



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

January 16, 2003

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Wilson B. Hicks, Plant Manager
Florida Power Corporation
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, Florida 32611-2295

Re: DEP File No. 0010001-004-AC (Request for Increase in CT Permitted Heat Input)

Dear Mr. Hicks:

Enclosed is one copy of the draft air construction permit amendment revising certain conditions in the air construction permit for Florida Power Corporation's cogen facility at the University of Florida. The Intent to Issue Air Construction Permit Modification and the Public Notice of Intent to Issue Air Construction Permit Modification are also included.

The Public Notice of Intent to Issue Air Construction Permit Modification must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact J. M. Reynolds at 850/921-9530.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TV/JR
Enclosures

"More Protection, Less Process"

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Received by (Please Print Clearly) _____</p> <p>B. Date of Delivery JAN 21 2001</p>
<p>1. Article Addressed to:</p> <p>Wilson B. Hicks, Plant Manager Florida Power Corporation University of Florida Cogen Plant Mowry Road, Bldg. 82, UF Gainesville, FL 32611-2295</p>	<p>C. Signature X <i>Fred Gots</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. <u>7001 0320 0001 3692 7157</u></p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952</p>	

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)												
7001 0320 0001 3692 7157	<table border="1"> <tr> <td>Postage</td> <td>\$</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">Postmark Here</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Total Postage & Fees</td> <td>\$</td> </tr> </table>	Postage	\$	Postmark Here	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		Total Postage & Fees	\$
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Restricted Delivery Fee (Endorsement Required)												
Total Postage & Fees	\$											
<p>Sent To Wilson B. Hicks Street, Apt. No., or P.O. Box Mowry Rd., Bldg. 82, UF City, State, ZIP+4 Gainesville, FL 32611-2295</p>												
<p>PS Form 3800, January 2001 See Reverse for Instructions</p>												

In the Matter of an
Application for Permit by:

Wilson B. Hicks, Plant Manager
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, Florida 32611-2295

DEP File No. 0010001-004-AC
Turbine Heat Input Modification
Alachua County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy of draft modification attached) for the proposed project, detailed in the application specified above and for the reasons stated below.

The applicant, Florida Power Corporation, applied on May 7, 2002, to the Department for an air construction permit modification revising certain conditions in its existing air permit for its facility located at Mowry Road, Bldg. 82, University of Florida, Gainesville, Alachua County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit modification is required to effect the changes requested, which include adjusting the turbine heat input according to actual performance capabilities.

The Department intends to issue this air construction permit modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of Public Notice of Intent to Issue Air Permit Modification. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that 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 such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

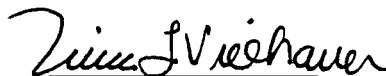
In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

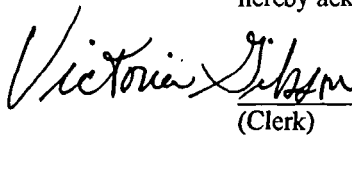

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit Modification (including the Public Notice of Intent to Issue Air Construction Permit Modification, and the Draft Permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1/17/2003 to the person(s) listed:

Wilson B. Hicks, FPC*
Mike Kennedy, FPC
Chris Kirts, NED
Scott Osbourn, P.E.

Clerk Stamp
FILING AND ACKNOWLEDGMENT FILED, on
this date, pursuant to §120.52, Florida Statutes, with
the designated Department Clerk, receipt of which is
hereby acknowledged.


(Clerk) January 17, 2003 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No. 0010001-004-AC

Florida Power Corporation
University of Florida Cogen Plant
Alachua County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Florida Power Corporation (FPC) extending and revising certain conditions in the existing air construction permit issued to FPC in May 2001. That permit (DEP File No. 0010001-003-AC) provided for replacement in 2001 of the original combustion turbine unit installed in 1994 with a more efficient model. A determination of Best Available Control Technology was not required. The applicant's mailing address is: Florida Power Corporation, University of Florida Cogen Plant, Mowry Road, Bldg. 82, Gainesville, Florida 32611-2295.

This modification allows for the adjustment of the combustion turbine (CT) heat input to reflect actual performance capabilities while capping CT emissions of nitrogen oxides (NOx) at 141 tons per year so that there will be no increase in actual annual emissions. The requested adjustment amounts to an increase of about 3 MW in the CT's output rating. This would have triggered retroactive Prevention of Significant Deterioration (PSD) review for NOx from the CT if the annual emissions were not capped. This was due to the fact that PSD rules would have automatically applied upon reaching the threshold of 40 tons of NOx per year, since PSD review was avoided for the original 1994 turbine based on a netting increase of 39.7 tons of NOx per year. Compliance with the turbine emission cap will be verified by continuous emission monitoring equipment.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the DRAFT Permit Modification, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall

constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301 of the Florida Administrative Code.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that 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 such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. A complete project file 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:

Dept. of Environ. Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, FL 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Dept. of Environ. Protection
Northeast District Office
7825 Baymeadows Way, Suite
200B
Jacksonville, Florida 32256-7590
Telephone: 904/807-3300
Fax: 904/448-4319

Dept. of Environ. Protection
Northeast District Branch Office
101 NW 75th Street, Suite 3
Gainesville, FL 32608-1609
Telephone: 352/333-2850
Fax: 352/333-2856

The complete project file includes the application, draft permit modification, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, FL 32301 or call 850/488-0114 for additional information. The DRAFT Permit Modification can be accessed on the Internet at "<http://www.dep.state.fl.us/air/permitting/construct.htm>"



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

DRAFT

February xx, 2003

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Wilson B. Hicks, Plant Manager
Florida Power Corporation
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, FL 32611-2295

Re: DEP File No. 0010001-004-AC (Request for Increase in CT Permitted Heat Input)

Dear Mr. Hicks:

This is the Department's permitting action in response to the referenced request received from Florida Power Corporation (FPC) on May 7, 2002. FPC submitted a request to modify Permit No. 0010001-003-AC by increasing the permitted heat input to the UF combustion turbine (CT) from the current 392 mmBTU/hr to 408 mmBTU/hr at 59°F. The adjustment reflects the engine's actual performance curve. On June 6, the Department replied to FPC that the requested increase amounting to about 3 MW in the CT's output rating would trigger retroactive Prevention of Significant Deterioration (PSD) review for NOx from the CT if no offsets are applied such as a further limitation on operating hours. This was due to the fact that PSD automatically applied upon reaching the threshold of 40 tons per year, since PSD review was avoided for the original turbine based on a netting increase of 39.7 tons of NOx per year.

On November 8, 2002, FPC modified its application by proposing that the baseline annual fuel usage cap for the turbine be replaced with a cap limiting total annual NOx emissions from the turbine to 141 TPY, as verified by the existing continuous NOx monitor. This proposal is acceptable to the Department since the original PSD-baseline turbine installed in 1994 was replaced in 2001 with a more efficient, less polluting model and thus the 2001 actual average lbs NOx/hr is 12.3 percent lower than the 1994 actual average. Therefore, the expiration date of Permit No. 0010001-003-AC is hereby extended to March 31, 2003 and Section III of the permit is otherwise modified as indicated below:

5. Combustion Turbine/Duct Burner Capacity: The heat input to the combustion turbine shall not exceed 392 million Btu per hour (mmBtu/hr) when firing natural gas and 384 mmBtu/hr when firing fuel oil the values indicated on the turbine manufacturer's heat input vs. power output curve attached to this permit (Attachment C). The heat input to the duct burner system shall not exceed 188 MMBtu/hr on natural gas (no oil firing). The maximum heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 59°F temperature, 60% relative humidity, and 14.7 psia. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Rule 62-210.200, F.A.C. (Potential to Emit), Permit 0010001-001-AV]

6. Hours of Operation/Fuel Usage Limitations: Combustion turbine/duct burner operation at maximum firing rates shall be limited to 7,211 hours per year (to prevent retroactive PSD applicability for NOx

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under PSD-FL-181, pursuant to Rule 62-212.400(5), F.A.C., by reaching the 40 tons per year PSD applicability threshold). The turbine/duct burner may operate at lower than maximum rates for more hours per year provided that ~~the annual fuel consumption limitations are not exceeded~~ **NOx emissions from the turbine alone do not exceed 141 tons per year** and that facility-wide NOx emissions do not exceed 194.3 TPY. ~~The total annual fuel usage for the combustion turbine and the duct burner combined shall not exceed 3.48 trillion BTU (includes up to 635,100 gallons No. 2 fuel oil fired in the turbine).~~ The annual fuel usage by the duct burner is limited to 519.5 million ft³ natural gas.

EU 003 and 004 (Boilers Nos. 4 and 5) shall be allowed to operate as required for backup only as long as the facility-wide NOx cap of 194.3 TPY is not exceeded for any calendar year. Emission factors pursuant to condition C.14 of the facility's Title V permit shall be applied to the fuel consumed by Boilers Nos. 4 and 5 to determine compliance with the facility cap. The NOx emissions calculations shall be submitted to the Compliance Authority with the Annual Operating Report. The permittee shall install and operate a continuous monitoring system to monitor and record fuel consumption as required by 40 CFR 60.334. [Applicant Request, Rules 62-210.200 (Definitions), 62-212.400(5), F.A.C., 40 CFR 60 Subpart GG]

8.a.1. When firing natural gas, NO_x emissions from the combustion turbine shall not exceed any of the following: 25 ppmvd (corrected to 15% oxygen), 39.6 pounds per hour, 141* tons per year (**141 tons per year includes total annual NOx emissions from firing natural gas or distillate oil in the combustion turbine**). [Applicant Request*, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

8.a.2. When firing distillate oil, NO_x emissions from the combustion turbine shall not exceed any of the following: 42.0 ppmvd corrected to 15% oxygen, 66.3 pounds per hour, ~~7.3 tons per year~~ (**141 tons per year includes total annual NOx emissions from firing natural gas or distillate oil in the combustion turbine**). The nitrogen content of the fuel oil shall be monitored in accordance with 40 CFR 60.334(b). [40 CFR 60 Subpart GG, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

8.c.3. Ongoing and annual compliance for EU 001 and shall be determined by the existing NOx CEM system on a 30-day rolling average basis and reported as required by the current Title V permit, except for the following addition/revision: *To verify **compliance with the 141 TPY cap for EU 001 and facility-wide compliance with the 194.3 TPY cap for NOx emissions including EU 003 and 004 (Boilers Nos. 4 and 5), and to provide reasonable assurance that NOx emissions will not be PSD-significant, CEM records along with cumulative fuel consumption records for EU 003 and 004 shall be kept and maintained by the permittee. Total NOx emissions for the both calendar year caps shall be reported in the facility's annual operating report.*** [PSD-FL-181, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

18. Fuel Consumption Monitoring of Operations: ~~To demonstrate compliance with the fuel consumption limits, t~~The permittee shall monitor and record the rates of consumption of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. ~~To demonstrate compliance with the turbine capacity requirements, t~~The permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; 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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Wilson B. Hicks, FPC*
Mike Kennedy, FPC
Chris Kirts, NED
Scott Osbourn, P.E.

Clerk Stamp

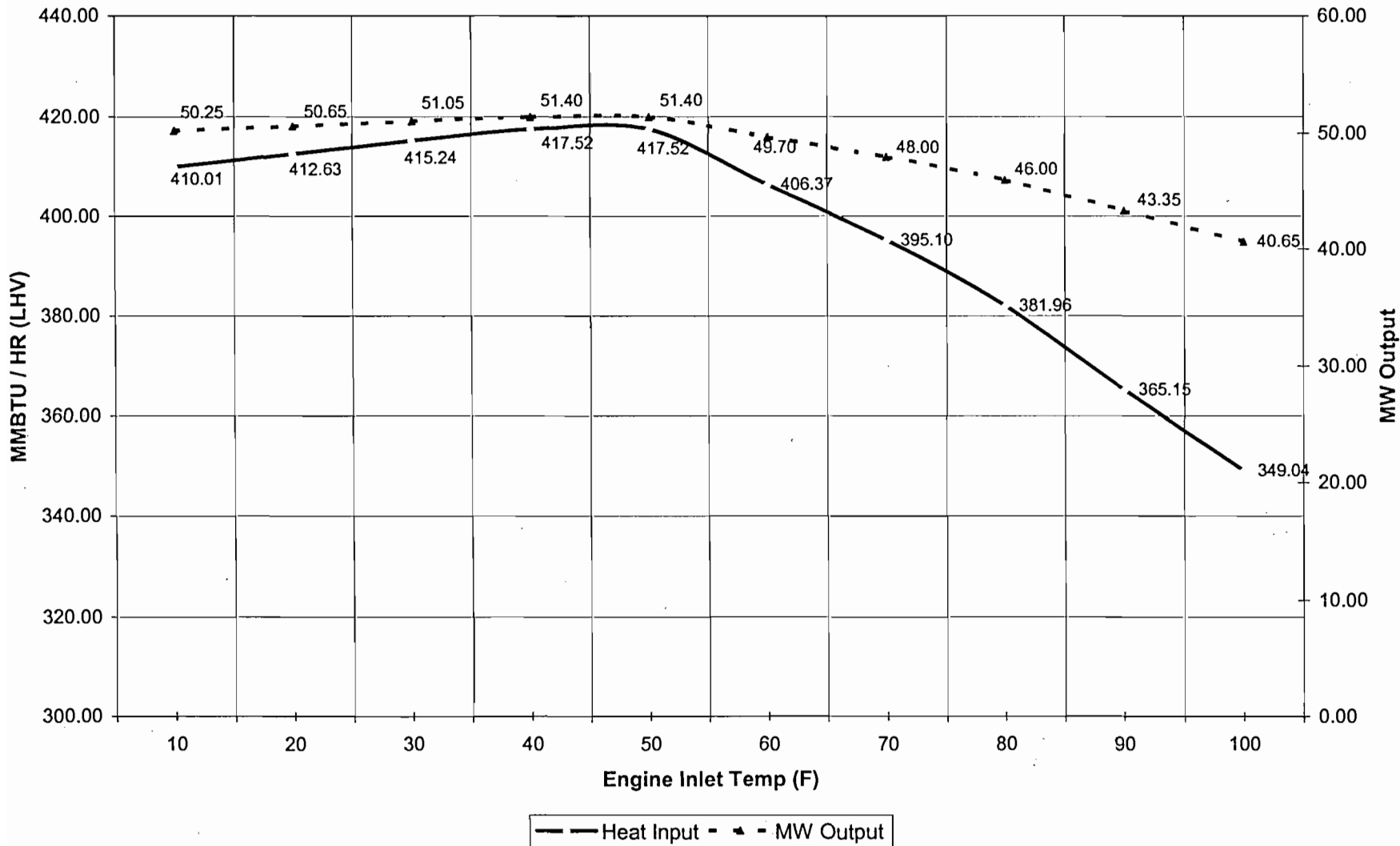
FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.

(Clerk)

(Date)

ATTACHMENT C

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output
LM6000PC-Esprint - University of Florida Cogen - Florida Power



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FINAL DETERMINATION

DEP File No. 0010001-004-AC

FPC University of Florida Cogeneration Plant
Alachua County, Florida

An Intent to Issue an air construction permit modification to revise some specific conditions and to allow for the adjustment of the combustion turbine (CT) heat input to reflect actual performance capabilities while capping CT emissions of nitrogen oxides (NOx) at 141 tons per year was distributed on January 17, 2003. This FPC facility is located at Gainesville, Alachua County, Florida.

The Public Notice of Intent to Issue Air Construction Permit was published in the Gainesville Sun on February 1, 2003. No comments were received as a result of the Public Notice period.

Based on subsequent internal review and for the sake of clarity, Unit 002 (duct burner) was specifically included in the final facility-wide cap of 194.3 tons of NOx.

The final action of the Department will be to issue the permit modification as noted during the Public Notice period.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 17, 2003

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Wilson B. Hicks, Plant Manager
Florida Power Corporation
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, FL 32611-2295

Re: DEP File No. 0010001-004-AC (Request for Increase in CT Permitted Heat Input)

Dear Mr. Hicks:

This is the Department's permitting action in response to the referenced request received from Florida Power Corporation (FPC) on May 7, 2002. FPC submitted a request to modify Permit No. 0010001-003-AC by increasing the permitted heat input to the UF combustion turbine (CT) from the current 392 mmBTU/hr to 408 mmBTU/hr at 59°F. The adjustment reflects the engine's actual performance curve. On June 6, the Department replied to FPC that the requested increase amounting to about 3 MW in the CT's output rating would trigger retroactive Prevention of Significant Deterioration (PSD) review for NOx from the CT if no offsets are applied such as a further limitation on operating hours. This was due to the fact that PSD automatically applied upon reaching the threshold of 40 tons per year, since PSD review was avoided for the original turbine based on a netting increase of 39.7 tons of NOx per year.

On November 8, 2002, FPC modified its application by proposing that the baseline annual fuel usage cap for the turbine be replaced with a cap limiting total annual NOx emissions from the turbine to 141 TPY, as verified by the existing continuous NOx monitor. This proposal is acceptable to the Department since the original PSD-baseline turbine installed in 1994 was replaced in 2001 with a more efficient, less polluting model and thus the 2001 actual average lbs NOx/hr is 12.3 percent lower than the 1994 actual average. Therefore, the expiration date of Permit No. 0010001-003-AC is hereby extended to March 31, 2003 and Section III of the permit is otherwise modified as indicated below:

SPECIFIC CONDITION No. 5

Combustion Turbine/Duct Burner Capacity: The heat input to the combustion turbine shall not exceed ~~392 million Btu per hour (mmBtu/hr) when firing natural gas and 384 mmBtu/hr when firing fuel oil~~ **the values indicated on the turbine manufacturer's heat input vs. power output curve attached to this permit (Attachment C).** The heat input to the duct burner system shall not exceed 188 MMBtu/hr on natural gas (no oil firing). The maximum heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 59°F temperature, 60% relative humidity, and 14.7 psia. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Rule 62-210.200, F.A.C. (Potential to Emit), Permit 0010001-001-AV]

"More Protection, Less Process"

Printed on recycled paper.

SPECIFIC CONDITION No. 6

Hours of Operation/Fuel Usage Limitations: Combustion turbine/duct burner operation at maximum firing rates shall be limited to 7,211 hours per year (to prevent retroactive PSD applicability for NO_x under PSD-FL-181, pursuant to Rule 62-212.400(5), F.A.C., by reaching the 40 tons per year PSD applicability threshold). The turbine/duct burner may operate at lower than maximum rates for more hours per year provided that ~~the annual fuel consumption limitations are not exceeded~~ **NO_x emissions from the turbine alone do not exceed 141 tons per year** and that facility-wide NO_x emissions do not exceed 194.3 TPY. ~~The total annual fuel usage for the combustion turbine and the duct burner combined shall not exceed 3.48 trillion BTU (includes up to 635,100 gallons No. 2 fuel oil fired in the turbine).~~ The annual fuel usage by the duct burner is limited to 519.5 million ft³ natural gas.

EU 003 and 004 (Boilers Nos. 4 and 5) shall be allowed to operate as required for backup only as long as the facility-wide NO_x cap of 194.3 TPY is not exceeded for any calendar year. Emission factors pursuant to condition C.14 of the facility's Title V permit shall be applied to the fuel consumed by Boilers Nos. 4 and 5 to determine compliance with the facility cap. The NO_x emissions calculations shall be submitted to the Compliance Authority with the Annual Operating Report. The permittee shall install and operate a continuous monitoring system to monitor and record fuel consumption as required by 40 CFR 60.334. [Applicant Request, Rules 62-210.200 (Definitions), 62-212.400(5), F.A.C., 40 CFR 60 Subpart GG]

SPECIFIC CONDITION No. 8.a.1

When firing natural gas, NO_x emissions from the combustion turbine shall not exceed any of the following: 25 ppmvd (corrected to 15% oxygen), 39.6 pounds per hour, 141* tons per year (**141 tons per year includes total annual NO_x emissions from firing natural gas or distillate oil in the combustion turbine**). [Applicant Request*, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

SPECIFIC CONDITION No. 8.a.2

When firing distillate oil, NO_x emissions from the combustion turbine shall not exceed any of the following: 42.0 ppmvd corrected to 15% oxygen, 66.3 pounds per hour, ~~7.3 tons per year~~ (**141 tons per year includes total annual NO_x emissions from firing natural gas or distillate oil in the combustion turbine**). The nitrogen content of the fuel oil shall be monitored in accordance with 40 CFR 60.334(b). [40 CFR 60 Subpart GG, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

SPECIFIC CONDITION No. 8.c.3

Ongoing and annual compliance for EU 001 and shall be determined by the existing NO_x CEM system on a 30-day rolling average basis and reported as required by the current Title V permit, except for the following addition/revision: *To verify **compliance with the 141 TPY cap for EU 001 and facility-wide compliance with the 194.3 TPY cap for NO_x emissions including EU 002, EU 003 and 004 (Duct burner Boilers Nos. 4 and 5)**, and to provide reasonable assurance that NO_x emissions will not be PSD-significant, CEM records along with cumulative fuel consumption records for EU 003 and 004 shall be kept and maintained by the permittee. Total NO_x emissions for the **both** calendar year **caps** shall be reported in the facility's annual operating report.* [PSD-FL-181, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

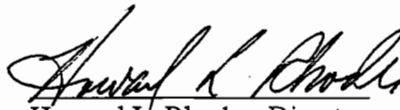
SPECIFIC CONDITION No. 18

Fuel Consumption Monitoring of Operations: ~~To demonstrate compliance with the fuel consumption limits,~~ ~~†~~ The permittee shall monitor and record the rates of consumption of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. ~~To demonstrate compliance with the turbine capacity requirements,~~ ~~†~~ The permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat

content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; 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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.


Howard L. Rhodes, Director
Division of Air Resources
Management

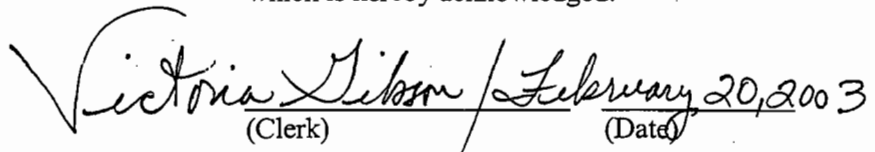
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/20/03 to the person(s) listed:

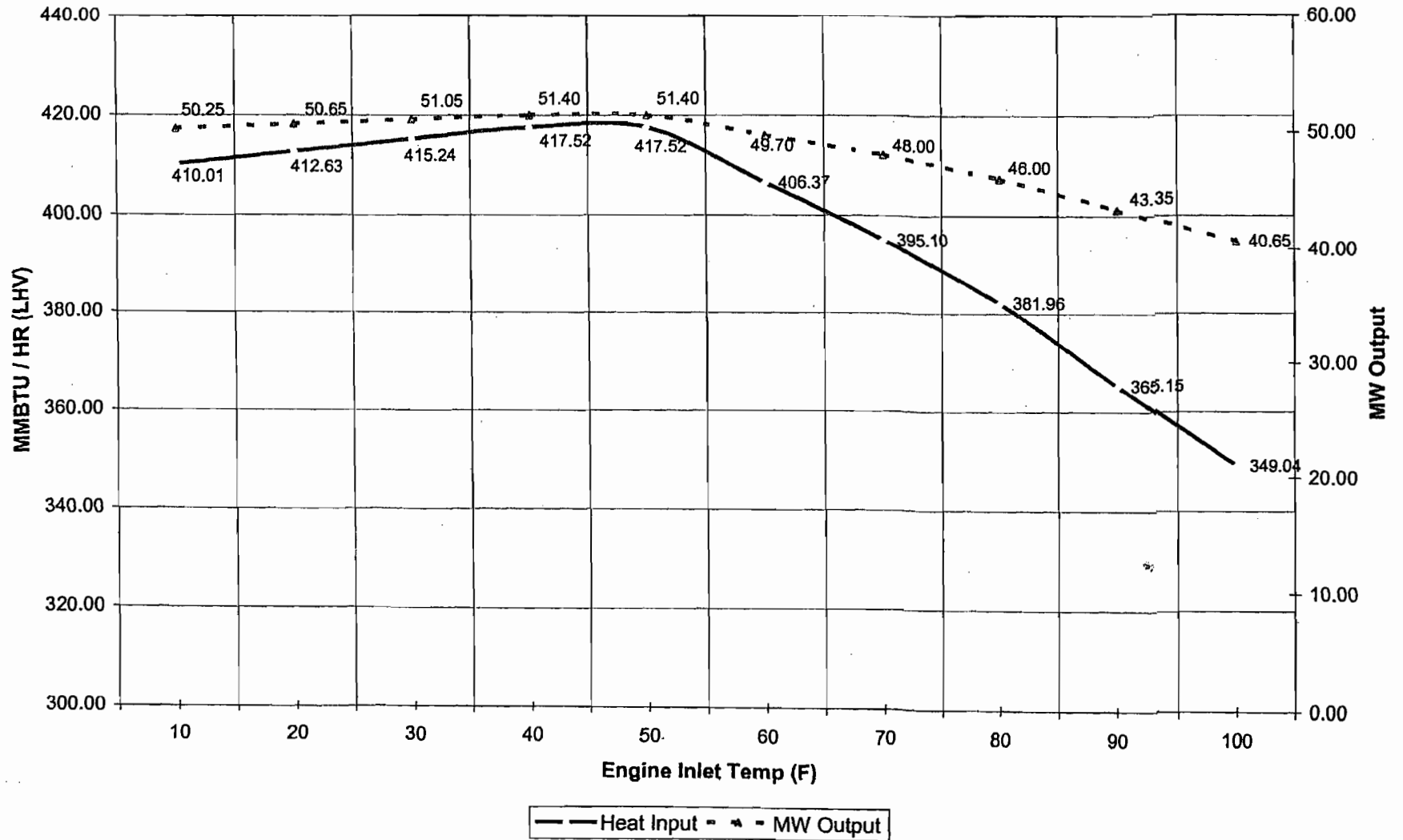
Wilson B. Hicks, FPC*
Mike Kennedy, FPC
Chris Kirts, NED
Scott Osbourn, P.E.

Clerk Stamp

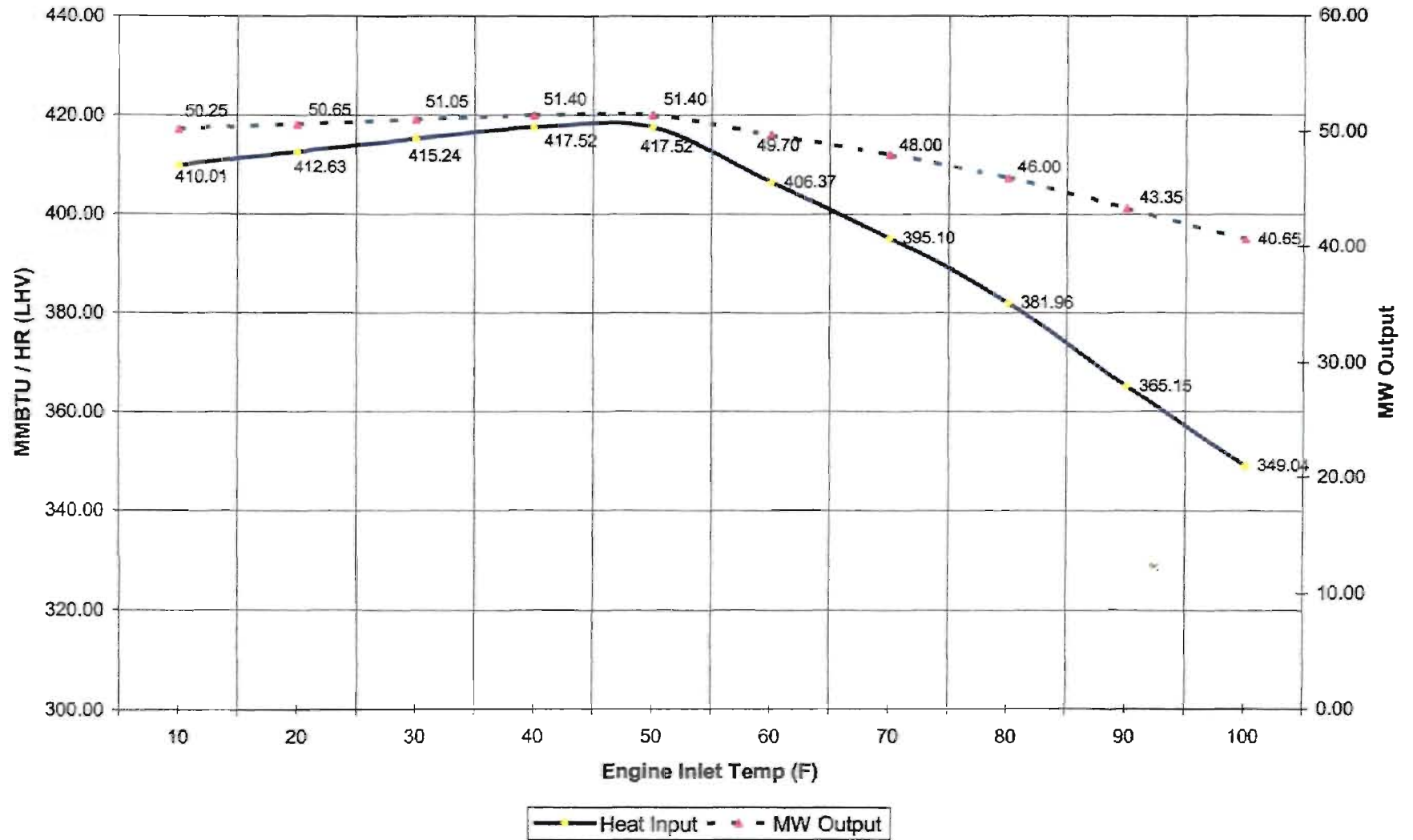
FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.


(Clerk) / February 20, 2003
(Date)

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output LM6000PC-Esprint - University of Florida Cogen - Florida Power



**Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output
LM6000PC-Esprint - University of Florida Cogen - Florida Power**





Florida Power

A Progress Energy Company

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MAY 07 2002

April 29, 2002

BUREAU OF AIR REGULATION

Mr. Al Linero, P.E. Administrator
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Re: Florida Power University of Florida Facility
Construction Permit No. 0010001-003-AC/ Title V Permit No. 0010001-001-AV

Florida Power is submitting a request to modify the above-referenced construction permit and, subsequently, the Title V operating permit that will incorporate the requested changes. The proposed changes are discussed in detail below.

The current construction permit was issued on May 18, 2001. Specific Condition 5 in Section III contains a permitted capacity, referenced to the heat input for the combustion turbine (CT). This permitted capacity is stated as 392 mmBtu/hour at 59 degrees F, based on the fuel's LHV when firing natural gas. The current Title V (TV) operating permit for this facility contains similar language, the difference being that the TV permit contains a "permitting note" that explains the purpose of the heat input rating (Specific condition A.1. of Section III of the current Title V permit). Without the permitting note, it could be implied that the heat input rating is a value that is not to be exceeded. The maximum heat input for this CT model, as well as the model that existed prior to the modification, actually occurs at 49F.

The heat input rating contained in the current construction permit was based on information provided to the DEP in the permit application, and it corresponds to data provided by General Electric (GE). Florida Power has found that the CT can attain a heat input level that is slightly higher than the current permit rating

The CT can actually attain a heat input of approximately 408 mmBtu/hour, as well as a nominal rating of 50 MW output, at 59 deg. F, as shown on the enclosed heat input/MW vs. engine inlet temperature graph. Florida Power requests that the current construction and operating permits be amended to incorporate this heat input curve. In addition, retention of the permitting note contained in the current TV permit will provide clarity for compliance purposes. In the interim, until additional guidance or permitting action is provided by the Department, Florida Power will continue to restrict operation to ensure that the heat input rating is not exceeded. This results in the loss of approximately 3 MW that could be produced, which becomes more critical as we approach the high demand summer peaking season. Florida Power bases this request on the understanding that additional operating flexibility will be provided, but there will be no change

in the emission limits contained in the permit (i.e., compliance with all lb/hour and tons/year limits will be maintained).

In addition, Condition 6 of Section III of the construction permit contains fuel usage limits for the DB (519.5 million ft³ of natural gas) and for the CT and DB combined (3.48 trillion Btu). This presents an additional complication, given that the fuel limit for the DB is a fuel flow value, while the limit for the CT and DB combined is provided as a total heating value. In order to avoid confusion and ensure compliance, Florida Power requests that the language in the permit regarding the fuel use limit be changed to reflect an approach similar to that for the annual hours of operation limit. Specifically, the permit should state a baseline amount that may be exceeded, provided that the facility-wide annual NOx emissions limit is not exceeded. Florida Power requests that the second sentence of Condition 6 be changed to the following language:

The turbine/duct burner may operate for more hours per year and at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.

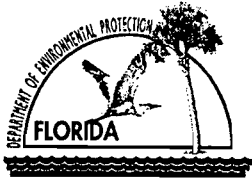
The combination of continuous monitoring and the associated reporting for both the short-term lb/hour limit and the long-term annual limit will ensure adequate monitoring for purposes of determining continuous compliance with the emissions limits.

Florida Power has enclosed four copies of the appropriate permit application forms and the revised heat input curve. Thank you for your consideration of this submittal. Please contact Mike Kennedy at (727) 826-4334 or Matt Lydon at (727) 826-4152 if you have any questions.

Sincerely,



Kris G. Edmondson
Plant Manager



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Florida Power Corporation	
2. Site Name: University of Florida Cogeneration Plant	
3. Facility Identification Number: 0010001 [] Unknown	
4. Facility Location: Street Address or Other Locator: Mowry Road, Building 82, University of Florida City: Gainesville County: Alachua Zip Code: 32611-2295	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: J. Michael Kennedy, Manager Air Program, Environmental Services Department	
2. Application Contact Mailing Address: Organization/Firm: Florida Power Corporation Street Address: One Power Plaza, 263 13 th Ave., S. City: St. Petersburg State: FL Zip Code: 33701	
3. Application Contact Telephone Numbers: Telephone: (727) 826-4334 Fax: (727) 826-4216	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	5-7-02
2. Permit Number:	0010001-004-AE
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

RECEIVED

MAY 07 2002

Purpose of Application

Air Operation Permit Application

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

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

Current construction permit number: _____

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

Current construction permit number: _____

Operation permit number to be revised: _____

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

Operation permit number to be revised/corrected: 001-0001-001-AV

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

Operation permit number to be revised: _____

Reason for revision: _____

Air Construction Permit Application


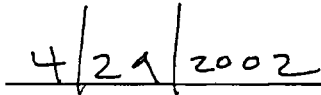
This Application for Air Permit is submitted to obtain: (Check one)

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

Construction permit no. 001-0001-003-AC

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Kris Edmondson, Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Florida Power Corporation Street Address: P.O. Box 14042 GV44 City: Gainesville State: FL Zip Code: 33733-4042
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (352) 337-6900 Fax: (352) 337-6920
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature  Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Scott Osbourn Registration Number: 57557
2. Professional Engineer Mailing Address: Organization/Firm: ENSR International Street Address: 150 Second Ave. N., Suite 1500 City: St. Petersburg State: FL Zip Code: 33701-3343
3. Professional Engineer Telephone Numbers: Telephone: (727) 898-9591 Fax: (727) 898-9582

4. Professional Engineer Statement:

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

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

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

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

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

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



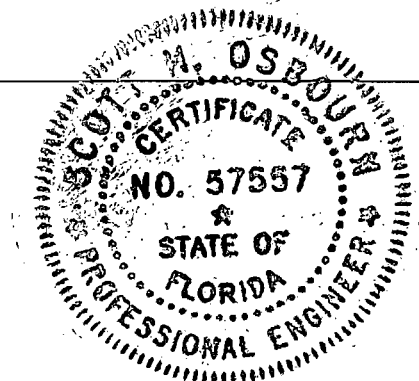
Signature

5/3/02

Date

(seal)

* Attach any exception to certification statement.



Construction/Modification Information

1. Description of Proposed Project or Alterations:

Applicant has found that the LM6000-PC-ESPRINT combustion turbine can attain a performance level of approximately 408 MMBTU/hour (LHV) and 50 MW at 59 deg. F as shown on the enclosed heat input vs. engine inlet temperature graph. Florida Power requests that the permit be amended to incorporate this heat input curve. In addition, retention of the permitting note contained in the current Title V permit will provide clarity for compliance purposes. No change is requested in any of the emission limits (lb/hr and tons/yr) that currently exist in the permit.

In addition, Florida Power requests that the turbine/duct burner operate at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.

2. Projected or Actual Date of Commencement of Construction: May 18, 2001

3. Projected Date of Completion of Construction: June 2, 2001

Application Comment

For clarity, the application forms are divided into:

- Facility information
- Newly modified emission unit (Combustion Turbine)

III. EMISSIONS UNIT INFORMATION

LM6000-PC-ESPRINT

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

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine (LM6000-PC-ESPRINT)</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: ARMS No. 001 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: June 2, 2001</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The new CT has replaced the previous CT, which exhausted through a heat recovery steam generator (HRSG) and a single stack. There are no other changes to the process configuration.</p>			

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	408 mmBtu/hr LHV @ 59°F inlet	
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:	50 MW @ 59°F inlet temp	
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year*
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
	<p>Maximum heat input based on natural gas-firing,</p> <p>* The permitted NOx cap of 194.3 TPY is based on operation of the CT/DB at maximum firing rates for 7,211 hr/yr and total fuel usage of 3.48 trillion Btu/yr. The CT/DB may operate for more hours per year (up to 8,760 hr/yr) and at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.</p>	

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

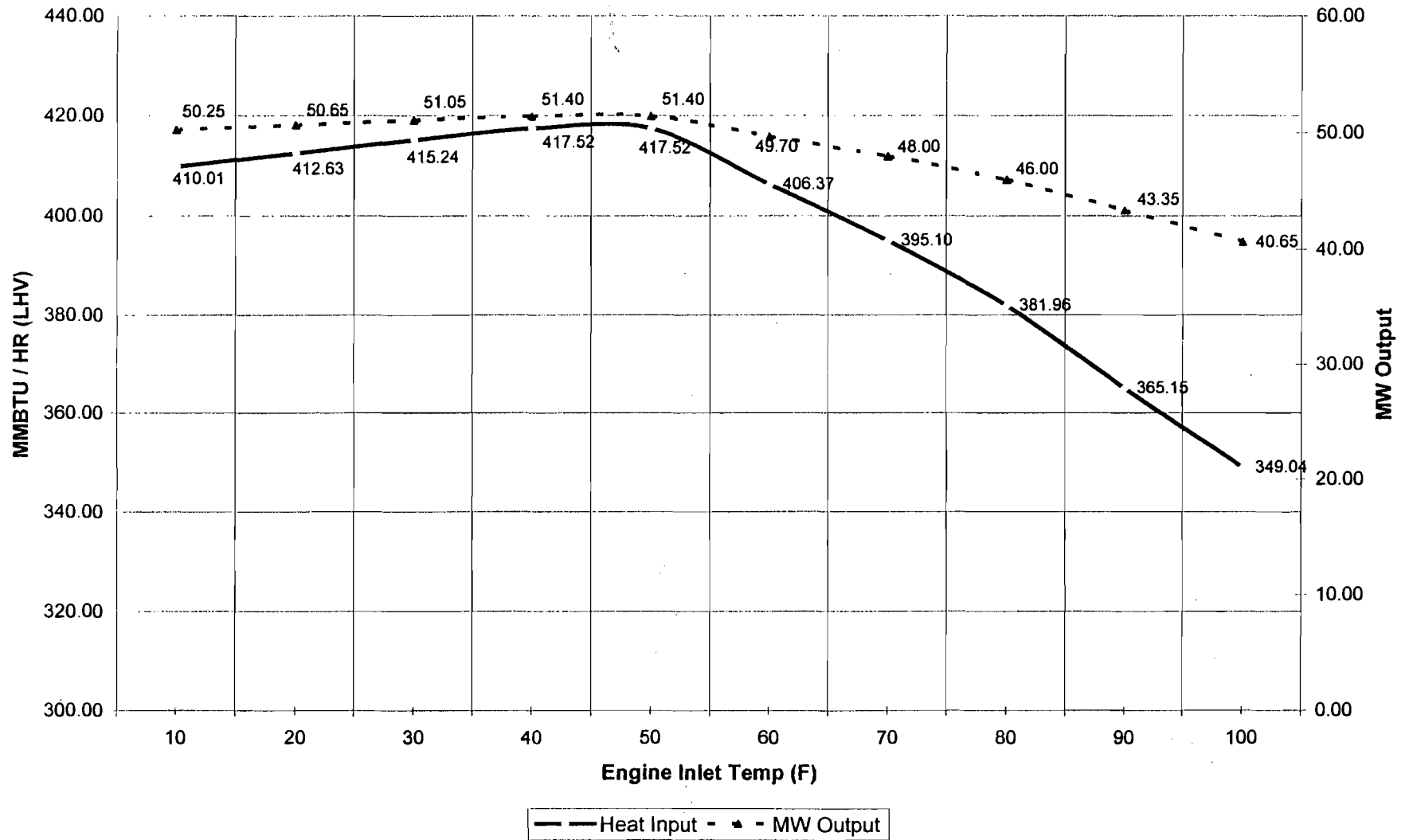
Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural Gas Firing		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet Burned
3. Maximum Hourly Rate: 0.429 (LHV)	4. Maximum Annual Rate: 3,663 (LHV)	6. Estimated Annual Activity Factor:
2. Maximum % Sulfur: 1 grain/ 100 CF	8. Maximum % Ash:	9. Million Btu per SCC Unit: 950 (LHV)
10. Segment Comment (limit to 200 characters): Based on inlet conditions 59°F and 60% relative humidity, LHV.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Distillate oil firing in CT		
3. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 2.9	5. Maximum Annual Rate: 635	6. Estimated Annual Activity Factor:
3. Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 132
10. Segment Comment (limit to 200 characters): Million Btu per SCC Unit = 132.48 (rounded to 132). Heat content based on LHV:		

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output LM6000PC-Esprint - University of Florida Cogen - Florida Power



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Wilson B. Hicks
 Plant Manager, Florida Power Corporation
 University of Florida Cogen Plant
 Mowry Road, Bldg. 82, UF
 Gainesville, FL 32611-2295

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 Addressee

Carl Williams

B. Received by (Printed Name) Date of Delivery
 DEAR 31 2003

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

7001 0320 0001 3692 6778

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

7001 0320 0001 3692 6778

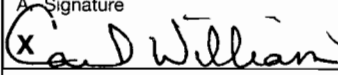
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To
 Wilson B. Hicks
 Street, Apt. No.
 or P.O. No. Rd., Bldg. 82, UF
 City, State, ZIP+4
 Gainesville, FL 32611-2295

Speed (s) Velocity (V)

- *Speed* is the distance traveled by a vehicle during a unit time. The speed of a vehicle at any time t is the slope of the time-distance diagram for that vehicle at time t .
- Velocity is equal in magnitude to speed but velocity is a vector.
- $V = dx/dt \sim$ derivative of displacement with respect to time.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature  <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) _____ C. Date of Delivery FEB 24 2001</p>
<p>1. Article Addressed to:</p> <p>Wilson B. Hicks, Plant Manager Florida Power Corporation University of Florida Cogen Plant Mowry Road, Bldg. 82, UF Gainesville, FL 32611-2295</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>7001 0320 0001 3692 6938</p>	

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee <small>(Endorsement Required)</small>		
Restricted Delivery Fee <small>(Endorsement Required)</small>		
Total Postage & Fees	\$	

Sent To
 Wilson B. Hicks

Street, Apt. No.,
 or P.O. Box
 Mowry Rd., Bldg. 82, UF

City, State, ZIP+4
 Gainesville, FL 32611-2295

PS Form 3800, January 2001 See Reverse for Instructions

7001 0320 0001 3692 6938

Acceleration (a)

- Rate of change of velocity with respect to time.
- Acceleration $a = dv/dt$
- Deceleration is negative acceleration

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Received by (Please Print Clearly) B. Date of Delivery JAN 21 2000</p>
<p>1. Article Addressed to:</p> <p>Wilson B. Hicks, Plant Manager Florida Power Corporation University of Florida Cogen Plant Mowry Road, Bldg. 82, UF Gainesville, FL 32611-2295</p>	<p>C. Signature X <i>Fred Gots</i> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>2. 7001 0320 0001 3692 7157</p>	<p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>

PS Form 3811, July 1999

Domestic Return Receipt

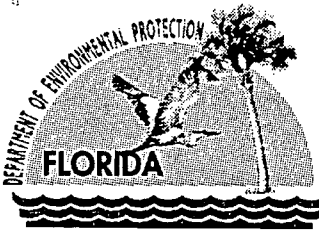
102595-00-M-0952

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)											
OFFICIAL USE											
<table border="1"> <tr> <td>Postage</td> <td>\$</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Total Postage & Fees</td> <td>\$</td> </tr> </table>	Postage	\$	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		Total Postage & Fees	\$	<p>Postmark Here</p>
Postage	\$										
Certified Fee											
Return Receipt Fee (Endorsement Required)											
Restricted Delivery Fee (Endorsement Required)											
Total Postage & Fees	\$										
<p>Sent To Wilson B. Hicks Street, Apt. No., or P.O. Box No. Mowry Rd., Bldg. 82, UF City, State, ZIP+4 Gainesville, FL 32611-2295</p>											
<p>PS Form 3800, January 2001 See Reverse for Instructions</p>											

7001 0320 0001 3692 7157

Example

- A vehicle approaches an intersection at a speed of 30 m/h. The vehicle begins to decelerate at a rate of 16 ft/s^2 . Calculate the time it would take the vehicle to stop.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
March 26, 2003

David B. Struhs
Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Wilson B. Hicks, Plant Manager
Florida Power Corporation
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, FL 32611-2295

Re: DEP File No. 0010001-004-AC (Request for Construction Permit Expiration Date Extension)
Florida Power Corporation – University of Florida (FPC-UF)

Dear Mr. Hicks:

The Department reviewed your letter dated March 5, 2003 for extension of the referenced air construction permit until December 31, 2004. Physical construction has been completed. The Department will therefore extend the permit only until December 31, 2003. This should provide sufficient time to test the new unit and submit a complete Title V Permit Application reflecting the as-built project.

All references in the permit to the expiration date are hereby revised to **December 31, 2003**.

This determination is issued pursuant to Chapter 403, Florida Statutes. A person whose substantial interests are affected by the proposed agency action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes (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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.)

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for

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Printed on recycled paper.

service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that 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 such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

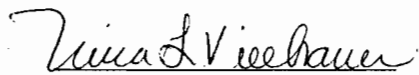
This determination is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106,

F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Department.

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty (30) days after this order is filed with the clerk of the Department.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation
Division of Air Resources Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3/27/03 to the person(s) listed:

Wilson B. Hicks, FPC*
Mike Kennedy, FPC
Chris Kirts, NED
Scott Osbourn, P.E.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.

Victoria Gibson / *March 27, 2003*
(Clerk) (Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p><i>Wilson B. Hicks</i></p> <p>B. Received by (Printed Name) MAR 31 2003</p>
<p>1. Article Addressed to:</p> <p>Mr. Wilson B. Hicks Plant Manager, Florida Power Corporation University of Florida Cogen Plant Mowry Road, Bldg. 82, UF Gainesville, FL 32611-2295</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>7001 0320 0001 3692 6778</p>	
<p>PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540</p>	

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

7001 0320 0001 3692 6778

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To
 Wilson B. Hicks
 Street, Apt. No. or P.O. No.
 Mowry Rd., Bldg. 82, UF
 City, State, ZIP+4
 Gainesville, FL 32611-2295

PS Form 3800, January 2001 See Reverse for Instructions



RECEIVED

MAR 10 2003

BUREAU OF AIR REGULATION

March 5, 2003

Ms. Trina Vielhauer
Bureau Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: University of Florida Cogeneration Facility Request for Incorporation of Air Construction Permit 0010001-004-AC Conditions into the Air Operating Permit 0010001-005-AV.

This letter is in request of incorporating the recent amendments to the University of Florida Cogeneration Facility's Air Construction Permit 0010001-004-AC into the facility's Air Operating Permit 0010001-005-AV. Enclosed is the letter of Final Determination containing the recent amendments to the permit.

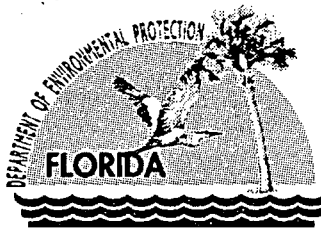
Please contact Matthew Lydon (727) 826-4152 if you have any questions.

Sincerely,

Wilson B. Hicks
Plant Manager

cc. Scott Sheplak

enclosure



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

February 17, 2003

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Wilson B. Hicks, Plant Manager
Florida Power Corporation
University of Florida Cogen Plant
Mowry Road, Bldg. 82, UF
Gainesville, FL 32611-2295

Re: DEP File No. 0010001-004-AC (Request for Increase in CT Permitted Heat Input)

Dear Mr. Hicks:

This is the Department's permitting action in response to the referenced request received from Florida Power Corporation (FPC) on May 7, 2002. FPC submitted a request to modify Permit No. 0010001-003-AC by increasing the permitted heat input to the UF combustion turbine (CT) from the current 392 mmBTU/hr to 408 mmBTU/hr at 59°F. The adjustment reflects the engine's actual performance curve. On June 6, the Department replied to FPC that the requested increase amounting to about 3 MW in the CT's output rating would trigger retroactive Prevention of Significant Deterioration (PSD) review for NOx from the CT if no offsets are applied such as a further limitation on operating hours. This was due to the fact that PSD automatically applied upon reaching the threshold of 40 tons per year, since PSD review was avoided for the original turbine based on a netting increase of 39.7 tons of NOx per year.

On November 8, 2002, FPC modified its application by proposing that the baseline annual fuel usage cap for the turbine be replaced with a cap limiting total annual NOx emissions from the turbine to 141 TPY, as verified by the existing continuous NOx monitor. This proposal is acceptable to the Department since the original PSD-baseline turbine installed in 1994 was replaced in 2001 with a more efficient, less polluting model and thus the 2001 actual average lbs NOx/hr is 12.3 percent lower than the 1994 actual average. Therefore, the expiration date of Permit No. 0010001-003-AC is hereby extended to March 31, 2003 and Section III of the permit is otherwise modified as indicated below:

SPECIFIC CONDITION No. 5

Combustion Turbine/Duct Burner Capacity: The heat input to the combustion turbine shall not exceed ~~392 million Btu per hour (mmBtu/hr) when firing natural gas and 384 mmBtu/hr when firing fuel oil~~ **the values indicated on the turbine manufacturer's heat input vs. power output curve attached to this permit (Attachment C)**. The heat input to the duct burner system shall not exceed 188 MMBtu/hr on natural gas (no oil firing). The maximum heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 59°F temperature, 60% relative humidity, and 14.7 psia. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Rule 62-210.200, F.A.C. (Potential to Emit), Permit 0010001-001-AV]

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SPECIFIC CONDITION No. 6

Hours of Operation/Fuel Usage Limitations: Combustion turbine/duct burner operation at maximum firing rates shall be limited to 7,211 hours per year (to prevent retroactive PSD applicability for NO_x under PSD-FL-181, pursuant to Rule 62-212.400(5), F.A.C., by reaching the 40 tons per year PSD applicability threshold). The turbine/duct burner may operate at lower than maximum rates for more hours per year provided that ~~the annual fuel consumption limitations are not exceeded~~ **NO_x emissions from the turbine alone do not exceed 141 tons per year** and that facility-wide NO_x emissions do not exceed 194.3 TPY. ~~The total annual fuel usage for the combustion turbine and the duct burner combined shall not exceed 3.48 trillion BTU (includes up to 635,100 gallons No. 2 fuel oil fired in the turbine).~~ The annual fuel usage by the duct burner is limited to 519.5 million ft³ natural gas.

EU 003 and 004 (Boilers Nos. 4 and 5) shall be allowed to operate as required for backup only as long as the facility-wide NO_x cap of 194.3 TPY is not exceeded for any calendar year. Emission factors pursuant to condition C.14 of the facility's Title V permit shall be applied to the fuel consumed by Boilers Nos. 4 and 5 to determine compliance with the facility cap. The NO_x emissions calculations shall be submitted to the Compliance Authority with the Annual Operating Report. The permittee shall install and operate a continuous monitoring system to monitor and record fuel consumption as required by 40 CFR 60.334. [Applicant Request, Rules 62-210.200 (Definitions), 62-212.400(5), F.A.C., 40 CFR 60 Subpart GG]

SPECIFIC CONDITION No. 8.a.1

When firing natural gas, NO_x emissions from the combustion turbine shall not exceed any of the following: 25 ppmvd (corrected to 15% oxygen), 39.6 pounds per hour, 141* tons per year **(141 tons per year includes total annual NO_x emissions from firing natural gas or distillate oil in the combustion turbine)**. [Applicant Request*, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

SPECIFIC CONDITION No. 8.a.2

When firing distillate oil, NO_x emissions from the combustion turbine shall not exceed any of the following: 42.0 ppmvd corrected to 15% oxygen, 66.3 pounds per hour, ~~7.3 tons per year~~ **(141 tons per year includes total annual NO_x emissions from firing natural gas or distillate oil in the combustion turbine)**. The nitrogen content of the fuel oil shall be monitored in accordance with 40 CFR 60.334(b). [40 CFR 60 Subpart GG, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

SPECIFIC CONDITION No. 8.c.3

Ongoing and annual compliance for EU 001 and shall be determined by the existing NO_x CEM system on a 30-day rolling average basis and reported as required by the current Title V permit, except for the following addition/revision: *To verify **compliance with the 141 TPY cap for EU 001 and facility-wide compliance with the 194.3 TPY cap for NO_x emissions including EU 002, EU 003 and 004 (Duct burner, Boilers Nos. 4 and 5)**, and to provide reasonable assurance that NO_x emissions will not be PSD-significant, CEM records along with cumulative fuel consumption records for EU 003 and 004 shall be kept and maintained by the permittee. Total NO_x emissions for ~~the~~ **both** calendar year **caps** shall be reported in the facility's annual operating report.* [PSD-FL-181, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

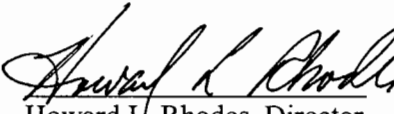
SPECIFIC CONDITION No. 18

Fuel Consumption Monitoring of Operations: ~~To demonstrate compliance with the fuel consumption limits,~~ The permittee shall monitor and record the rates of consumption of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. ~~To demonstrate compliance with the turbine capacity requirements,~~ The permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat

content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; 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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.


Howard L. Rhodes, Director
Division of Air Resources
Management


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2/20/03 to the person(s) listed:

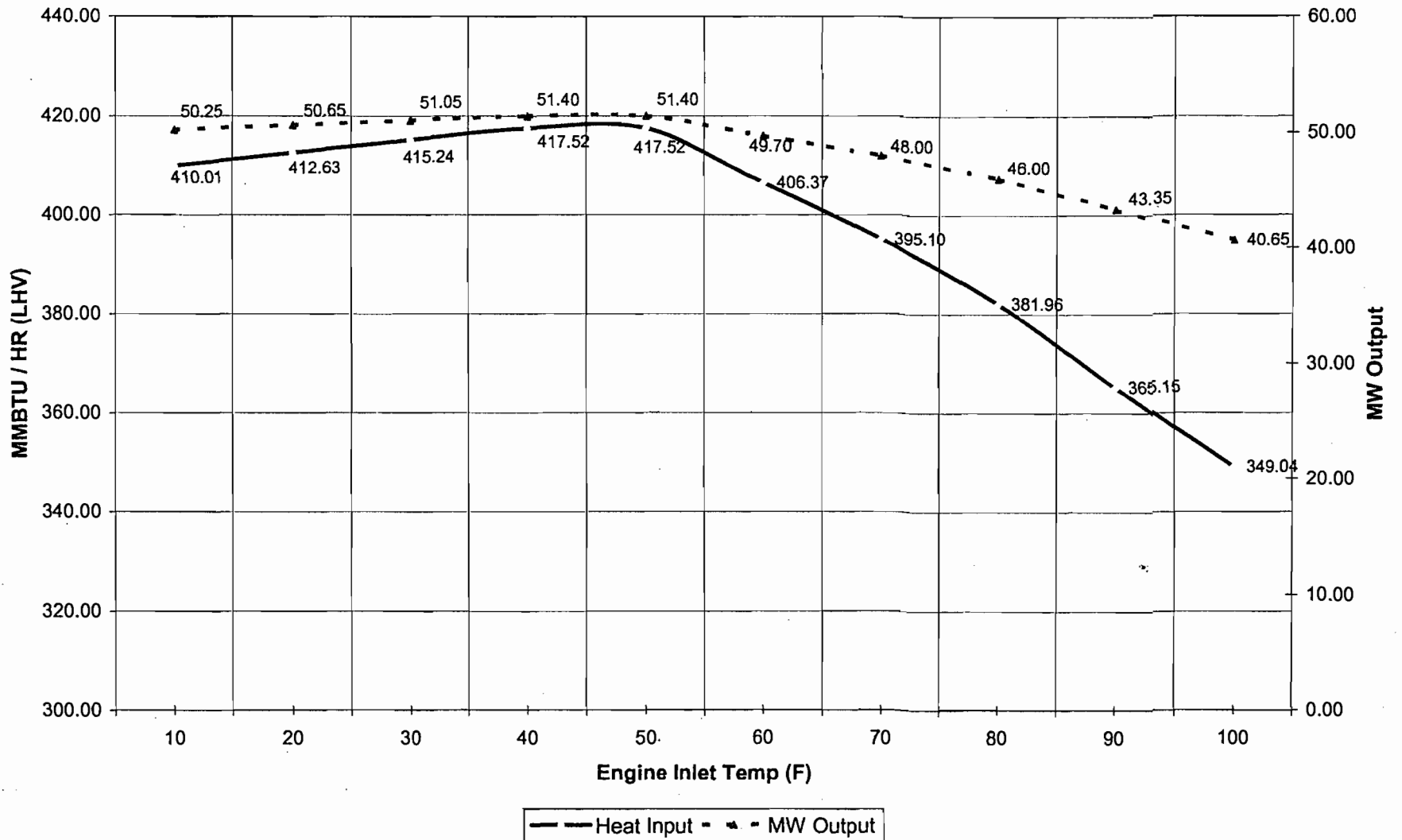
Wilson B. Hicks, FPC*
Mike Kennedy, FPC
Chris Kirts, NED
Scott Osbourn, P.E.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.


(Clerk) / February 20, 2003
(Date)

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output LM6000PC-Esprint - University of Florida Cogen - Florida Power



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature <input checked="" type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee <i>C. D. Williams</i></p> <p>B. Received by (Printed Name) _____ Date of Delivery FEB 24 2001</p>
<p>1. Article Addressed to:</p> <p>Wilson B. Hicks, Plant Manager Florida Power Corporation University of Florida Cogen Plant Mowry Road, Bldg. 82, UF Gainesville, FL 32611-2295</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>7001 0320 0001 3692 6938</p>	
<p>PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540</p>	

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee <small>(Endorsement Required)</small>		
Restricted Delivery Fee <small>(Endorsement Required)</small>		
Total Postage & Fees	\$	

Sent To
Wilson B. Hicks

Street, Apt. No.,
or P.O. Box
Mowry Rd., Bldg. 82, UF

City, State, ZIP+4
Gainesville, FL 32611-2295

PS Form 3800, January 2001

: See Reverse for Instructions

7001 0320 0001 3692 6938

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FINAL DETERMINATION

DEP File No. 0010001-004-AC

FPC University of Florida Cogeneration Plant
Alachua County, Florida

An Intent to Issue an air construction permit modification to revise some specific conditions and to allow for the adjustment of the combustion turbine (CT) heat input to reflect actual performance capabilities while capping CT emissions of nitrogen oxides (NOx) at 141 tons per year was distributed on January 17, 2003. This FPC facility is located at Gainesville, Alachua County, Florida.

The Public Notice of Intent to Issue Air Construction Permit was published in the Gainesville Sun on February 1, 2003. No comments were received as a result of the Public Notice period.

Based on subsequent internal review and for the sake of clarity, Unit 002 (duct burner) was specifically included in the final facility-wide cap of 194.3 tons of NOx.

The final action of the Department will be to issue the permit modification as noted during the Public Notice period.

Memorandum

Florida Department of Environmental Protection

TO: Howard L. Rhodes

THRU: Al Linero/Trina L. Vielhauer *cey 2/17*

FROM: John Reynolds/Teresa Heron *T.H.*

DATE: February 17, 2003

SUBJECT: Draft Permit Amendment for Florida Power Corporation/University of Florida
Cogen Plant – Alachua County
Permit No. 0010001-004-AC

Attached for approval and signature is the final permit amendment that extends and revises certain conditions in FPC's existing air construction permit, 0010001-003-AC. This permit was issued on May 18, 2001 to replace the existing 43 MW GE LM6000 PA aeroderivative combustion turbine (EU No. 001) with a more efficient GE LM6000 PC ESPRINT unit rated at 48 MW. The present application reflects the as-built combustion turbine with a slightly greater heat input.

This proposed amendment avoids triggering PSD since the original PSD-baseline turbine installed in 1994 was replaced in 2001 with a more efficient, less polluting model and thus the 2001 actual average lbs NOx/hr is 12.3 percent lower than the 1994 actual average. The pre-existing facility-wide NOx emissions cap of 194.3 TPY is sufficient to insure PSD is not triggered by this project.

The expiration date of Permit No. 0010001-003-AC is extended from December 31, 2002 to March 31, 2003.

We recommend your approval and signature.

AL/th



Florida Power
A Progress Energy Company

RECEIVED

FEB 07 2003

BUREAU OF AIR REGULATION

February 3, 2003

Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Mail Station: 5505
Tallahassee, FL 32399-2400

Re: University of Florida Cogen Facility Public Notice Proof of Publication

I have enclosed the original proof of publication of the intent to issue the air construction permit modification public notice. The public notice was published on February 1, 2003 in *The Gainesville Sun* newspaper.

Please contact Matthew Lydon (727) 826-4152 if you have any questions.

Sincerely,

Wilson B. Hicks
Plant Manager

enclosure

RECEIVED

24437

NO _____

FEB 07 2003

BUREAU OF AIR REGULATION

THE GAINESVILLE SUN
Published Daily and Sunday
GAINESVILLE, FLORIDA

STATE OF FLORIDA
COUNTY OF ALACHUA

Naomi Williams-Jordan

Before the undersigned authority appeared.....
Classified Assistant Manager

Who on oath says that he/she is.....of THE GAINESVILLE SUN, a daily

newspaper published at Gainesville in Alachua County, Florida, that the attached copy of advertisement, being a
PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION,
State of Florida, Department of Environmental Protection

DEP File no: 0010001-004-AC

in the matter of

in the.....Court, was published in said newspaper in the issues of

FEBRUARY 1st

.....2003

Affidavit further says that the said THE GAINESVILLE SUN is a newspaper published at Gainesville, in said Alachua County, Florida, and that the said newspaper has heretofore been continuously published in said Alachua County, each day, and has been entered as second class mail matter at the post office in Gainesville, in Said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy Of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount for publication in the said newspaper.

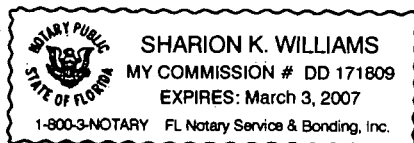
Sworn to and subscribed before me this

³⁰ day of Jan A.D., 2003

Sharion K Williams

(seal) Notary Public

Naomi Williams Jordan



Sun Classified Department

Acct: 203346

Name: FLORIDA POWER CORPORATION

Adid: 2094642

Ph: 8138665151

Class Rate:

Disp Rate:

P.O. BOX 14042

Credit Status:

3201 34TH STREET SOUTH

ST. PETERSBURG FL. 33733

Reply Request

Paytype BL

Rate LR LEGAL RATE

Rep: 16

Source F

Class 0001 Legal Notices

TFN

Start 2/1/03

Days 1 Rate Iss 1

Stop 2/1/03

0.00	Words.....	1,229	Price	886.72
0.00	Lines.....	272	Discount	0.00
0.00	Depth.....	272.00	Commis	0.00
0.00	Columns.....	2	Net	886.72
0.00	Graphic.....	0	St Tax	0.00
0.00	St Words.	11	Fed Tax	0.00
<input type="checkbox"/> Boxed Ad			Total	886.72
Free Day	0		Payment	0.00
Copy Line PUBLIC NOTICE OF			App Cr.	0.00
Sort String PUBLIC NOTICE			Balance	0.00
On Hold				

Product Code

Tear Sheets

Ad Killed

PO # 24437

Comments

Reason for Discount

24437 02/01	
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Editions

E1,

NEWSPAPER CLASSIFICATION...
 FLORIDA POWER CORPORATION...
 PUBLIC NOTICE...
 ST. PETERSBURG FL...
 33733...
 CLASS 0001...
 LEGAL RATE...
 RATE LR...
 LEGAL RATE...
 REPLY REQUEST...
 PAYTYPE BL...
 RATE LR...
 LEGAL RATE...
 REP: 16...
 SOURCE F...
 CLASS 0001...
 LEGAL NOTICE...
 TFN...
 START 2/1/03...
 DAYS 1...
 RATE ISS 1...
 STOP 2/1/03...
 WORDS 1,229...
 LINES 272...
 DEPTH 272.00...
 COLUMNS 2...
 GRAPHIC 0...
 ST WORDS 11...
 PRICE 886.72...
 DISCOUNT 0.00...
 COMMISS 0.00...
 NET 886.72...
 ST TAX 0.00...
 FED TAX 0.00...
 TOTAL 886.72...
 PAYMENT 0.00...
 APP CR 0.00...
 BALANCE 0.00...
 PRODUCT CODE...
 TEAR SHEETS...
 PO # 24437...
 AD KILLED...
 COMMENTS...
 REASON FOR DISCOUNT...
 EDITIONS...
 E1,

Classified Department

1:39 P

Adid: 2094642

RPORATION

Rate:

Status:

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Rep: 16

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2/1/03

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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
 1115 N.W. 17th Street
 Tallahassee, Florida 32304-3000

Florida Power Corporation
 University of Florida
 Campus Plaza
 Alachua County

The Department of Environmental Protection (DEP) is reviewing your application for the proposed gas turbine at its location. It is an air conditioning plant modification to Florida Power Corporation (FPC) existing and pending construction in the existing air conditioning plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

This modification allows for the adjustment of the construction phases (C) and (D) to reflect the performance of a public utility in carrying out construction of a project in the amount of \$10 million per year to that there will be an increase in the total number of construction phases. The proposed project will be completed by the end of 2003. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the DRAFT Permit Modification, which is no longer required in accordance with the following conditions: a) The permit is a final permit and is not subject to appeal or modification; b) The permit is a final permit and is not subject to appeal or modification; c) The permit is a final permit and is not subject to appeal or modification.

The Department will accept written comments and requests for public hearings concerning the proposed permit application at least 30 days from the date of publication of the Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public hearings should be submitted to the Department at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000. Any written comments and requests for public hearings should be submitted to the Department at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

The Department will issue the permit with the following conditions: a) The permit is a final permit and is not subject to appeal or modification; b) The permit is a final permit and is not subject to appeal or modification; c) The permit is a final permit and is not subject to appeal or modification.

DEP is reviewing your application for the proposed gas turbine at its location. It is an air conditioning plant modification to Florida Power Corporation (FPC) existing and pending construction in the existing air conditioning plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

DEP is reviewing your application for the proposed gas turbine at its location. It is an air conditioning plant modification to Florida Power Corporation (FPC) existing and pending construction in the existing air conditioning plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

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DEP is reviewing your application for the proposed gas turbine at its location. It is an air conditioning plant modification to Florida Power Corporation (FPC) existing and pending construction in the existing air conditioning plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

The complete project description is available on DEP's website at www.dep.state.fl.us/air/permits/modification.htm. The project is provided for by the contract for the proposed construction of the existing plant located at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the DRAFT Permit Modification, which is no longer required in accordance with the following conditions: a) The permit is a final permit and is not subject to appeal or modification; b) The permit is a final permit and is not subject to appeal or modification; c) The permit is a final permit and is not subject to appeal or modification.

The Department will accept written comments and requests for public hearings concerning the proposed permit application at least 30 days from the date of publication of the Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public hearings should be submitted to the Department at 1115 N.W. 17th Street, Tallahassee, Florida 32304-3000.

The Department will issue the permit with the following conditions: a) The permit is a final permit and is not subject to appeal or modification; b) The permit is a final permit and is not subject to appeal or modification; c) The permit is a final permit and is not subject to appeal or modification.

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NOV 08 2002

BUREAU OF AIR REGULATION

November 7, 2002

Mr. Al Linero, P.E. Administrator
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Re: Florida Power University of Florida Facility
Permit No. 0010001-003-AC

On April 29 of this year, Florida Power submitted a request to modify the above-referenced construction permit. Following review, the DEP rejected the request due to the potential applicability of PSD review to the combustion turbine because of the uncertainty of the total emissions from that unit under the proposal.

Florida Power has reconsidered the earlier submittal, and proposes to modify the request. In addition to committing to the facility-wide emissions cap, Florida Power will commit to maintaining total annual emissions from the combustion turbine to 141 tons/year. In this way, the operation of the unit obtains the flexibility to achieve the increased heat input level while ensuring that NO_x emissions do not reach the PSD threshold. Heat input curve changes have been approved at other Florida Power combustion turbine units in a similar manner, in that the heat input was changed while maintaining permitted emission limits. The proposed changes in the April 29 submittal are discussed again in detail as follows, and changes to the original proposal are indicated in strike-through and bold type.

The current construction permit was issued on May 18, 2001. Specific Condition 5 in Section III contains a designed maximum heat input for the combustion turbine (CT) of 392 mmBtu/hour at 59 degrees F when firing natural gas. This heat input was based on information provided to the DEP in the permit application, and it corresponds to data provided by General Electric (GE). Florida Power has found that the CT can attain a heat input level that is slightly higher than the currently permitted amount. Florida Power is ensuring that the daily average heat input of 392 mmBtu/hour is not exceeded, but this results in the loss of approximately 3 MW that could be produced.

The CT can actually attain a heat input of approximately 408 mmBtu/hour at 59 deg. F as shown on the enclosed heat input vs. engine inlet temperature graph. Florida Power requests that the permit be changed to incorporate this heat input curve. Florida Power is not seeking a

Mr. Al Linero
November 7, 2002
Page 2

change in the emission limits contained in the permit; compliance with all lb/hour and tons/year limits will be maintained.

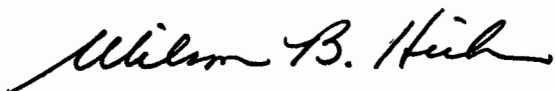
In addition, Condition 6 of Section III of the construction permit contains a fuel usage limit. If the revised heat input curve is incorporated as requested, the potential exists for the annual fuel usage to also require minor adjustment. Florida Power requests that the language in the permit regarding the fuel use limit be changed to reflect an approach similar to that for the annual hours of operation limit - that is, a stated baseline amount with the provision that the facility-wide annual NOx emissions limit is not exceeded. Florida Power requests that the second sentence of Condition 6 be changed to the following language:

*The turbine/~~duct burner~~ may operate for more hours per year and at a higher annual fuel consumption provided that the ~~facility-wide~~ NOx emissions **from the combustion turbine** do not exceed ~~194.3~~ 141 TPY.*

The combination of continuous monitoring and the associated reporting for both the short-term lb/hour limit and the long-term annual limit will ensure adequate monitoring for purposes of determining continuous compliance with the emissions limits.

Thank you for your continued consideration of this submittal. Please contact Mike Kennedy at (727) 826-4334 or Matt Lydon at (727) 826-4152 if you have any questions.

Sincerely,



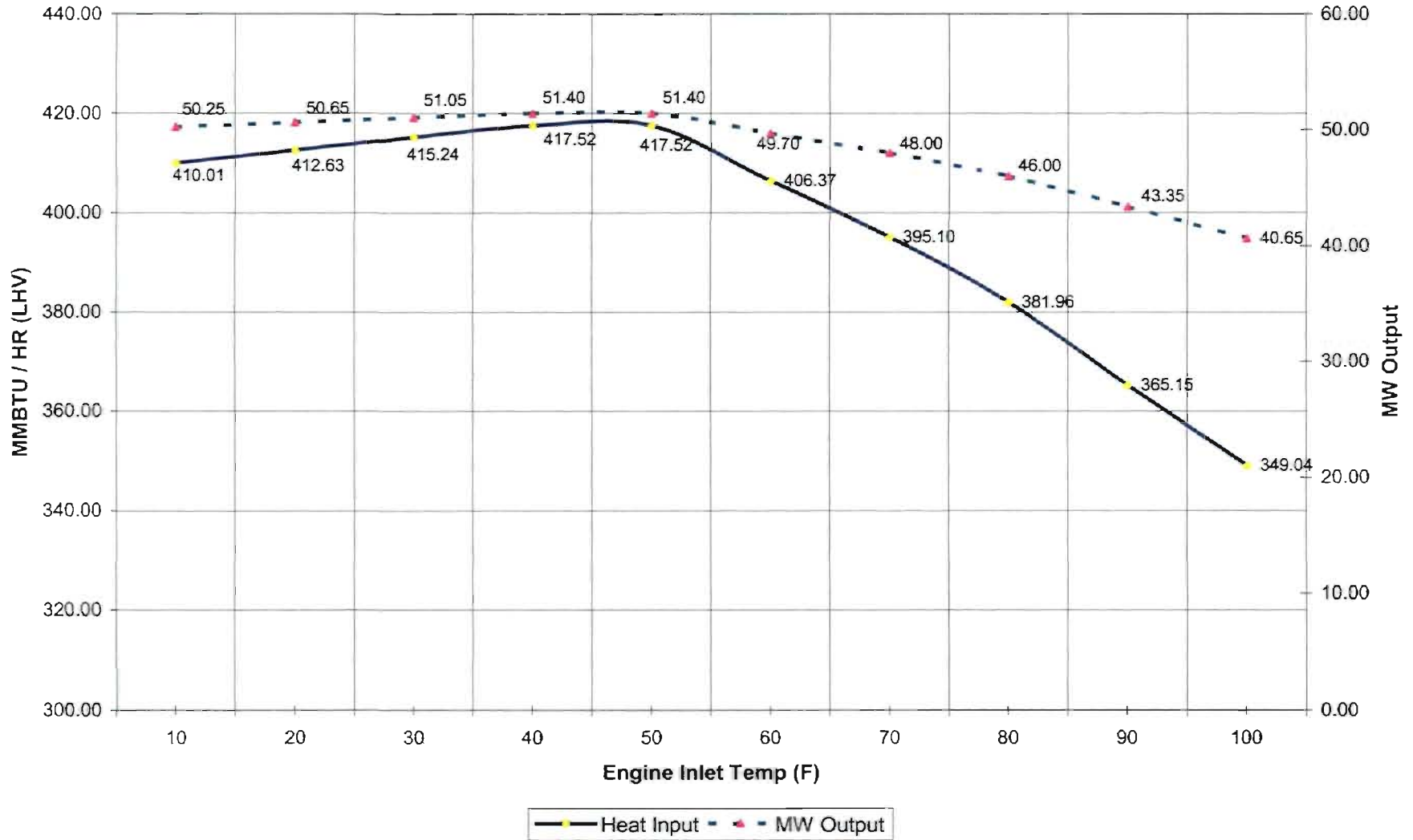
Wilson B. Hicks
Plant Manager
Responsible Official

cc. John Reynolds
enclosures

Mr. Al Linero
November 7, 2002
Page 3

bcc: J. M. Kennedy
M. Lydon
S. H. Osbourn, ENSR

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output
LM6000PC-Esprint - University of Florida Cogen - Florida Power





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MAY 07 2002

April 29, 2002

BUREAU OF AIR REGULATION

Mr. Al Linero, P.E. Administrator
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Re: Florida Power University of Florida Facility
Construction Permit No. 0010001-003-AC/ Title V Permit No. 0010001-001-AV

Florida Power is submitting a request to modify the above-referenced construction permit and, subsequently, the Title V operating permit that will incorporate the requested changes. The proposed changes are discussed in detail below.

The current construction permit was issued on May 18, 2001. Specific Condition 5 in Section III contains a permitted capacity, referenced to the heat input for the combustion turbine (CT). This permitted capacity is stated as 392 mmBtu/hour at 59 degrees F, based on the fuel's LHV when firing natural gas. The current Title V (TV) operating permit for this facility contains similar language, the difference being that the TV permit contains a "permitting note" that explains the purpose of the heat input rating (Specific condition A.1. of Section III of the current Title V permit). Without the permitting note, it could be implied that the heat input rating is a value that is not to be exceeded. The maximum heat input for this CT model, as well as the model that existed prior to the modification, actually occurs at 49F.

The heat input rating contained in the current construction permit was based on information provided to the DEP in the permit application, and it corresponds to data provided by General Electric (GE). Florida Power has found that the CT can attain a heat input level that is slightly higher than the current permit rating

The CT can actually attain a heat input of approximately 408 mmBtu/hour, as well as a nominal rating of 50 MW output, at 59 deg. F, as shown on the enclosed heat input/MW vs. engine inlet temperature graph. Florida Power requests that the current construction and operating permits be amended to incorporate this heat input curve. In addition, retention of the permitting note contained in the current TV permit will provide clarity for compliance purposes. In the interim, until additional guidance or permitting action is provided by the Department, Florida Power will continue to restrict operation to ensure that the heat input rating is not exceeded. This results in the loss of approximately 3 MW that could be produced, which becomes more critical as we approach the high demand summer peaking season. Florida Power bases this request on the understanding that additional operating flexibility will be provided, but there will be no change

in the emission limits contained in the permit (i.e., compliance with all lb/hour and tons/year limits will be maintained).

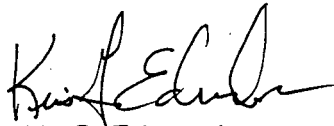
In addition, Condition 6 of Section III of the construction permit contains fuel usage limits for the DB (519.5 million ft³ of natural gas) and for the CT and DB combined (3.48 trillion Btu). This presents an additional complication, given that the fuel limit for the DB is a fuel flow value, while the limit for the CT and DB combined is provided as a total heating value. In order to avoid confusion and ensure compliance, Florida Power requests that the language in the permit regarding the fuel use limit be changed to reflect an approach similar to that for the annual hours of operation limit. Specifically, the permit should state a baseline amount that may be exceeded, provided that the facility-wide annual NOx emissions limit is not exceeded. Florida Power requests that the second sentence of Condition 6 be changed to the following language:

The turbine/duct burner may operate for more hours per year and at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.

The combination of continuous monitoring and the associated reporting for both the short-term lb/hour limit and the long-term annual limit will ensure adequate monitoring for purposes of determining continuous compliance with the emissions limits.

Florida Power has enclosed four copies of the appropriate permit application forms and the revised heat input curve. Thank you for your consideration of this submittal. Please contact Mike Kennedy at (727) 826-4334 or Matt Lydon at (727) 826-4152 if you have any questions.

Sincerely,



Kris G. Edmondson
Plant Manager



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Florida Power Corporation	
2. Site Name: University of Florida Cogeneration Plant	
3. Facility Identification Number: 0010001 [] Unknown	
4. Facility Location: Street Address or Other Locator: Mowry Road, Building 82, University of Florida City: Gainesville County: Alachua Zip Code: 32611-2295	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: J. Michael Kennedy, Manager Air Program, Environmental Services Department	
2. Application Contact Mailing Address: Organization/Firm: Florida Power Corporation Street Address: One Power Plaza, 263 13 th Ave., S. City: St. Petersburg State: FL Zip Code: 33701	
3. Application Contact Telephone Numbers: Telephone: (727) 826-4334 Fax: (727) 826-4216	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	5-7-02
2. Permit Number:	001 0001-004-Ae
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

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MAY 07 2002

Purpose of Application

Air Operation Permit Application

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

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

Current construction permit number: _____

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

Current construction permit number: _____

Operation permit number to be revised: _____

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

Operation permit number to be revised/corrected: 001-0001-001-AV

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

Operation permit number to be revised: _____

Reason for revision: _____

Air Construction Permit Application

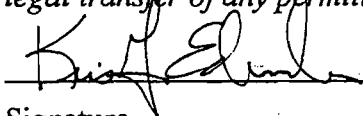
This Application for Air Permit is submitted to obtain: (Check one)

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

Construction permit no. 001-0001-003-AC

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Kris Edmondson, Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Florida Power Corporation Street Address: P.O. Box 14042 GV44 City: Gainesville State: FL Zip Code: 33733-4042
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (352) 337-6900 Fax: (352) 337-6920
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature 4/21/2002 Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Scott Osbourn Registration Number: 57557
2. Professional Engineer Mailing Address: Organization/Firm: ENSR International Street Address: 150 Second Ave. N., Suite 1500 City: St. Petersburg State: FL Zip Code: 33701-3343
3. Professional Engineer Telephone Numbers: Telephone: (727) 898-9591 Fax: (727) 898-9582

4. Professional Engineer Statement:

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

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

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

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

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

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



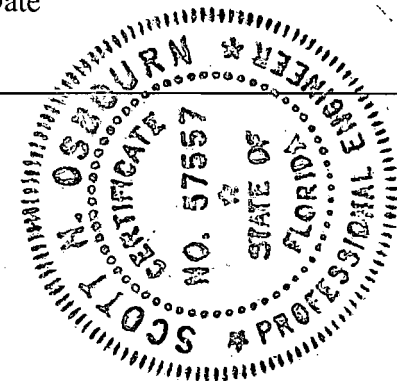
Signature

5/3/02

Date

(seal)

* Attach any exception to certification statement.



Construction/Modification Information

1. Description of Proposed Project or Alterations:

Applicant has found that the LM6000-PC-ESPRINT combustion turbine can attain a performance level of approximately 408 MMBTU/hour (LHV) and 50 MW at 59 deg. F as shown on the enclosed heat input vs. engine inlet temperature graph. Florida Power requests that the permit be amended to incorporate this heat input curve. In addition, retention of the permitting note contained in the current Title V permit will provide clarity for compliance purposes. No change is requested in any of the emission limits (lb/hr and tons/yr) that currently exist in the permit.

In addition, Florida Power requests that the turbine/duct burner operate at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.

2. Projected or Actual Date of Commencement of Construction: May 18, 2001

3. Projected Date of Completion of Construction: June 2, 2001

Application Comment

For clarity, the application forms are divided into:

- Facility information
- Newly modified emission unit (Combustion Turbine)

III. EMISSIONS UNIT INFORMATION

LM6000-PC-ESPRINT

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

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine (LM6000-PC-ESPRINT)</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: ARMS No. 001 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: June 2, 2001</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The new CT has replaced the previous CT, which exhausted through a heat recovery steam generator (HRSG) and a single stack. There are no other changes to the process configuration.</p>			

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	408 mmBtu/hr LHV @ 59°F inlet	
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:	50 MW @ 59°F inlet temp	
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year*
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
	<p>Maximum heat input based on natural gas-firing,</p> <p>* The permitted NOx cap of 194.3 TPY is based on operation of the CT/DB at maximum firing rates for 7,211 hr/yr and total fuel usage of 3.48 trillion Btu/yr. The CT/DB may operate for more hours per year (up to 8,760 hr/yr) and at a higher annual fuel consumption provided that the facility-wide NOx emissions do not exceed 194.3 TPY.</p>	

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

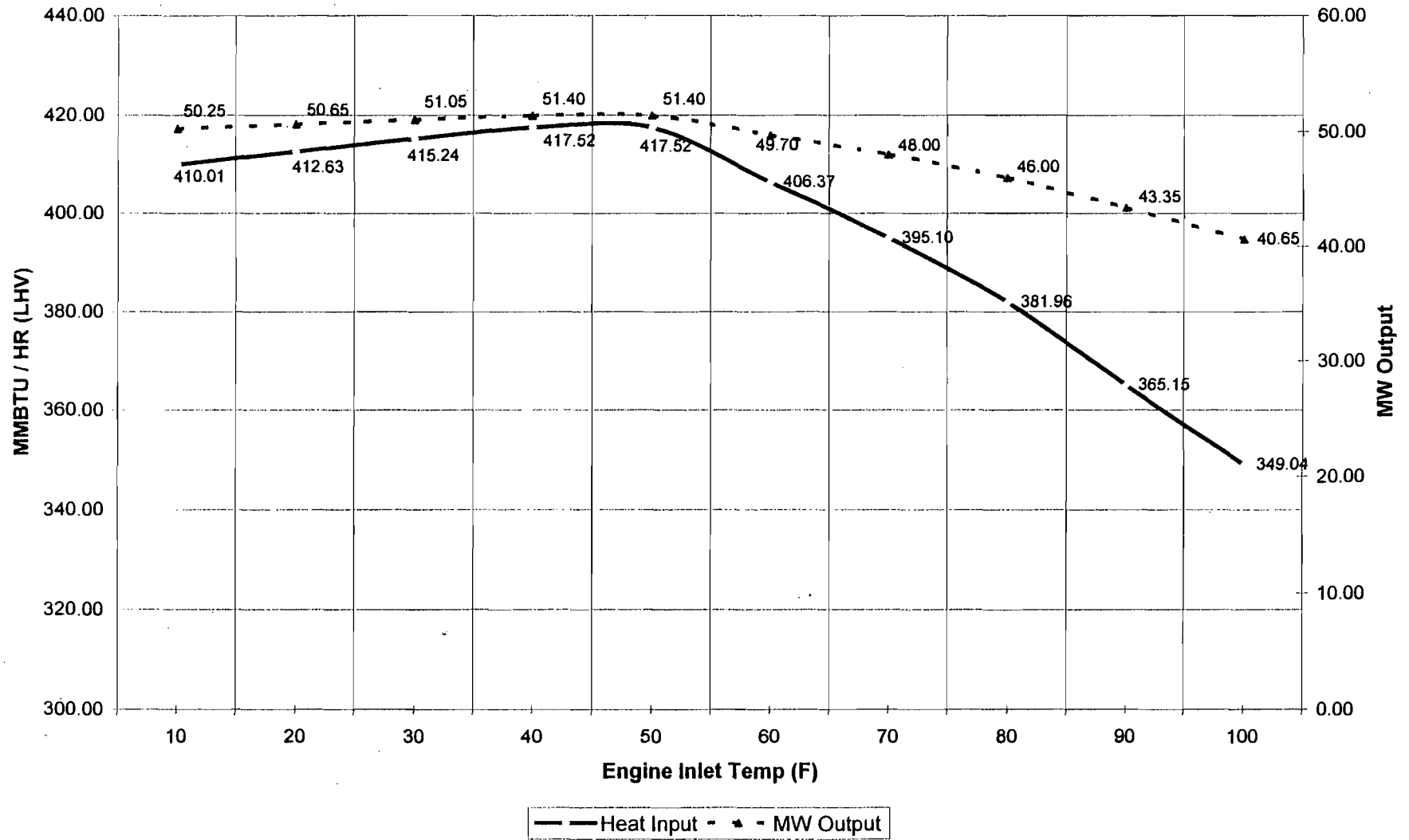
Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural Gas Firing		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet Burned
3. Maximum Hourly Rate: 0.429 (LHV)	4. Maximum Annual Rate: 3,663 (LHV)	6. Estimated Annual Activity Factor:
2. Maximum % Sulfur: 1 grain/ 100 CF	8. Maximum % Ash:	9. Million Btu per SCC Unit: 950 (LHV)
10. Segment Comment (limit to 200 characters): Based on inlet conditions 59°F and 60% relative humidity, LHV.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Distillate oil firing in CT		
3. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Thousand Gallons Burned
4. Maximum Hourly Rate: 2.9	5. Maximum Annual Rate: 635	6. Estimated Annual Activity Factor:
3. Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit: 132
10. Segment Comment (limit to 200 characters): Million Btu per SCC Unit = 132.48 (rounded to 132). Heat content based on LHV.		

Engine Inlet Temp. Vs. Heat Input (LHV) and MW Output LM6000PC-Esprint - University of Florida Cogen - Florida Power



PERMITTEE:

Florida Power Corporation/UF Cogen Plant
Mowry Road, Building 82
University of Florida
Gainesville, Florida 32611-2295

Permit No. 0010001-003-AC
File No. 0010001-003-AC
SIC No. 4911
Expires: December 31, 2002

Authorized Representative:

Kris Edmondson – Plant Manager

PROJECT AND LOCATION:

This Air Construction Permit is pursuant to the requirements for the installation of a nominal 48 megawatt (MW) combustion turbine (GE LM6000-PC-ESPRINT) to replace the existing 43 MW combustion turbine (GE LM6000-PA) that has been operated at the permittee's facility since 1994. The new model will utilize spray intercooling to maximize throughput thus reducing supplemental firing in the duct burner for meeting steam and power requirements. This unit will be located at the University of Florida Cogen Plant, Mowry Road, Building 82, UF, Gainesville, Alachua County. UTM coordinates are: Zone 17; 369.4 km E; 3,279.3 km N.

STATEMENT OF BASIS:

This Air Construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached Appendices and Tables made a part of this permit:

Appendix GC - Construction Permit General Conditions
Appendix GG - NSPS Subpart GG Requirements

Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT 0010001-003-AC

SECTION 1 – FACILITY INFORMATION

FACILITY DESCRIPTION

This existing University of Florida Cogen Plant consists of a single combustion turbine (CT), heat recovery steam generator (HRSG), duct burners (DB) located between the CT and the HRSG, and Boilers Nos. 4 and 5 utilized for backup only. This facility was permitted originally in 1992 to provide power and steam for the University of Florida. That project (PSD-FL-181) involved the construction of the cogen facility along with the permanent shutdown of Boilers Nos. 1, 2 and 3. This project is for the replacement of the original 43 Megawatt CT with a more efficient model that is moderately higher in capacity (48 MW).

EMISSIONS UNITS

This permit addresses the following emissions units:

E.U. No.	EMISSION UNIT DESCRIPTION
001	GE LM6000-PC-ESPRINT Combustion Turbine
002	Duct Burner System/HRSG
003	No. 4 Boiler
004	No. 5 Boiler

REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of Air Pollution as defined in Rule 62-210.200. It is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. and is a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

PSD review and a Best Available Control Technology (BACT) determination are not required for this project since the net emissions increases are less than PSD-significant levels for all pollutants. The new CT is subject to the New Source Performance Standard for Stationary Gas Turbines at 40CFR60, Subpart GG.

This facility is also subject to certain Acid Rain provisions of Title IV of the Clean Air Act.

PERMIT SCHEDULE/RELEVANT DOCUMENTS:

The documents listed below provide the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. All documents are on file with the Department.

- Application received January 29, 2001
- Department's letter to the applicant dated February 9, 2001
- Applicant's response letter dated March 5, 2001
- Public Notice Package including Technical Evaluation and Preliminary Determination, April 18, 2001
- Department's Final Determination and BACT Determination issued May 18, 2001.

SECTION II – ADMINISTRATIVE REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-0114.
2. Compliance Authority: All documents related to reports, tests, and notifications should be submitted to the DEP Northeast District Office, 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590, phone 904/448-4300 and Northeast District Branch Office, 101 NW 75th Street, Suite 3, Gainesville, Florida, phone 352/333-2850.
3. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
4. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
5. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
6. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]
7. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
8. Completion of Construction: The permit expiration date is December 31, 2002. Physical construction shall be complete by September 30, 2002. The additional time provides for testing, submittal of results, and submittal of the Title V permit to the Department.
9. Permit Expiration Date Extension: The permittee, for good cause, may request that this PSD permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.080, F.A.C.).

SECTION II – ADMINISTRATIVE REQUIREMENTS (CONT'D)

10. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, the extension of the permit expiration date, or any increases in MW generated by steam, heat input limits, hours of operation, oil firing, low or baseload operation, short-term or annual emission limits, annual fuel heat input limits or similar changes; the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [Note: Pursuant to PSD-FL-181, the permittee requested and received a 39.7 TPY net increase in NO_x emissions. Therefore, any net increase in NO_x emissions of 0.3 TPY above the allowable limitation established in PSD-FL-181 will initiate preconstruction review requirements pursuant to Rule 62-212.400(5), F.A.C., for NO_x as if construction of these emissions units had not yet begun. [Rules 62-212.400(2)(g) and 62-212.400(5), F.A.C.]
11. Application for Title IV Permit: An application for a Title IV Acid Rain Permit must be submitted to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia and a copy to the Department's Bureau of Air Regulation in Tallahassee at least 24 months before the date on which the new unit begins serving an electrical generator greater than 25 MW. [40 CFR 72]
12. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Bureau of Air Regulation, and a copy to the Department's Southeast District Office. [Chapter 62-213, F.A.C.]

OPERATIONAL REQUIREMENTS

13. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
14. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All plant operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
15. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without the applicable air control device operating properly. [Rule 62-210.650, F.A.C.]
16. Unconfined Particulate Matter Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

SECTION II – ADMINISTRATIVE REQUIREMENTS (CONT'D)

TESTING REQUIREMENTS

17. Test Notification: The permittee shall notify each Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. Notification shall include the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and conducting the test. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8]
18. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
19. Applicable Test Procedures
 - (a) *Required Sampling Time*. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)1. and 2., F.A.C.]
 - (b) *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
 - (c) *Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]
20. Determination of Process Variables
 - (a) *Required Equipment*. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
 - (b) *Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]
21. 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

SECTION II – ADMINISTRATIVE REQUIREMENTS (CONT'D)

22. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rule 62-297.310]
23. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2)(b), F.A.C.]

RECORDS

24. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

REPORTS

25. Emissions Performance Test Results Reports: A report indicating the results of any required emissions performance test shall be submitted to each Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
26. Annual Operating Reports: The permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the Department's Northeast District Office by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS

APPLICABLE STANDARDS AND REGULATIONS

1. Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-17, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 52, 60, 72, 73, and 75.
2. Applicable Requirements: Issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law, notwithstanding that these applicable requirements are not explicitly stated in this permit. In cases where there is an ambiguity or conflict in the specific conditions of this permit with any of the above-mentioned regulations, the more stringent local, state, or federal requirement applies. [Rules 62-204.800 and Rules 62-210.300 and 62-4.070 (3) F.A.C.]
3. NSPS Requirements: The combustion turbine (EU 001) shall comply with the applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The duct burner (EU 002) shall comply with the applicable provisions of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Emissions units subject to a specific NSPS subpart shall also comply with the applicable requirements of 40 CFR 60, Subpart A, General Provisions including:
 - 40CFR60.7 Notification and Record Keeping
 - 40CFR60.8 Performance Tests
 - 40CFR60.11 Compliance with Standards and Maintenance Requirements
 - 40CFR60.12 Circumvention
 - 40CFR60.13 Monitoring Requirements
 - 40CFR60.19 General Notification and Reporting requirements

GENERAL OPERATION REQUIREMENTS

4. Authorized Fuels: The combustion turbine shall fire only pipeline-quality natural gas or No. 2 distillate oil (or a superior grade) containing no more than 0.5% sulfur by weight. The permittee shall monitor sulfur content and nitrogen content of No. 2 fuel oil. The frequency of determinations of these values shall be as follows: (a) If the emissions unit is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source (b) If the emissions unit is supplied its fuel oil without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom fuel monitoring schedule requests shall be substantiated with data and submitted to the Department. The Department will submit the request to the Administrator, who must approve the custom fuel monitoring schedule before it can be used to comply with 40 CFR 60.334(b). [40 CFR 60.334(b)(1) and (2)]
5. Combustion Turbine/Duct Burner Capacity: The heat input to the combustion turbine shall not exceed 392 million Btu per hour (mmBtu/hr) when firing natural gas and 384 mmBtu/hr when firing

SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS (CONT'D)

fuel oil. The heat input to the duct burner system shall not exceed 188 MMBtu/hr on natural gas (no oil firing). The maximum heat input limits are based on the lower heating value (LHV) of each fuel, 100% load, and ambient conditions of 59°F temperature, 60% relative humidity, and 14.7 psia. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department within 45 days of completing the initial compliance testing. [Rule 62-210.200, F.A.C. (Potential to Emit), Permit 0010001-001-AV]

6. Hours of Operation/Fuel Usage Limitations: Combustion turbine/duct burner operation at maximum firing rates shall be limited to 7,211 hours per year (to prevent retroactive PSD applicability for NO_x under PSD-FL-181, pursuant to Rule 62-212.400(5), F.A.C., by reaching the 40 tons per year PSD applicability threshold). The turbine/duct burner may operate at lower than maximum rates for more hours per year provided that the annual fuel consumption limitations are not exceeded and that facility-wide NO_x emissions do not exceed 194.3 TPY. The total annual fuel usage for the combustion turbine and the duct burner combined shall not exceed 3.48 trillion BTU (includes up to 635,100 gallons No. 2 fuel oil fired in the turbine). The annual fuel usage by the duct burner is limited to 519.5 million ft³ natural gas.

EU 003 and 004 (Boilers Nos. 4 and 5) shall be allowed to operate as required for backup only as long as the facility-wide NO_x cap of 194.3 TPY is not exceeded for any calendar year. Emission factors pursuant to condition C.14 of the facility's Title V permit shall be applied to the fuel consumed by Boilers Nos. 4 and 5 to determine compliance with the facility cap. The NO_x emissions calculations shall be submitted to the Compliance Authority with the Annual Operating Report. The permittee shall install and operate a continuous monitoring system to monitor and record fuel consumption as required by 40 CFR 60.334. [Applicant Request, Rules 62-210.200 (Definitions), 62-212.400(5), F.A.C., 40 CFR 60 Subpart GG]

CONTROL TECHNOLOGY

7. Wet Injection: A wet injection system shall be installed to reduce NO_x emissions from the combustion turbine exhaust. The permittee shall install and operate a continuous monitoring system to monitor and record the ratio of water to fuel being fired in the combustion turbine. [Rule 62-212.400, F.A.C., 40 CFR 60, Subpart GG]
8. Nitrogen Oxides (NO_x): [The NO_x emissions limits include oxides of nitrogen consisting of both Nitric Oxide (NO) and Nitrogen Dioxide (NO₂). By convention, total NO_x on a mass basis is expressed as equivalent NO₂. NO_x concentration (ppm) is measured as NO by EPA stack sampling methods 7E and 20 and as NO₂ by the CEM analyzer. The NO_x concentration is converted to mass emissions by applying the molecular weight of NO₂ to the total flow rate.]
- a. Combustion Turbine (EU 001):
1. When firing natural gas, NO_x emissions from the combustion turbine shall not exceed any of the following: 25 ppmvd (corrected to 15% oxygen), 39.6 pounds per hour, 141* tons per year. [Applicant Request*, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]
 2. When firing distillate oil, NO_x emissions from the combustion turbine shall not exceed any of the following: 42.0 ppmvd corrected to 15% oxygen, 66.3 pounds per hour, 7.3 tons per year. The nitrogen content of the fuel oil shall be monitored in accordance with 40 CFR 60.334(b). [40 CFR 60 Subpart GG, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

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SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS (CONT'D)

3. The performance test shall be determined in accordance with EPA Method 7E or EPA Method 20. Ongoing and annual compliance thereafter shall be determined by the existing NO_x CEM system using hourly heat input rates applied to actual operating hours according to the procedures outlined in the facility's current Title V permit. [40 CFR 60, Subpart GG, Permit 0010001-001-AV]

b. Duct Burner (EU 002):

1. NO_x emissions from firing natural gas in the duct burner shall not exceed any of the following: 0.1 lb/MMBtu, 18.7 pounds per hour, 24.6 tons per year. [Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

2. The initial performance test and annual compliance tests shall be conducted as required in Specific Condition 8.a.3. above for EU 001 [40CFR60, Subpart GG]

c. CEM System (EU 001):

1. When firing natural gas, NO_x emissions from the combustion turbine shall not exceed 25.0 ppmvd corrected to 15% oxygen. [40CFR60, Subpart GG]

2. When firing distillate oil, NO_x emissions from the combustion turbine shall not exceed 42.0 ppmvd corrected to 15% oxygen. [40CFR60, Subpart GG]

3. Ongoing and annual compliance for EU 001 and shall be determined by the existing NO_x CEM system on a 30-day rolling average basis and reported as required by the current Title V permit, except for the following addition/revision: *To verify facility-wide compliance with the 194.3 TPY cap for NO_x emissions including EU 003 and 004 (Boilers Nos. 4 and 5), and to provide reasonable assurance that NO_x emissions will not be PSD-significant, CEM records along with cumulative fuel consumption records for EU 003 and 004 shall be kept and maintained by the permittee. Total NO_x emissions for the calendar year shall be reported in the facility's annual operating report.* [PSD-FL-181, Rule 62-212.400, F.A.C., Permit 0010001-001-AV]

9. Carbon Monoxide (CO) Emissions:

a. Combustion Turbine (EU 001):

1. When firing natural gas, CO emissions from the combustion turbine shall not exceed any of the following: 36 ppmvd (corrected to 15% oxygen), 35.8 pounds per hour, 127.5 tons per year. [Applicant Request, Rule 62-212.400, F.A.C.]

2. When firing distillate oil, CO emissions from the combustion turbine shall not exceed any of the following: 75.0 ppmvd (corrected to 15% oxygen), 70.5 pounds per hour, 7.7 tons per year. [Rule 62-212.400, F.A.C.]

3. Performance and annual compliance shall be determined in accordance with EPA Method 10. [40CFR60, Subpart GG and Appendix A]

b. Duct Burner (EU 002):

1. When firing natural gas, CO emissions from the duct burner shall not exceed any of the following: 0.15 lb/MMBtu, 28.1 pounds per hour, 36.9 tons per year. [Rule 62-212.400, Permit 0010001-001-AV]

2. Performance and annual compliance with the above limits shall be determined in accordance with EPA Method 10. [40CFR60, Subpart GG and Appendix A]

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SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS (CONT'D)

10. Sulfur Dioxide (SO₂) Emissions:

a. SO₂ emissions from the combustion turbine shall not exceed 0.015 percent by volume at 15 percent oxygen and on a dry basis. [40 CFR 60.333(a), Subpart GG]

b. The SO₂ performance test shall be conducted using EPA Method 20 in accordance with 40 CFR 60.335. [40 CFR 60, Subpart GG]

c. In lieu of an annual compliance test for SO₂, the fuels fired in the combustion turbine and/or duct burner shall have the following sulfur limits:

Natural Gas – 1.0 grain sulfur per 100 standard cubic feet

Fuel Oil – 0.5 percent (wt.) sulfur [PSD-FL-181], 0.8 percent (wt.) sulfur [40 CFR 60.333, Subpart GG]

d. Ongoing compliance with the fuel sulfur limit for natural gas and fuel oil shall be demonstrated by the fuel supplier's analysis reports containing the sulfur content of the fuel being supplied. Methods for determining the sulfur content of natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions. Ongoing compliance with the fuel oil sulfur limits shall be demonstrated by fuel analyses certified according to the provisions of 40 CFR 75 Appendix D by the fuel supplier. At the request of the Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content. [40 CFR 60, Subpart Db, Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

11. Visible Emissions (VE):

a. When firing natural gas in the combustion turbine (EU 001) and/or duct burner (EU 002), visible emissions shall not exceed 10 percent opacity as determined by EPA Method 9. [Permit 0010001-001-AV, Rule 62-212.400, F.A.C.]

b. When firing fuel oil in the combustion turbine (EU 001), visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9. [Permit 0010001-001-AV, Rule 62-212.400, F.A.C.]

c. Ongoing compliance with the above visible emissions limits shall be determined in accordance with EPA Method 9. [40 CFR 60, Appendix A]

12. Performance Tests: The combustion turbine and duct burner shall be stack-tested as required above when firing each authorized fuel to demonstrate compliance with the emission standards for NO_x, SO₂, CO and visible emissions. The tests must be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the emissions units. Tests for NO_x, SO₂ and CO shall be conducted concurrently. [Rule 62-297.310(7)(a)1., F.A.C.; 40 CFR 60.335]

13. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the combustion turbine/duct burner shall be tested when firing natural gas to demonstrate compliance with the emission limits for NO_x, CO and visible emissions. If the combustion turbine fires fuel oil more than 400 hours during the federal fiscal year, it shall also be tested for visible emissions when firing oil. [Rule 62-212.400, F.A.C.; Permit 0010001-001-AC]

SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS (CONT'D)

EXCESS EMISSIONS

14. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction are prohibited. These emissions shall be included in the 24-hour compliance averages for NO_x and for CO emissions.
[Rule 62-210.700(4), F.A.C.]
15. Excess Emissions Defined: During startup, shutdown, and documented unavoidable malfunction of the combined cycle gas turbine, the following permit conditions allow excess emissions or the exclusion of monitoring data for specifically defined periods of operation. These conditions apply only if operators employ the best operational practices to minimize the amount and duration of excess emissions during such incidents. If a CEM system reports emissions in excess of the standard, the permittee shall notify the Compliance Authority within (1) working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident.
[Turbine Manufacturer Data; Rule 62-210.700, F.A.C.]
16. Best operational practices: Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited. [Rule 62-210.700, F.A.C.]

MONITORING REQUIREMENTS

17. Continuous Emission Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the stack to measure and record the emissions of NO_x from these emissions units in a manner sufficient to demonstrate compliance with the CEM emission limits of this permit. The oxygen content or the carbon dioxide (CO₂) content of the flue gas shall also be monitored at the location where NO_x is monitored to correct the measured NO_x emissions rates to 15% oxygen. [Rule 62-210.700, F.A.C., 40 CFR 60, Subpart GG]
18. Fuel Consumption Monitoring of Operations: To demonstrate compliance with the fuel consumption limits, the permittee shall monitor and record the rates of consumption of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. To demonstrate compliance with the turbine capacity requirements, the permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]
19. Fuel Consumption Rates Monthly Monitoring: By the fifth calendar day of each month, the permittee shall record the monthly fuel consumption and hours of operation for the combustion turbine. The information shall be recorded in a verifiable manner and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department or the Compliance Authority. [Rule 62-4.070(3), F.A.C.]

SECTION III – EMISSIONS UNITS SPECIFIC CONDITIONS (CONT'D)

NOTIFICATION, REPORTING, AND RECORDKEEPING

20. Records: All measurements, records, and other data required to be maintained shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available upon request. [Rules 62-4.160 and 62-213.440, F.A.C]
21. NSPS Notifications: All applicable notifications and reports required by 40 CFR 60, Subpart A shall be submitted to the Compliance Authority. [40 CFR 60, Subpart A]
22. Semi-Annual Reports: Semi-annual excess emission reports, in accordance with 40 CFR 60.7 (a)(7)(c) (2000 version), shall be submitted to each Compliance Authority. [40 CFR 60.7]
23. Addresses: The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northeast District Office and Branch Office: Department of Environmental Protection, Northeast District Office, 825 Baymeadows Way, Suite 200-B, Jacksonville, FL 32256-7590, Telephone: 904/448-4300, Fax: 904/448-4363, and Department of Environmental Protection, Northeast District Branch Office, 5700 Southwest 34th Street, Suite 1204, Gainesville, FL 32608, Telephone: 352/955-2095, Fax: 352/377-5671.

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TITLE V EMISSION LIMITS

(Summary of Emission Limits in Current Title V Permit 0010001-001-AV)

Pollutant	Fuel Type	Basis of Limit (CT/DB)	CT/DB	
			lbs/hr	TPY
NO _x ¹	Natural Gas	25 ppmvd/0.1 lb per MMBtu	39.6/18.7 ³	142.7/24.6 ^{1,2}
	No.2 Fuel Oil	42 ppmvd/Not Applicable	66.3 ³ /Not Applicable	7.3 ^{1,2} /Not Applicable
SO ₂	No.2 Fuel Oil	BACT	0.5% (wt.) Sulfur	
CO	Natural Gas	42 ppmvd/0.15 lb per MMBtu	38.8/28.1	158.0/36.9
	No.2 Fuel Oil	75 ppmvd/Not Applicable	70.5/Not Applicable	7.7/Not Applicable
VE	Natural Gas		10% opacity ⁴	
VE	No. 2 Fuel Oil		20% opacity, except for one 6-min. period per hour of not more than 27% opacity ⁴	

- ¹ The NO_x limit was accepted by the applicant to escape PSD New Source Review.
- ² Any net increase in NO_x emissions of 0.3 TPY above the combined allowable limits of the CT and DB (174.6 TPY; and, see Specific Conditions B.4. and D.2.b.) will initiate preconstruction review requirements pursuant to Rule 62-212.400(5), F.A.C., for NO_x for the CT and DB as if construction of these emissions units had not yet begun.
- ³ 30-day rolling average, compliance timeframe. (See Specific Condition A.6.)
- ⁴ Since the CT and DB are in series, the opacity standard is applicable when the CT or the CT and DB are in operation, except when the CT is firing No. 2 distillate fuel oil, at which time the CT's opacity standard for fuel oil will be in effect. See Specific Condition B.4.

The permittee has elected to demonstrate compliance with the NO_x emissions limits using a continuous emissions monitor system (CEMS). Since the CT and DB are in series, the allowable emissions for both emissions units shall be combined for ongoing compliance demonstration purposes. For the purpose of demonstrating ongoing compliance with the applicable combined emissions limits for both the CT and DB, using the stack CEMS, compliance is considered to occur when the NO_x emissions are less than or equal to (1) 39.6 lbs/hr or 66.3 lbs/hr when only the CT is operating and firing natural gas or No. 2 distillate fuel oil, respectively; (2) 58.3 lbs/hr when both the CT and DB are operating and firing natural gas; or, (3) 85.0 lbs/hr when both the CT and DB are operating and the CT is firing No. 2 distillate fuel oil and the DB is firing natural gas. The daily rolling average compliance value shall be calculated based on the proportion of hours operated in a day (midnight to midnight) that the CT or both the CT and DB are operating. Any portion of an hour that the DB operates shall be recognized as an hour-period on the daily operation. For example, in a given daily timeframe, with 20 hours of CT operation only while firing natural gas and 4 hours of CT-DB operation while firing natural gas:

$$\begin{aligned} \text{Calculated Daily NO}_x \text{ Emissions Value} &= \\ &[(39.6 \text{ lbs/hr} \times 20\text{-hrs}) + (58.3 \text{ lbs/hr} \times 4\text{-hrs})]/24\text{-hrs} = \\ &42.72 \text{ lbs/day NO}_x \text{ emissions value} \end{aligned}$$

For the 30-day rolling average, this daily calculated emissions value will then be added to the previous 29-day period of daily calculated emission values and divided by 30 (days) to establish the 30-day average emissions value for comparing to the CEMS data over the same 30-day period.

$$\begin{aligned} \text{Calculated 30-Day Average NO}_x \text{ Emissions Value} &= \\ &[42.72 \text{ lbs/day} + \text{"previous 29-daily emission values (lbs/day) summation"}]/30\text{-days} = \\ &\# \text{ lbs/30-day average NO}_x \text{ emissions value} \end{aligned}$$

Compliance with the permitted NO_x emission limitation is considered satisfied as long as the NO_x emissions value from the stack CEMS is less than or equal to the calculated NO_x emissions value, averaged over the same 30-day period.

[AC 01-204652/PSD-FL-181/PSD-FL-181(A); 40 CFR 60.44b(i); and, Rule 62-212.400(2)(g), F.A.C.]