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AIR REGULATION

November 4, 2010

Mr. Jonathan Holtom P.E.  
DEP/DARM  
Title V Program Administrator  
Division of Air Resource Management  
2600 Blair Stone Road MS 5500  
Tallahassee, Florida 32399-2400

Re: Crystal River Facility – Title V Permit 0170004-024-AV – Insignificant Emission Unit & Categorical Exemption number 36

Dear Mr. Holtom:

Thank you very much for working with Mr. Meyer regarding my letter to you dated October 18, 2010 (please see Attachment 1). Progress Energy's Crystal River site has historically utilized "categorical exemption" number 36 for general purpose internal combustion engines. The Crystal River nuclear facility is in the process of uprating the unit's capacity. This project involves replacing the nuclear unit's steam generators. In order to replace the steam generators the concrete containment reactor building had to be cut open, the steam generators replaced, and the containment building repaired to its original condition. Following the repair of the concrete containment reactor building, the Nuclear Regulatory Commission rules require a test of the reactor building. This test consists of pressurizing the concrete containment structure to 55 lb. per square inch air pressure and measuring the leak rate. In addition to the leak rate test, the Nuclear Regulatory Commission requires us to perform a structural integrity test at a higher pressure. This pressurization test is required every 10 years (the industry is requesting an extension to every 15 years) or when the structure is modified, as in this case. The plant plans to utilize approximately 15 rental diesel driven air compressors to pressurize the containment structure. Progress Energy would like to add an item to Appendix I-1 – List of Insignificant Emission Units and/or Activities (please see Attachment 2). The site plans to conduct the test mid November.

It is anticipated that the testing will require 6,000 gallons of diesel fuel. Using a conservative figure of 9,000 gallons of diesel fuel and a safety factor of 1.8 due to the "D" factor rating in AP-42, it is estimated NOx emissions would be 5 tons (please see the attached emissions estimate – Attachment 3).

The Title V Permitting Action Tree - Item number 13 allows waiting until the Title V permit is revised or renewed to incorporate the change in Appendix I-1. Accordingly, we would very much appreciate adding the Crystal River Unit 3 containment building

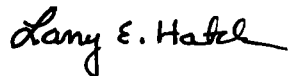
diesel engine air compressors to Appendix I-1 - List of Insignificant Emission Units and/or Activities the next time the permit is revised or renewed.

As the pressurization of the containment building is a unique and infrequent activity, we have added a sentence in the insignificant emission unit section – “The fuel usage for this insignificant emission unit will not be counted towards the categorical exemption number 36 – general-purpose internal combustion engines.” If additional testing is required, causing fuel usage to be greater than 9,000 gallons, we will request a conditional exemption as we did in 2005 (please see Attachment 4)

If you have any questions, please contact Dave Meyer at (727) 820 5295. Thank you very much for your help in this matter.

*I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this document is being submitted. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.*

Sincerely,



Mr. Larry E. Hatcher  
Manager, Crystal River Fossil Plant & Fuel Operations

Cc: Mr. Bill Schroeder



Larry E. Hatcher  
Plant Manager  
Crystal River Fossil Plant & Fuel Operations

October 18, 2010

Mr. Jonathan Holtom P.E.  
DEP/DARM  
Title V Permitting  
Division of Air Resource Management  
2600 Blair Stone Road MS 5500  
Tallahassee, Florida 32399-2400

Re: Crystal River Facility – Title V Permit 0170004-024-AV – Categorical Exemption  
number 36

Dear Mr. Holtom:

Progress Energy's Crystal River site has historically utilized "categorical exemption" number 36 for general purpose internal combustion engines. The Crystal River nuclear facility is in the process of uprating the unit's capacity. This project involves replacing the nuclear unit's steam generators. In order to replace the steam generators the concrete containment reactor building had to be cut open, the steam generators replaced, and the containment building repaired to its original condition. Following the repair of the concrete containment reactor building, the Nuclear Regulatory Commission rules require a test of the reactor building. This test consists of pressurizing the concrete containment structure to 55 lb. per square inch air pressure and measuring the leak rate. In addition to the leak rate test, the Nuclear Regulatory Commission requires us to perform a structural integrity test at a higher pressure. The plant plans to utilize approximately 15 rental diesel driven air compressors to pressurize the containment structure. The site plans to conduct the test mid November.

It is possible that this project will cause the site to exceed the categorical exemption heat input allotment (32,000 gallons). In 2005, the total fuel usage for 20 air compressors was only 2,500 gallons of diesel fuel. We anticipate testing for this project to be 4,000 to 6,000 gallons of diesel fuel (this project includes a structural integrity test that was not performed in 2005). It is possible that one or more of the tests will need to be redone, depending on the results.

Progress Energy Florida, Inc.  
Crystal River Steam Plant  
15760 W. Powerline Street  
CN77  
Crystal River, FL 34428


Attachment 1

As this is a rare but very important safety test required by the Nuclear Regulatory Commission, we would very much appreciate an allowance for exceeding the allotment for this year's exemption. We have made this request on one occasion in the past and the request was approved, (please see the attachments).

If you have any questions, please contact Dave Meyer at (727) 820 5295. Thank you very much for your consideration.

*I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this document is being submitted. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.*

Sincerely,

 FOR LARRY HATCHER

Mr. Larry E. Hatcher  
Manager, Crystal River Fossil Plant & Fuel Operations

XC: Mr. Bill Schroeder

### Brief Description of Emissions Units and/or Activities

1. Vehicle diesel and gasoline tanks.
2. \* Diesel fire pump and tank at Unit 3 (FWP-7).
3. \* Diesel pump driver for emergency feedwater (1,670 BHP).
4. \* Diesel generator for security bldg and system (backup).
5. \* 260 kW emergency diesel generator at Unit 3 technical support center.
6. \* Unit 3 diesel generator air compressors.
7. Unit 3 halon fire protection system.
8. \* Fire pump house emergency diesel generator units and electric generator units.
9. Laboratory facilities.
10. CEM equipment and calibration gas storage and venting.
11. Surface coating of less than 6.0 gallons per day.
12. Brazing, soldering and welding.
13. Grounds maintenance.
14. \* Miscellaneous gas and diesel engines (under 500 hp).
15. Miscellaneous material handling activities.
16. Part waster.
17. Miscellaneous material cleaning equipment (e.g., self contained sand blasting).
18. \* 175 kW emergency diesel generator for the Site Administration building.
19. Sand Blasting.
20. One concrete batch plant.
21. Two grout batch plants.
22. \*\* Operation of portable diesel engine driven air compressors firing less than 9,000 gallons of diesel fuel per calendar year for purposes of infrequent Building Pressurization Testing, as required by the Nuclear Regulatory Commission. The fuel usage for this insignificant emission unit will not be counted towards the categorical exemption number 36 – general-purpose internal combustion engines.

\* These engines meet the 40 CFR 63, Subpart ZZZZ definition of “existing units”, there are no unit specific applicable requirements that must be met pursuant to this rule at this time.

\*\* These engines will meet the applicable operation, maintenance, and certification requirements of 40 CFR 63, Subpart ZZZZ.

AP-42 01/96  
 3.3 DIESEL INDUSTRIAL ENGINES  
 BASED ON FUEL CONSUMPTION

INPUT	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5
	Diesel Compressor Engines				
UNITS	1				
GALLONS OF FUEL	9,000				
BTU/LB	19,300				
LB/GAL	7.253				

OUTPUT					
(POUNDS)	RATING FACTOR				TOTAL
NOX	D	4.41	5,556	$5,556 \text{ lb} \times 1.8 \text{ Factor} \times \frac{1}{2000 \text{ lb}} =$	5,556
CO	D	0.95	1,197		1,197
SOX	D	0.29	365	5 Tons Nox	365
PM10	D	0.31	391		391
CO2	B	164	206,615		206,615
ALDEHYDES	D	0.07	88		88
HYDROCARBONS					
EXHAUST	D	0.35	441		441
EVAPORATIVE	E	0	0		0
CRANKCASE	E	0.01	13		13
REFULING	E	0	0		0

Attachment 3

Crystal River Water - Air Correspondence  
Site



**Bernie M. Cumble**  
Manager, Crystal River  
Fossil Plant & Fuel Operations

September 26, 2005

Mr. Jeff Koerner  
DEP/DARM  
North Permitting Section  
Division of Air Resource Management  
2600 Blair Stone Road MS 5500  
Tallahassee, Florida 32399-2400

Re: Crystal River Facility - Title V Permit 0170004-009-AV  
- Categorical Exemption #21

Dear Mr. Koerner:

Progress Energy's Crystal River site has historically utilized the "categorical exemption" number 21 for general purpose internal combustion engines. This year, the Nuclear Regulatory Commission rules require that the nuclear plant conduct a test of the reactor building. The test consists of pressurizing the concrete containment structure to 55 lb. per square inch air pressure. The plant plans to utilize 20 rental diesel driven air compressors to pressurize the containment structure. The site plans to conduct the test mid October.

We anticipate that this project will cause the site to exceed the categorical exemption heat input allotment.

As this is a one time project, and we do not anticipate exceeding the heat input allotment in the future, we would very much appreciate an allowance for exceeding the allotment for this year's exemption.

If you have any questions, please contact Dave Meyer at (727) 820 5295. Thank you very much for your consideration.

*I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this document is being submitted. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.*

Sincerely,

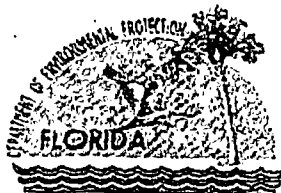
A handwritten signature in black ink, appearing to read 'Bernie M. Cumble'.

**Bernie M. Cumble**  
Manager, Crystal River  
Fossil Plant & Fuel Operations

Cc: Mr. Bob Soich (FDEP, SW District)

Progress Energy Florida, Inc.  
Crystal River Steam Plant  
15760 W. Powerline Street  
Crystal River, FL 34428

Attachment 4



## Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Cassille  
Secretary

September 26, 2005

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bernie M. Cumbie, Plant Manager  
Progress Energy - Crystal River Plant  
P.O. Box 14042, CN77  
St. Petersburg, Florida 33733-4042

Re: Exemption from the Requirement to Obtain an Air Construction Permit  
Pressure Test for Nuclear Reactor Containment Building  
Progress Energy - Crystal River Plant  
Current Title V Permit No. 0170004-009-AV

Dear Mr. Cumbie:

On September 23, 2005, the Department received your email request for an exemption from the requirement to obtain an air construction permit to pressure test the nuclear reactor containment building at the Crystal River Plant, which is located on Power Line Road, West of U.S. Highway 19, in Crystal River, Citrus County, Florida. The test is required by the Nuclear Regulatory Commission and is scheduled for mid-October. It will involve pressurizing the containment structure for a period of time to maintain 55 psi of air pressure. Approximately 30 rental air compressors driven by diesel engines will be used to conduct the test. It is estimated that approximately 39,000 gallons of diesel fuel could be fired during one such test. More than one test may be necessary.

**Determination:** The test is a temporary event required to satisfy safety regulations. The Department conservatively estimates the emissions from firing 39,000 gallons of diesel fuel to be: 2.5 tons of carbon monoxide, 11.6 tons of nitrogen oxides, and less than 1 ton each of particulate matter, sulfur dioxide, and volatile organic compounds. Based on the specific details provided, the Department exempts this project from the requirement to obtain an air construction permit pursuant to Rule 62.4.040(1)(b), F.A.C., which states, "Any existing or proposed installation which the Department shall determine does not or will not cause the issuance of air or water contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified. Such a determination is agency action and is subject to Chapter 120, F.S. Such determination shall be made in writing and filed by the Department as a public record. Such determination may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect." Only diesel fuel with a maximum sulfur content of 0.05% sulfur by weight shall be fired. The owner or operator shall record the quantity of fuel fired during each test. This fuel consumption shall also be reported in the Annual Operating Report. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Petitions:** A person whose substantial interests are affected by the 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 with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 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 twenty-one (21) days of receipt

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### CASE-BY-CASE EXEMPTION

of this Written Notice of Exemption. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one (21) days of publication of a Public Notice or within twenty-one (21) days of receipt of this Written Notice of Exemption, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within twenty-one (21) 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 each 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 state; (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 the 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 Permitting Authority'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.

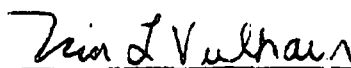
Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Exemption. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

**Effective Date:** This permitting decision 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.

**Appeal:** Any party to this permitting decision (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 #33, 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.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief  
Bureau of Air Regulation

**CASE-BY-CASE EXEMPTION**

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this order was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 9/29/05 to the persons listed:

Mr. Bernie M. Cumbie, Progress Energy\*  
Mr. Dave Meyer, Progress Energy  
Mr. Jason Waters, SWD  
Mr. Bob Soich, SWD

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.

Paula J. Friday 9/29/05  
(Clerk) (Date)