



Serial: NPD-NRC-2011-063  
July 27, 2011

10 CFR 52, Appendix D, X.B

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

**LEVY NUCLEAR PLANT, UNITS 1 AND 2  
DOCKET NOS. 52-029 AND 52-030  
AP1000 COMBINED LICENSE APPLICATION DEPARTURE REPORT UPDATE**

Ladies and Gentlemen:

Progress Energy Florida, Inc. submitted an application, dated July 28, 2008, for a combined license for two AP1000 passive pressurized water reactors to be located at a site in Levy County, Florida. Part 7 of the application is the "Departures and Exemption Requests."

The purpose of this letter is to provide an update to the report describing plant-specific departures from the AP1000 Design Control Document (i.e., Departures Report) as required by 10 CFR 52, Appendix D, paragraph X.B.1 and X.B.3.b.

One addition to the departures contained in the Levy Nuclear Plant, Units 1 and 2 "Departures and Exemption Requests" has been identified in the most recent six-month reporting period. The Enclosure provides the revised information to the departures portion of COLA Part 7, Departures and Exemption Requests. The following is a brief description of the changes, which provide departures to Revision 19 of the Westinghouse AP1000 DCD.

Standard departure STD DEP 8.3-1: Class 1E voltage regulating transformer current limiting features, is adopted.

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (727) 820-4481.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on July 27, 2011.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John Elnitsky', written over a white background.

John Elnitsky  
Vice President  
New Generation Programs & Projects

Attachments: Enclosure 1

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cc: U.S. NRC Region II, Regional Administrator  
Mr. Brian Anderson, U.S. NRC Project Manager

**Enclosure 1**

**Standard Departure Number: STD DEP 8.3-1**

**Description And Evaluation**

**Departure Number: STD DEP 8.3-1**

**AFFECTED DCD/FSAR SECTIONS:**

8.3.2.2

**SUMMARY OF DEPARTURE:**

The DCD states the Class 1 E battery chargers and Class 1E voltage regulating transformers are designed to limit the input (ac) current to an acceptable value under faulted conditions on the output side. However, the AP1000 voltage regulating transformers do not have active components to limit current.

**SCOPE/EXTENT OF DEPARTURE:**

This departure is identified in FSAR Subsection 8.3.2.2.

**DEPARTURE JUSTIFICATION:**

DCD subsection 8.3.2.2 states the Class 1E voltage regulating transformers have built-in circuit breakers at the input and output sides for protection and isolation. The circuit breakers are coordinated and periodically tested to verify their designed coordination and isolation function. They are qualified as isolation devices between Class IE and non-Class IE circuits in accordance with IEEE 384 and Regulatory Guide 1.75. Since the isolation and protection function is provided by the breakers, there is no need for the voltage regulating transformers to have current limiting capability. This departure does not adversely affect any safety-related system, nor does it conflict with applicable regulatory guidance.

**DEPARTURE EVALUATION:**

This Tier 2 departure is associated with isolation between Class 1E loads and the non-Class 1 E ac power source. The departure results in a change to the DCD that does not impact the required design function (i.e., isolation). Accordingly, it does not:

1. Result in more than a minimal increase in the frequency of occurrence of an accident previously evaluated in the plant-specific DCD;
2. Result in more than a minimal increase in the likelihood of occurrence of a malfunction of a structure, system, or component (SSC) important to safety and previously evaluated in the plant specific DCD;
3. Result in more than a minimal increase in the consequences of an accident previously evaluated in the plant-specific DCD;
4. Result in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in plant specific DCD;

5. Create a possibility for an accident of a different type than any evaluated previously in the plant-specific DCD;
6. Create a possibility for a malfunction of an SSC important to safety with a different result than any evaluated previously in the plant specific DCD;
7. Result in a design basis limit for a fission product barrier as described in the plant-specific DCD being exceeded or altered; or
8. Result in a departure from a method of evaluation described in the plant specific DCD used in establishing the design bases or in the safety analyses.

This Tier 2 departure does not affect resolution of an ex-vessel severe accident design feature identified in the plant-specific DCD. Therefore, this departure has no safety significance.

**NRC APPROVAL REQUIREMENT:**

This departure does not require NRC approval pursuant to 10 CFR Part 52, Appendix D, Section VIII.B.5.