

Memorandum

Florida Department of Environmental Protection

TO: Clair Fancy

THRU: Al Linero *AAL* 7/1

FROM: Martin Costello *MC*

DATE: July 1, 1997

SUBJECT: City of Tallahassee, Purdom Unit 8

Attached is the public notice package and draft PSD permit for the planned Tallahassee Purdom Unit 8. The new unit will replace two small existing boilers with a 160 MW combustion turbine and a 90 MW HRSG. The facility will take emissions caps such that there will not be physical increases in emissions of nitrogen oxides and sulfur dioxide compared to the past two years of operation. However there will be an "actual emissions increase" as defined by the rules based on netting calculations.

Controls consist of Dry Low NO_x technology and burning natural gas with 0.05 percent sulfur fuel oil as the backup fuel. The Park Service and EPA have reviewed the application and had no adverse comments.

I recommend your approval and signature.

AAL/mc

Is your RETURN ADDRESS completed on the re-

permit
 • Write "Return Receipt Requested" on the matpiece below the article number.
 • The Return Receipt will show to whom the article was delivered and the date delivered.

- 1. Addressee's Address
 - 2. Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to Jenette Curtis, Env. Adm. City of Tallahassee Utilit. Serv 300 S. Adams Street Tallahassee, Fl 32301		4a. Article Number P 265 659 236
5. Received By: (Print Name) Kenneth George		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
6. Signature: (Addressee or Agent) X <i>Kenneth George</i>		7. Date of Delivery JUL 08 1997
8. Addressee's Address (Only if requested and fee is paid)		

PS Form 3811, December 1994

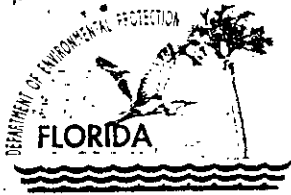
Thank you for using Return Receipt Service

P 265 659 236

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Post to <i>Jenette Curtis</i>	
Street & Number <i>City of Tall.</i>	
Post Office, State, & ZIP Code <i>Tallah. Fl</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
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Return Receipt Showing to Whom & Date Delivered	
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TOTAL Postage & Fees	\$
Postmark or Date	<i>7-1-97</i>

PS Form 3800, April 1995
PSO-FI-239
PA 97-36



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 1, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Jennette Curtis
Environmental Administrator
City of Tallahassee Utility Services
300 South Adams Street
Tallahassee, Florida 32301

Re: Purdom Unit 8, Combustion Turbine and
Heat Recovery Steam Generator
DRAFT Permit No. PSD-FL-239/PA97-36

Dear Ms. Curtis

Enclosed is one copy of the Draft permit for the Prevention of Significant Deterioration (PSD Permit) for the Purdom Generating Station including the new Unit 8 located at 667 Port Leon Drive, St. Marks, Wakulla, County. The Technical Evaluation and Preliminary Determination, Best Available Control Technology, the Department's Intent to Issue PSD permit and the "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time 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 Martin Costello or Mr. Linero at 904/488-1344.

Sincerely,

A. A. Linero, P.E. 7/1
for C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/mc

Enclosures

In the Matter of an
Application for Permit by:

City of Tallahassee Utility Services
300 South Adams Street
Tallahassee, FL 32301

DRAFT Permit No.: PSD-FL-239
Power Plant Siting: PA97-36
Purdum Generating Station
Wakulla County

INTENT TO ISSUE PSD PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit for the Prevention of Significant Deterioration (copy of DRAFT PSD Permit attached) for the proposed project, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, the City of Tallahassee, applied on March 17, 1997 to the Department for a PSD permit and Siting Certification to construct and operate a 250 megawatt combustion turbine and heat recovery steam generator for its Purdom Generating Station located at 667 Port Leon Drive, St. Marks, Wakulla, 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 a PSD permit is required for the proposed work.

The Department intends to issue this PSD permit 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 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT". The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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: 904/488-1344; Fax 904/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit, in accordance with the conditions of the enclosed DRAFT Permit 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 DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT." Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

Executed in Tallahassee, Florida.

C. H. Fancy, P.E. 7/1
for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE PSD PERMIT (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, Draft BACT Determination, and the DRAFT permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 7-1-97 to the person(s) listed:

Ms. Jennette Curtis, City of Tallahassee *
Mr. Darrel Graziani, P.E.
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Ed Middleswart, NWD
Mr. Buck Oven, DEP

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Buck Oven 7-1-97
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit No.: PSD-FL-239
Power Plant Siting No. PA97-36

City of Tallahassee Utility Services
Purdom Generating Station Unit 8
Wakulla County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit for the Prevention of Significant Deterioration (PSD permit) to the City of Tallahassee for the Purdom Generating Station proposed Unit 8 located in the City of St. Marks, Wakulla County. A Best Available Control Technology (BACT) determination was required for particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21. The applicant's name and address are City of Tallahassee Utility Services, 300 South Adams Street, Tallahassee, FL 32301

The City of Tallahassee has applied to construct Unit 8, a 250 megawatt (MW) combined cycle combustion turbine and heat recovery steam generator to replace existing conventional steam generating Units 5 and 6. Emissions control will be accomplished by dry low NO_x burners and use of natural gas, an inherently clean fuel. A new 200 foot stack and a cooling tower will be added to the facility for Unit 8.

Other existing units at the plant consist of Unit 7, a 44 MW steam boiler fired by natural gas and fuel oil, two older combustion turbines with a nominal rating of 12.5 MW each and a small auxiliary steam boiler fired by natural gas. The City has requested a facility-wide emissions cap for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) to ensure that no increase in these emissions will occur once Unit 8 is constructed. Therefore in the future, emissions from the facility, including Unit 8, will be less than or equal to emissions before the addition of Unit 8. Electrical output from this facility will be about three times higher than the current level with the addition of Unit 8.

Total facility-wide annual emissions including those from the project are summarized below:

Pollutants	Current Actual	Future Estimated Emissions	Net Increase
	ton/yr	ton/yr	ton/yr
PM ₁₀	10.7	59.0	48.3
SO ₂	80.0	80.0	0
NO _x	467.0	467.0	0
CO	66.0	193.0	127.0

An air quality impact analysis was conducted. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. The maximum predicted PSD Class II increments of NO₂, SO₂, and PM₁₀ consumed by all sources in the area, including this project, will be as follows:

	<u>PSD Class II Increment Consumed (µg/m³)</u>	<u>Allowable Increment (µg/m³)</u>	<u>Percent Increment Consumed</u>
PM ₁₀			
24-hour	3.3	31	11
Annual	0.3	17	2
SO ₂			
3-hour	14.4	512	3
24-hour	2.4	91	3
Annual	0.0	20	0
NO ₂			
Annual	6.2	25	25

IN THE NEWSPAPER

The maximum predicted PSD Class I increments of NO₂, SO₂, and PM₁₀ in the St. Marks National Wilderness Area and the Bradwell Bay National Wilderness Area consumed by all sources in the area, including this project, will be as follows:

<u>PSD Class I Increment Consumed ($\mu\text{g}/\text{m}^3$)</u>		<u>Allowable Increment ($\mu\text{g}/\text{m}^3$)</u>	<u>Percent Increment Consumed</u>
PM₁₀			
24-hour	0.73	8	9
Annual	0.16	4	4
SO₂			
3-hour	16.9	25	68
24-hour	4.9	5	98
Annual	0.0	2	0
NO₂			
Annual	0.91	2.5	36

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit 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 DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The issuance of this PSD permit is being coordinated with a certification under the Power Plant Siting Act (Chapter 403.501-519, Florida Statutes). If a petition for an administrative hearing on the preliminary determination and proposed PSD permit is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3), Florida Statutes.

The Department will issue FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. or a party requests mediation as an alternative remedy under Section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

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

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 of intent. 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.

IN THE NEWSPAPER

A person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information: (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any; (b) A statement of the preliminary agency action; (c) A statement of the relief sought; and (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time; (c) The agreed allocation of the costs and fees associated with the mediation; (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation; (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen; (f) The name of each party's representative who shall have authority to settle or recommend settlement; and (g) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 F.S. remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-1344
Fax: 850/922-6979

Department of Environmental Protection
NW District Office
160 Government Center
Pensacola, Florida 32501
Telephone: (850) 444-8300
Fax: (850) 444-8417

The complete project file includes the application, technical evaluations, Draft Permit, 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 Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 904/488-1344, for additional information.

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., or a party requests mediation as an alternative remedy under Section 120.573 F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

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

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 of intent. 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 person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information: (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any; (b) A statement of the preliminary agency action; (c) A statement of the relief sought; and (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time; (c) The agreed allocation of the costs and fees associated with the mediation; (d) The agreement of the parties on the confidentiality of discussions and

documents introduced during mediation; (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen; (f) The name of each party's representative who shall have authority to settle or recommend settlement; and (g) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 F.S. remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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.

DRAFT PSD PERMIT CONDITIONS

General Conditions

Same as always.

Specific Conditions:

Purdom Unit 8

The construction and operation of the City of Tallahassee Purdom Unit 8, a combined cycle combustion turbine, shall be in accordance with all applicable provisions of Chapters 62-210 through 297 and 62-4, Florida Administrative Code (F.A.C.), and 40 CFR 60 Subparts A and GG (1997 version). The following emission limitations and conditions reflect the BACT determinations for Purdom Unit 8. In addition to the foregoing, the project shall comply with the following conditions:

A. General Operation Requirements

1. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Purdom Unit 8 at ambient conditions of 95°F temperature, 60% relative humidity, and 14.7 psi pressure shall not exceed 1,467.7 mmBtu/hr when firing natural gas, nor 1,659.5 mmBtu/hr when firing No. 2 fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) at least 90 days prior to initial compliance testing. These curves or equations shall be used to establish the maximum allowable heat inputs at other ambient conditions for compliance determinations.
2. Purdom Unit 8 may operate continuously (i.e., 8760 hours per year).
3. Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight shall be fired in the combined cycle combustion turbine.
4. The permittee shall install duct module(s) suitable for possible future installation of an oxidation catalyst and/or SCR equipment on the combined cycle generating unit.
5. Dry low NO_x combustors shall be used on Unit 8 when firing natural gas and water injection shall be used when firing No. 2 fuel oil for control of NO_x emissions.
6. 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.

B. Emission Limits and Standards

The following shall apply upon completion of the initial compliance tests:

1. Best Available Control Technology. The following is a summary of the BACT determinations by DEP:

Pollutant	Fuel	BACT Standard
NO _x	Gas	12 ppmvd (a) (d)
	Oil	42 ppmvd (a) (b) (d)
SO ₂	Gas	Good combustion
	Oil	Good combustion of low (0.05%) sulfur fuel oil
PM/PM ₁₀ (d)	Gas	Good combustion
	Oil	Good combustion of low (0.05%) sulfur fuel oil
Visible Emissions	Gas	10 percent opacity
	Oil	10 percent opacity
CO	Gas	25 ppmvd (c) (d)
	Oil	90 ppmvd (c) (d)

(a) 30-day rolling average.
(b) Plus an allowance for fuel bound nitrogen using the formula provided in Condition B4.
(c) 3-hour blocked average.
(d) Not corrected to ISO conditions.

- Visible Emissions. Visible emissions shall not exceed 10 percent opacity when firing either natural gas or No. 2 fuel oil.
- Oxides of Nitrogen. Oxides of nitrogen emissions when firing natural gas shall not exceed 12 ppmvd at 15% O₂ on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by applicable compliance measures.
- Oxides of Nitrogen. Oxides of nitrogen emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O₂ on a 30-day rolling average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by applicable compliance measures, when fuel bound nitrogen values are less than or equal to 0.015 percent. For higher fuel bound nitrogen values (up to 0.03 percent), oxides of nitrogen shall be limited by the following formula:

$$STD = 0.0042 + F \text{ where:}$$

STD = allowable NO_x emissions (percent by volume at 15 percent O₂ and on a dry basis).

F = NO_x emission allowance for fuel-bound nitrogen defined by the following table:

Fuel-Bound Nitrogen (% by Weight)	F (NO_x % by Volume)
0 < N ≤ 0.015	0
0.015 < N ≤ 0.03	0.04 (N-0.015)

where: N = the nitrogen content of the fuel (% by weight).

5. Oxides of Nitrogen. Annual emissions of NO_x shall not exceed 467 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods.
6. Sulfur Dioxide. Annual emissions of SO₂ shall not exceed 80 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods.
7. Carbon Monoxide. Carbon monoxide emissions when firing natural gas shall not exceed 25 ppmvd on a 3-hour blocked average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by applicable compliance methods.
8. Carbon Monoxide. Carbon monoxide emissions when firing No. 2 fuel oil shall not exceed 90 ppmvd on a 3-hour blocked average basis (except during periods of startup, shutdown, malfunction or fuel switching), as measured by applicable compliance methods.

C. Excess Emissions

1. Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.
2. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited pursuant to Rule 62-210.700, F.A.C.

D. Compliance Determination

1. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate at which this unit will be operated, but not later than 180 days of initial operation of the unit and annually thereafter, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-297, F.A.C.

Initial (I) compliance tests shall be performed on Unit 8 while firing each fuel (gas, oil). Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C., on Unit 8.

- Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A); annual on oil if greater than 400 hours of oil firing; however, testing on gas is required only once every five years.
- Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I, A).
- Method 20 Determination of Oxides of Nitrogen and diluent emissions from Stationary Gas Turbines (I only, for compliance with 40 CFR 60 Subpart GG)

- 40 CFR 75 Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMs).(Continuous Method of Compliance)

Note: No other methods may be used for compliance testing unless prior DEP approval is received in writing. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

2. Notwithstanding the requirements of Rule 62-297.340, F.A.C., the exclusive use of fuel oil with a maximum sulfur content limit of 0.05% or less, by weight, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with 40 CFR 60.333 SO₂ emission limit and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with an EPA approved custom fuel monitoring schedule. For the purposes of demonstrating compliance with the emissions caps (Conditions B4 and B5) and for acid rain compliance purposes, natural gas and fuel oil supplier data for sulfur content may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335 (e) (1997 version).
3. An initial test for CO, concurrent with the initial NO_x test, is required. The initial NO_x and CO test results shall be the average of three valid one-hour runs. The DEP's Northwest District office shall be notified, in writing, at least 30 days prior to the initial compliance tests and at least 15 days before annual compliance test(s). Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test 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 purposes of additional compliance testing to regain the permitted capacity. Compliance test results shall be submitted to the DEP's Northwest District office no later than 45 days after completion of the last test run.

E. Notification, Reporting and Recordkeeping

1. All measurements, records, and other data required to be maintained by the City of Tallahassee shall be retained for at least five (5) years following the date on which such

measurements, records, or data are recorded. These data shall be made available to the DEP representatives.

F. Monitoring Requirements

1. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from this source. Thirty day rolling average periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported as excess emissions following the format of 40 CFR 60.7 (1997 version). The continuous emission monitor must comply with 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored and recorded. The NO_x CEMS will be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in accordance with 40 CFR 60, Subpart GG (1997 version), and are used as indicators of compliance with the NO_x standard specified in the subpart. Since the NO_x emission standard from Subpart GG is more than twice the BACT standard, monitoring for emissions in excess of the BACT limits using the NO_x CEMS is more stringent. FBN levels are not required for excess emission reports when excess emissions are reported and based on the stack monitoring system. The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by certification tests of the NO_x CEMS.
2. The following custom monitoring schedule for No. 2 fuel oil is approved (pending EPA concurrence). For all bulk shipments of No. 2 fuel oil received at the Purdom Station, an analysis which reports the sulfur content and the fuel bound nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
3. The following custom monitoring schedule for natural gas is approved (pending EPA concurrence) in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2).
 - a. Monitoring of natural gas nitrogen content shall not be required.
 - b. Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. Once Unit 8 becomes operational, monitoring of the sulfur content of the natural gas shall be conducted semiannually.
 - c. Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the City shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.
 - d. The City shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

- e. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the City for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.
 - f. The City shall obtain the sulfur content of the natural gas from the fuel supplier (Florida Gas Transmission Company).
4. Compliance with the annual facility-wide NO_x cap shall be determined by adding the annual NO_x emissions in tons per year determined by the CEMS required by 40 CFR 75 for Unit 8 along with existing Unit 7 to annual NO_x emissions calculated for existing GT1, GT2 and the auxiliary boiler determined by the following formulas:

GT 1 & GT 2 NO_x (natural gas)= (Fuel Usage)X (Heating Value of Natural Gas) X (0.44 lb/mmBtu)

Fuel usage shall be measured by fuel meter, recorded daily when unit is operated
 Heating value of natural gas will be determined from fuel supplier data
 0.44 lb/mmBtu = AP-42 emission factor

GT 1 & GT 2 NO_x (fuel oil)= (Fuel Usage)X (Heating Value of Fuel Oil) X (0.698 lb/mmBtu)

Fuel usage shall be measured by fuel meter, recorded daily when unit is operated
 Heating Value of fuel oil will be determined from fuel supplier data
 0.698 lb/mmBtu = AP-42 emission factor

Aux. Boiler NO_x (natural gas)= (Fuel Usage)X (140 lb/mmCF)

Fuel usage shall be measured by flow meter, recorded daily when unit is operated
 140 lb/mmCF = AP-42 emission factor

5. Compliance with the annual facility-wide SO₂ cap shall be determined by adding the annual SO₂ emissions in tons per year determined by the CEMS required by 40 CFR 75 for Unit 8 along with existing Unit 7 to annual SO₂ emissions calculated for existing GT1, GT2 and the auxiliary boiler determined by the following formulas:

GT 1 & GT 2 SO₂ Emissions (natural gas)= (Fuel Usage) X (Heating Value of Natural Gas) X (0.0006 lb/mmBtu)

Fuel usage shall be measured by fuel meter, recorded daily when unit is operated
 Heating Value of natural gas from fuel supplier data
 Sulfur Content default of NADB = 0.0006 lb-SO₂/mmBtu

GT 1 & GT 2 SO₂ Emissions (fuel oil) = (Fuel Usage) X (% Sulfur Content of oil) X (Molecular weight SO₂ / Molecular weight of S) X (Conversion factor)

Fuel usage shall be measured by fuel meter, recorded daily when unit is operated

% Sulfur will be determined from fuel oil analysis each time fuel is delivered

Molecular weight of SO₂ = 64

Molecular weight of S = 32

Conversion factor of 95% = 0.95

Aux. Boiler SO₂ Emissions (natural gas)= (Fuel Usage) X (Heat Rate of Natural Gas) X (0.0006 lb/mmBtu)

Fuel usage shall be measured by Fuel Meter, Recorded Daily when unit is operated

Heating Value of Natural Gas from fuel supplier data

Sulfur Content default of NADB = 0.0006 lb/mmBtu

G. Rule Requirements

1. The emission unit shall be in compliance with all applicable provisions of Chapter 403, F.S., and Chapters 62-4, 210, 212, 275, 296 and 297, F.A.C., except as otherwise specified herein.
2. The emission unit shall be in compliance with all applicable requirements of 40 CFR 60, Subpart A, Appendix A and Appendix B (1997 version), Subpart GG - Standards of Performance for Stationary Gas Turbines (1997 version), and Rule 62-204.800 (7) (b) 38, F.A.C., except as otherwise specified herein. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). All notifications and reports required by this specific condition shall be submitted to the DEP's Northwest District office.
3. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62-210.300(1), F.A.C.).
4. Except as otherwise specified herein, the emission unit shall be in compliance with all applicable provisions of Rule 62-210.650, F.A.C.: Circumvention; Rule 62-210.700, F.A.C.: Excess Emissions; Rule 62-204.800 (7) (b) 38, F.A.C.: Standards of Performance for New Stationary Sources (NSPS); Chapter 62-297, F.A.C.: Stationary Sources - Emissions Monitoring; and, Rule 62-4.130, F.A.C.: Plant Operation - Problems.
5. If construction does not commence within 18 months of issuance of this permit, the permittee shall obtain from the DEP's Bureau of Air Regulation a review and, if necessary a modification of the BACT determination and allowable emissions (40 CFR 52.21(r)(2) (1997 version)).
6. Quarterly excess emission reports, in accordance with 4 CFR 60.7 (7) (c) (1997 version), shall be submitted to the DEP's Northwest District office.

7. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation 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 DEP's Northwest District office by March 1st of each calendar year.
8. Stack sampling facilities shall be installed in accordance with Rule 62-297.345, F.A.C.
9. The permittee, for good cause, may request that this construction 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 62-4.090, F.A.C.).

H. Modifications

1. 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.