because remachining of the shaft is strictly a mechanical function, it does not affect the combustion process. Thus, emissions will not be adversely impacted. Improved performance, with the potential of improved opacity, will result from the nozzle modifications.

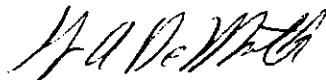
Mr. C. H. Fancy  
November 24, 1992  
Page 3

The two combustion turbines are expected to be ready for compliance testing the week of December 7, 1992. Because of the expiration date of the current construction permit, December 31, 1992, additional time is required to process and submit the compliance test results for the two combustion turbines.

This request for an extension of the construction permit application date is made pursuant to Specific Condition Number 24 of the Permit, and F.A.C. Rule 17-4.090. Because of the circumstances and timeliness of the related events, OUC was unable to provide the request for this extension of time prior to 60 days before the expiration of the permit.

OUC hereby makes a formal request for a six month extension of the construction permit, which would extend the permit until June 30, 1993. Because compliance testing activities are scheduled in the very near term, we will appreciate your early response to our request.

Very truly yours,



G. A. DeMuth  
Director  
Environmental Division

GAD:rc

xc: W. H. Herrington  
G. M. Standridge  
F. F. Haddad  
K. P. Ksionek  
V. F. Gallucci  
H. E. Smith  
A. Alexander, FDER Central District  
(Certified Mail No. P744-600-667 -  
Return Receipt Requested)

*P. Lewis*

Bob Hicks

(407)

423-9133

O.U. C

*Janeth* 12-23-92  
*Alexton,*  
This got buried  
on my desk. Clair  
got a call from OUC  
asking about it today.  
He told them to send  
\$50 but we would go  
ahead & do this quickly  
you did this permit -  
*Patty*



RECEIVED

SEP 5 1992

ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802

Division of Air  
Resources Management

Certified Mail No. P 609-606-898  
Return Receipt Requested

September 30, 1992

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

Re: AC 05-193720

Dear Mr. Fancy:

Pursuant to 40 CFR Part 60, Chapter 17-2, and PSD FL-173, the Orlando Utilities Commission (OUC) is hereby providing notification of the actual date of initial startup for Combustion Turbine D on September 15, 1992.

This Combustion Turbine is located at OUC's Indian River Plant, approximately 10 km. south of Titusville, FL (521.5 km. east and 3151.65 km. north).

By copy of this correspondence, I am also providing Notice to DER Central District office.

If you have any questions regarding this transmittal, please contact me at 407/423-9133.

Sincerely,

Robert F. Hicks  
Senior Environmental Engineer

RFH:rc

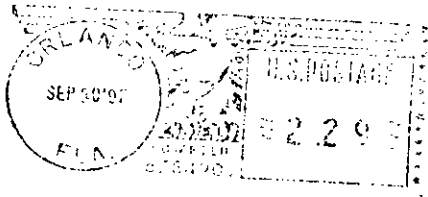
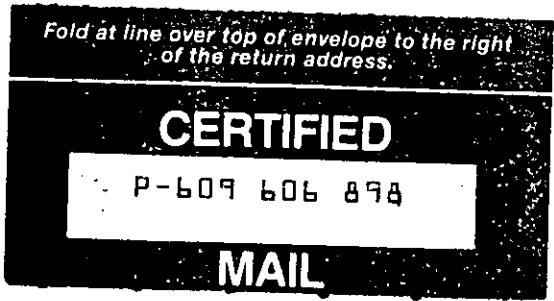
xc: W. H. Herrington  
G. A. DeMuth  
V. F. Gallucci  
T. Turba  
Alex Alexander - DER Central District office





ORLANDO UTILITIES  
COMMISSION

P. O. BOX 3193  
ORLANDO, FLORIDA 32802



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



031110





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

NOV 20 1991

RECEIVED

NOV 22 1991

Division of Air  
Resources Management

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: OUC Indian River Plant (PSD-FL-173)

Dear Mr. Fancy:

This is to acknowledge receipt of your final determination and Prevention of Significant Deterioration (PSD) permit for the proposed modification to the above referenced source. The modification will consist of the addition of two 129 MW simple-cycle combustion turbines to the existing facility (units C and D). We have reviewed this package as requested and have no adverse comments.

Thank you for the opportunity to review and comment on this package. If you have any questions on these comments, please contact Mr. Gregg Worley of my staff at (404) 347-5014.

Sincerely yours,

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

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