Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

July 22, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael Olive, Plant Manager
Progress Energy Florida
100 Central Avenue
St. Petersburg, FL 33701

Re: Request for Additional Information
Title V Renewal Application
File No. 0170004-009-AV
Crystal River Plant

Dear Mr. Olive:

The Department is in receipt of your Title V Renewal application, however in order to continue processing the application, we will need the additional information below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

Request for permit revisions

The Department has read the application to understand that Progress Energy is making four requests for permit revision. Please comment and or clarify as appropriate (deletions are shown as ~~struck through~~ and additions are shown as underlined):

1) EPA generally accepts Part 75 CEMS as Part 60 CEMS provided the requirements of both parts are met. Although the language Progress is proposing appears to be acceptable, the Department requests that Progress define the NO_X and SO_2 spans, to be certain that the requirements of both parts are indeed met. This is what Progress has proposed:

B.14. Pursuant to 40 CFR 60.45 Emission Monitoring.

CMS for Opacity, SO2, NOx, and CO2 are required.
(a) Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide except as provided in 40 CFR 60.45(b).
(c) For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
(1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined ~~as follows:~~ per the applicable requirements in 40 CFR Parts 60 and 75.

~~[In parts per million]~~

~~Fossil fuel~~	~~Span value for sulfur dioxide~~	~~Span value for nitrogen oxides~~
~~Gas~~	~~(1)~~	~~500~~
~~Liquid~~	~~1,000~~	~~500~~
~~Solid~~	~~1,500~~	~~1000~~
~~Combinations~~	~~1,000y+1,500z~~	~~500(x+y)+1,000z~~

~~(1)Not applicable.~~

~~where:~~
~~x = the fraction of total heat input derived from gaseous fossil fuel, and~~
~~y = the fraction of total heat input derived from liquid fossil fuel, and~~
~~z = the fraction of total heat input derived from solid fossil fuel.~~

2) Regarding Emissions Unit 016 (Material handling activities for coal-fired steam units), Progress has proposed to conduct VE's "as needed". The permit (subsection H.) currently incorporates emission limiting standards (see Specific Conditions H.1., H.2. and H.3), thus annual compliance is required as per 62-297.310(7)(a).

3) Regarding Emissions Unit 015 (Cooling towers for FFSG Units 4 and 5 used to reduce plant discharge water temperature), the Progress proposal is shown for clarity only:

> **G.5.** Inspection. The drift eliminators of both towers shall be inspected from the concrete walkways not less than every three months by ~~Florida Power Corporation~~ Progress Energy Florida staff or representatives to assure that the drift eliminators are clean and in good working order. Not less than annually, a complete inspection of the towers shall be conducted by a ~~manufacturer of drift eliminators or by a consultant~~ qualified inspector with recognized expertise in the field.
> Certification that the drift eliminators are properly installed and in good working order shall be ~~made at the time of submission of the reports~~ provided in the record keeping and reporting requirements noted below.
> [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]
>
> **G.6.** Reporting. Reports on tower testing and inspection shall be ~~submitted~~ handled as follows:
> a. Maintained within onsite files within 30 days after all visual inspections of the drift eliminators.
> b. Agency submittal within 45 days after the compliance testing of either tower.
> [Rule 62-213.440, F.A.C.; and, Modified PSD permit, PSD-FL-007, issued by EPA 11/30/88]

4) Regarding the "List of Unregulated Emissions Units and/or Activities" as well as the "List of Insignificant Emissions Units and/or Activities", the Department has attached the Progress proposal. Please confirm its correctness and provide the rationale for each change requested.

Acid Rain Program - NO_X Averaging Plan

Based upon the Department's review of the proposed NO_X Averaging Plan, Progress has requested an increase in potential NO_X emissions totaling over 6000 TPY, from the four Crystal River Plant coal-burning units. The request appears to be arithmetically justified based upon an offsetting reduction of over 6000 TPY of NO_X at four plants located in North Carolina. In order to better understand the impacts of this increase, as well as to ensure that the NAAQS are not violated for any of the criteria pollutants, the Department requests that Progress Energy provide modeled impacts to the Class I and Class II areas. Additionally, please discuss the Class I visibility/haze impacts, based upon the requested PTE increase of NO_X emissions.

Compliance Assurance Monitoring Plan

Based upon the Department's review of the proposed CAM plan, Progress proposes to utilize opacity as the indicator of ESP performance, and specifically establishes CAM Plan trigger levels at opacity of 10% below the steady state

limit on each unit. The use of the COMS for recording opacity is proposed by Progress, even though page 5 of the submittal states "As shown, there is almost no correlation between opacity and PM (lb/MMBtu)." Although somewhat scattered with no linear relationship clearly apparent, there does appear to be some increasing trends between PM emissions and opacity. The proposed indicator ranges of 18% and 36% opacity are not acceptable because the test data (as shown in the graphs provided) does not imply that compliance with the PM limits can be met at these opacity levels. Further, in the case of unit 1, a 36% VE appears to be a violation of the standard. In order to satisfy CAM with opacity as the only indicator, the maximum acceptable opacity for defining an excursion would be 11%, which represents the highest opacity level documented by the COMS while affirmatively meeting the PM emission limit. Because the COMS is required by the permit, pursuant to 40 CFR 64.3, it is required to be used as part of the approvable CAM plan. However; given the poor correlation between PM and opacity, the Department encourages Progress to consider alternative indicators.

EPA intends for affected sources to develop a CAM plan based on current process and control device operating requirements and practices. The plan should use indicator ranges for one or more key operating process parameters (for example, mass flow, temperature, pressure) and one or more key control device parameters (for example, voltage, current, power, sections in service) to establish reasonable assurance that emissions are within compliance limits. Possible ESP operating indicators are the operating voltage, operating current, corona, total power, spark rate, number of fields in service, or rapping intensity, rate and frequency. Key parameters should be identified and indicator ranges selected, using design information, historical data, and/or actual test data. The CAM plan must be developed such that data collected for each parameter is representative and meets any applicable installation specification.

Please provide either, a statement that Progress would like to use the COMS as the indicator with an excursion level of 11% opacity, or a new CAM plan that utilizes the COMS as one indicator and one of the above parameters as a second indicator. In this case, the COMS would be used to measure and record any sudden and sustained increase in opacity as a possible excursion as one of the indicators. A second indicator would also need to be established from the examples given above. The chosen indicator range must be clearly and adequately justified for the application to be deemed complete.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Please note that per Rule 62-4.055(1): *"The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department..... Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application."*

If you have any questions, please call Michael P. Halpin, P.E. at 850/921-9519.

Sincerely,

Michael P. Halpin, P.E.
DARM/BAR
North Permitting Section

Dave Meyer, Progress
Scott Osbourn, Golder
Gracy Danois, EPA Region IV
Jerry Kissel, DEP-SWD

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Florida Power Corporation — **Draft Permit No.:** 0170004-009-AV
Crystal River Plant — **Facility ID No.:** 0170004

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
017	Fuel and lube oil tanks and vents[1]
018	Sewage treatment, water treatment, lime storage[2]
019	~~Two~~ Three 3500 kW diesel generators associated with Unit 3

Notes:

1 This unregulated emissions unit consists of the following facilities:

Associated with Units 1 and 2:
Number 2 fuel oil, 210,000 gal capacity, tank # 10~~, and 20,200 gal capacity, tank # 11~~.
Lube oil vents, one each at Unit 1 and 2.
Rotoclone with air filter at Unit 1.
Oil vent at Unit 1.

Associated with Unit 3:
Equipment diesel tanks, tanks 2 through 8, 15, 16, 22 and 23, capacities from 30 gallons to 30,118 gallons.
Lube oil tank, 25,000 gallon capacity, tank #9.
Two small cooling towers west of Main Building.
Two lube oil vents.

Associated with Units 4 and 5:
Number 2 fuel oil, 256,200 gal capacity, tank # 1, and 255,318 gal capacity, tank # 2.
Equipment diesel tanks, tanks 3 and 4, capacity of 250 gallons, each.
Lube oil tank, 30,000 gallon capacity, tank #16.
Lube oil vents.

Associated with the Crystal River Site:
Equipment diesel tanks, E.O.F. #01, capacity of 2,000 gallons and E.O.F. # 02, capacity of 25 gallons.
Waste oil tank, Garage # 01, 150 gallon capacity.
Mineral spirits tanks, O.C. # 01, 80 gallon capacity, N. Sub. # 04, 1,100 gallon capacity.
Transmission oil tanks, N. Sub. # 01 through 03, capacity of 1,100 gallons each.

2 This unregulated emissions unit consists of the following facilities:

Associated with Units 4 and 5:
Water treatment systems for ~~Units 4 and 5~~ all EUSGUs.

~~Associated with the Crystal River Site:~~
Sewage treatment plant.
Lime storage.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Florida Power Corporation **Draft Permit No.:** 1070004-009-AV
Crystal River Plant **Facility ID No.:** 1070004

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Vehicle diesel and gasoline tanks.
2. Diesel fire pump and tank at Unit 1.
3. Diesel fire pump and tank at Unit 3 (FWP-7)
4. Diesel pump driver for emergency feedwater (1,670 BHP)
5. Diesel generator for security bldg and system (backup)
6. 260 kW emergency diesel generator at Unit 3 technical support center.
7. Unit 3 diesel generator air compressor.
8. Unit 3 halon fire protection system.
~~6. Two fire protection tanks at Unit 3.~~
9. Fire pump house emergency diesel generator units and electric generator units.
10. Laboratory facilities.
11. CEM equipment and calibration gas storage and venting.
12. Surface coating of less than 6.0 gallons per day.
13. Brazing, soldering and welding.
14. Grounds maintenance.
15. Miscellaneous gas and diesel engines.
16. Miscellaneous material handling facilities.
17. Parts washers.
18. Miscellaneous material cleaning equipment (e.g., self contained and sand blasting).

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- Print your name and address on the reverse so that we can return the card to you.
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1. Article Addressed to:

Mr. Michael Olive, Plant Manager
Progress Energy Florida
100 Central Avenue
St. Petersburg, Florida 33701

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* Dana Clark B. Date of Delivery 7/27/04

C. Signature
X Dana Clark ☐ Agent ☐ Addressee

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

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

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)* 7001 1140 0002 1578 1543

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

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Mr. Michael Olive, Plant Manager

Postage	$
Certified Fee	
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Total Postage & Fees	**$**

Postmark Here

7001 1140 0002 1578 1543

Sent To
Mr. Michael Olive, Plant Manager
Street, Apt. No.; or PO Box No. 100 Central Avenue
City, State, ZIP+ 4 St. Petersburg, Florida 33701

PS Form 3800, January 2001 **See Reverse for Instructions**

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

June 23, 2004

CERTIFIED MAIL - Return Receipt Requested

Mr. Michael R. Olive
Plant Manager and Primary Responsible Official
Progress Energy Florida, Inc.
Crystal River Fossil Plant
15760 West Powerline Street
Crystal River, Florida 34428

Dear Mr. Olive:

RE: Designated Representative

The Department received your package containing the identity of additional Responsible Officials and a Designated Representative for the Crystal River Fossil Plant. For Mr. J. Michael Kennedy, who was listed as the Designated Representative, please provide us with a copy of the Certificate of Representation submitted to EPA pursuant to 40 CFR 72, Subpart B, for him.

If there are any questions, please give Bruce Mitchell a call at 850/413-9198 or write to me at the above letterhead address.

Sincerely,

Trina L. Vielhauer
Chief
Bureau of Air Regulation

TLV/rbm

cc: Bruce Mitchell, BAR

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. Michael R. Olive
Plant Manager and Primary
Responsible Official
Progress Energy Florida, Inc.
Crystal River Fossil Plant
15760 West Powerline Street
Crystal River, Florida 34428

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Mary Bennett ☑ Agent ☐ Addressee

B. Received by (Printed Name) MARY BENNETT
C. Date of Delivery 6-25-09

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

3. Service Type
☒ Certified Mail ☐ Express Mail
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CERTIFIED MAIL RECEIPT
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Mr. Michael R. Olive, Plant Manager and R.O.

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

Postmark Here

7001 1140 0002 1578 1413

Sent To Mr. Michael R. Olive, Plant Manager and R.O.
Street, Apt. No.; or PO Box No. 15760 West Powerline Street
City, State, ZIP+ 4 Crystal River, Florida 34428

PS Form 3800, January 2001 See Reverse for Instructions