



Serial: NPD-NRC-2009-004  
January 12, 2009

10CFR52.79

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

**LEVY NUCLEAR POWER PLANT, UNITS 1 AND 2  
DOCKET NOS. 52-029 AND 52-030  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 003 RELATED TO  
INFORMATION SYSTEMS IMPORTANT TO SAFETY**

Reference: Letter from Tanya Simms (NRC) to Garry Miller (PEF), dated November 25, 2008,  
"Request for Additional Information Letter No. 003 Related to SRP Section 07.05 for  
the Levy County Nuclear Plant, Units 1 and 2 Combined License Application"

Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits our response to the Nuclear Regulatory  
Commission's (NRC) request for additional information provided in the referenced letter.

A response to the NRC request is addressed in the enclosure. The enclosure also identifies  
changes that will be made in a future revision of the Levy Nuclear Power Plant Units 1 and 2  
application.

If you have any further questions, or need additional information, please contact Bob Kitchen at  
(919) 546-6992, or me at (919) 546-6107.

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

Executed on January 12, 2009.

Sincerely,

Garry B. Miller  
General Manager  
Nuclear Plant Development

Enclosure

cc : U.S. NRC Director, Office of New Reactors/NRLPO  
U.S. NRC Office of Nuclear Reactor Regulation/NRLPO  
U.S. NRC Region II, Regional Administrator  
Ms. Tana Simms, U.S. NRC Project Manager

**Levy Nuclear Power Plant Units 1 and 2  
Response to NRC Request for Additional Information Letter No. 003 Related to  
SRP Section 07.05 for the Combined License Application, dated December 12, 2008**

<u>NRC RAI #</u>	<u>Progress Energy RAI #</u>	<u>Progress Energy Response</u>
1759 R0 (07.05-1)	L-0016	Response enclosed – see following pages

**NRC Letter Date:** December 12, 2008

**NRC RAI #:** 1759 R0 (07.05-1)

**Text of NRC RAI:**

Tables 7.5-1 and 7.5-8 of the AP1000 Design Control Document (DCD), Revision 16, Post-Accident Monitoring System, contain variables to monitor the meteorological parameters and environs radiation and radioactivity. These variables are defined as site specific. Define these variables in compliance with Regulatory Guide 1.97, Revision 3, as committed to in the combined license application, or justify an alternative approach.

Table 7.5-1, (Sheet 12 of 12) of the AP1000 DCD, Revision 16, identifies meteorological parameters as site specific. Additionally, Table 7.5-8 of the AP1000 DCD identifies "meteorology" and "boundary environs radiation and radioactivity" as site specific variables. However, the staff has not found where the combined license application addresses the parameters/variables. Explain where these variables are found.

**PGN RAI ID #:** L-0016

**PGN Response to NRC RAI:**

The meteorological parameters monitored are identified in FSAR Tables 2.3.3-201 and 2.3.3-202. The environs radiation and radioactivity monitoring complies with Regulatory Guide 1.97, Revision 3. This information will be incorporated into the FSAR in a future amendment via a site specific table that addresses both DCD Tables 7.5-1 and 7.5-8 and adds appropriate instrument ranges to FSAR Table 2.3.3-202

**Associated LNP COL Application Revisions:**

The following changes will be made to the LNP FSAR in a future amendment:

1. Revise FSAR Section 7.5 from:  
"This section of the referenced DCD is incorporated by reference with no departures or supplements."  
To read:  
"This section of the referenced DCD is incorporated by reference with the following departures and/or supplements."  
LNP SUP 7.5-1
2. Revise FSAR Section 7.5 to add Table 7.5-201. This table supplements DCD Table 7.5-1 and provides variable data shown in the DCD table as "site specific."
3. Revise FSAR Table 2.3.3-202 to add ranges for Wind Direction, Wind Speed, Ambient Temperature, Relative Humidity, and Barometric Pressure.

LNP SUP 7.5-1

**Table 7.5-201<sup>(a)</sup>**  
**Post-Accident Monitoring System**

Variable	Range / Status	Number of Instruments Required	Remarks
Boundary environs radiation	Conforms to RG 1.97	Conforms to RG 1.97	
Meteorological parameters	See Remarks	See Remarks	See FSAR Subsection 2.3.3 and Tables 2.3.3-201, 2.3.3-202

- a) This Table supplements DCD Tables 7.5-1 and 7.5-8 and provides the site specific information noted in "Remarks" column of DCD Table 7.5-1 and in the "Variable" column of DCD Table 7.5-8.

LNP COL 2.3-3

**Table 2.3.3-202**  
**LNP Meteorological Monitoring Tower**  
**Accuracy of Monitored Parameters**

Monitored Parameter	Basis	Accuracy Criteria
Wind Direction (10 & 60 meters) 0 -360 °	NRC Regulatory Guide 1.23, Revision 1	±5 degrees (°). Starting threshold <0.45 m/s (1 mph). Resolution to 1.0°.
Wind Speed (10 & 60 meters) 0-112mph	NRC Regulatory Guide 1.23, Revision 1	±0.2 m/s (±0.45 mph) or 5% of observed wind speed. Starting threshold <0.45 m/s (1 mph). Resolution to 0.1 m/s or 0.1 mph.
Ambient Temperature (10 & 60 meters) -58 – 122 Deg F	NRC Regulatory Guide 1.23, Revision 1	±0.5°C (±0.9°F). Resolution to 0.1°C (0.1°F).
Differential Temperature	NRC Regulatory Guide 1.23, Revision 1	±0.1°C (±0.18°F). Resolution to 0.01°C (0.01°F).
Wet Bulb Temperature	NRC Regulatory Guide 1.23, Revision 1	±0.5°C (±0.9°F). Resolution to 0.1°C (0.1°F).
Relative Humidity/Dew-Point 0-98%	NRC Regulatory Guide 1.23, Revision 1	Relative Humidity: ±4% Resolution to 0.1%. Dew-Point: ±1.5°C (±2.7°F). Resolution to 0.1°C (0.1°F).
Total Precipitation	NRC Regulatory Guide 1.23, Revision 1	Precipitation (water equivalent). ±10% for a volume equivalent to 2.54 mm (0.1 in.) of precipitation at a rate <50 mm/h (<2 in/h). Resolution to 0.25 mm (0.01 in.)
Solar Radiation <sup>(a)</sup>	ANSI/ANS 2.5-1984	Consistent with current state-of-the-art.
Barometric Pressure <sup>(a)</sup> 800-1100 hPa/mb	ANSI/ANS 2.5-1984	Consistent with current state-of-the-art
Datalogger Sampling Rate	NRC Regulatory Guide 1.23, Revision 1	At least once every 5 seconds
Time	NRC Regulatory Guide 1.23, Revision 1	±5 minutes Resolution to ±1 minute

Notes:

a) There are no accuracies specified in the NRC Regulatory Guide 1.23 for these parameters. ANSI/ANS 2.5-1984 guidance reflects industry and regulator-accepted state-of-the-art specifications.

° = degrees

°F = degrees Fahrenheit

in/h = inches per hour

m/s = meters per second

mm = millimeter

mm/h = millimeters per hour

mph = miles per hour

**Attachments/Enclosures to Response to NRC:**

None