



Serial: NPD-NRC-2013-001
January 18, 2013

10CFR52.79

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
SUPPLEMENT 5 TO RESPONSE TO NRC RAI LETTER 108 – IMPLEMENTATION OF
FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATIONS**

- References:
1. Letter from Mark Tonacci (NRC) to John Elnitsky (PEF), dated March 15, 2012, "Request for Additional Information Letter No. 108 Concerning Implementation of Fukushima Near-Term Task Force Recommendations."
 2. Letter from John Elnitsky (PEF) to Nuclear Regulatory Commission (NRC), dated April 12, 2012, "30-Day Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-012.
 3. Letter from John Elnitsky (PEF) to Nuclear Regulatory Commission (NRC), dated April 25, 2012, "Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-014.
 4. Letter from John Elnitsky (PEF) to Nuclear Regulatory Commission (NRC), dated June 19, 2012, "Supplement 1 to Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-019.
 5. Letter from Christopher Fallon (PEF) to Nuclear Regulatory Commission (NRC), dated August 1, 2012, "Supplement 2 to Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-029.
 6. Letter from Christopher Fallon (PEF) to Nuclear Regulatory Commission (NRC), dated September 27, 2012, "Supplement 3 to Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-033.
 7. Letter from Christopher Fallon (PEF) to Nuclear Regulatory Commission (NRC), dated October 15, 2012, "Supplement 4 to Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-035.
 8. Letter from Christopher Fallon (PEF) to Nuclear Regulatory Commission (NRC), dated October 31, 2012, "Revised Supplement 4 to Response to NRC RAI Letter 108 – Implementation of Fukushima Near-Term Task Force Recommendations," Serial: NPD-NRC-2012-036.

Progress Energy Florida, Inc.
P.O. Box 14042
St. Petersburg, FL 33733

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Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits a supplemental response to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI) provided in Reference 1.

A supplemental response to bullet 3 of NRC question 01.05-1 is provided in Enclosure 1. Enclosure 1 also identifies associated changes to be included in a future revision of the Levy Nuclear Plant Units 1 and 2 application.

Included in this response is a report that provides a description of how compliance with the requirements of the proposed license condition for Reliable Spent Fuel Pool Level Instrumentation in Enclosure 1 will be achieved. This report was developed in conjunction with Westinghouse Electric Company, LLC (Westinghouse) for the AP1000 and is included as Enclosure 2. Enclosure 2 (proprietary) contains the Westinghouse report, APP-SFS-M3R-003, "Response to NRC Orders EA-12-051 and EA-12-063, and Background Information for Future Licensees on AP1000 Spent Fuel Pool Instrumentation."

In addition to the submittal of Enclosure 2, Enclosure 3 contains the Westinghouse report, APP-SFS-M3R-004, "Response to NRC Orders EA-12-051 and EA-12-063, and Background Information for Future Licensees on AP1000 Spent Fuel Pool Instrumentation, Redacted." This is a redacted version and is therefore non-proprietary.

Also enclosed is the Westinghouse Application for Withholding Proprietary Information from Public Disclosure CAW-12-3537 (Enclosure 4), accompanying Affidavit (Enclosure 4), Proprietary Information Notice (Enclosure 5), and Copyright Notice (Enclosure 5).

As Enclosure 2 contains information proprietary to Westinghouse Electric Company LLC, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in 10 CFR 2.390(b)(4). Accordingly, it is respectfully requested that the information (Enclosure 2) which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above or the supporting Westinghouse affidavit should reference CAW-12-3537 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

If you have any further questions, or need additional information, please contact Bob Kitchen at (704) 382-4046, or me at (704) 382-9248.

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

Executed on January 18, 2013

Sincerely,

A handwritten signature in black ink that reads "Christopher M. Fallon". The signature is fluid and cursive, with the first name "Christopher" being more prominent than the last name "Fallon".

Christopher M. Fallon
Vice President
Nuclear Development

Enclosures:

1. Supplemental Response
2. Westinghouse APP-SFS-M3R-003, (PROPRIETARY)
3. Westinghouse APP-SFS-M3R-004 (Redacted), (NON-PROPRIETARY VERSION)
4. Westinghouse Application Letter CAW-12-3537 and Affidavit
5. Proprietary Information Notice and Copyright Notice

cc : U.S. NRC Region II, Regional Administrator
Mr. Donald Habib, U.S. NRC Project Manager

bc (without Enclosure 2):

Chris Fallon, VP- Nuclear Development
Robert Kitchen, Manager- Nuclear Development Licensing
John Thrasher, Director-Nuclear Development Engineering
Tillie Wilkins, ND-Licensing
Kate Nolan, Associate General Counsel
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)
Brian Hobbs (Shaw Power Group)
A. K. Singh (Sargent & Lundy, LLC)
Tanya Flowers (Sargent & Lundy, LLC)
Lorin Young (CH2M HILL)
John Archer (WorleyParsons)

bc: ND Document Control Inbox (Records: Correspondence)
File: ND (Dana Rose)

Levy Nuclear Plant Units 1 and 2 (LNP)
Supplement 5 to Response to NRC Request for Additional Information Letter No. 108
Related to Implementation of Fukushima Near Term Task Force Recommendations,
Dated 3/15/2012

<u>NRC RAI #</u>	<u>Progress Energy RAI #</u>	<u>Progress Energy Response</u>
01.05-1	L-0998 & L-1016	August 1, 2012; NPD-NRC-2012-029 and October 31, 2012; NPD-NRC-2012-036
01.05-1	L-0999 & L-1013	April 25, 2012; NPD-NRC-2012-0014 and September 27, 2012; NPD-NRC-2012-033
01.05-1	L-1000, L-1014, & L-1019	April 25, 2012; NPD-NRC-2012-0014, September 27, 2012; NPD-NRC-2012-033, and supplemental response enclosed – see following pages
01.05-1	L-1002	June 19, 2012; NPD-NRC-2012-019

NRC Letter No.: LNP-RAI-LTR-108

NRC Letter Date: March 15, 2012

NRC Review of Final Safety Analysis Report

NRC RAI NUMBER: 01.05-1

Text of NRC RAI:

Subject: Request for Additional Information Letter No. 108 Concerning Implementation of Fukushima Near-term Task Force (NTTF) Recommendations

Bullet 3

Provide sufficient reliable instrumentation, able to withstand design-basis natural phenomena, to monitor key spent fuel pool parameters (i.e., water level, temperature, and area radiation levels) from the control room (detailed Recommendation 7.1 - Enclosure 6 of SECY-12-0025).

PGN RAI ID #: L-1019

PGN Response to NRC RAI:

Bullet 3

The LNP proposed license condition developed in response to this bullet is being modified to remove the requirement to develop a description of how compliance with the requirements of the license condition is achieved. How compliance is achieved is based on the submittal of the compliance description in APP-SFS-M3R-003 (Enclosure 2 of this response). APP-SFS-M3R-003 describes how compliance with the requirements of the orders received by AP1000 licensees is met. The content of items a. and b. in the proposed license condition below is taken directly from the requirements stated in the order issued to AP1000 licensees for spent fuel pool instrumentation.

A future revision of the LNP COLA will reflect the changes discussed in this response.

Associated LNP COL Application Revisions:

COLA Part 10, License Condition 12.B, will be revised from:

B. RELIABLE SPENT FUEL POOL LEVEL INSTRUMENTATION

Prior to initial fuel load, PEF shall fully implement the following requirements for spent fuel pool level indication using the guidance contained in JLD-ISG-2012-03, Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation, Revision 0.

- a. The spent fuel pool level instrumentation shall include the following design features:
 1. Arrangement: The spent fuel pool level instrument channels shall be arranged in a manner that provides reasonable protection of the level indication function against missiles that may result from damage to the structure over the spent fuel pool. This protection may be provided by locating the safety-related instruments to maintain instrument channel separation within the spent fuel pool area, and to utilize inherent shielding from missiles provided by existing recesses and corners in the spent fuel pool structure.
 2. Qualification: The level instrument channels shall be reliable at temperature, humidity, and radiation levels consistent with the spent fuel pool water at saturation conditions for an extended period.
 3. Power supplies: Instrumentation channels shall provide for power connections from sources independent of the plant alternating current (ac) and direct current (dc) power distribution systems, such as portable generators or replaceable batteries. Power supply designs should provide for quick and accessible connection of sources independent of the plant ac and dc power distribution systems. Onsite generators used as an alternate power source and replaceable batteries used for instrument channel power shall have sufficient capacity to maintain the level indication function until offsite resource availability is reasonably assured.
 4. Accuracy: The instrument shall maintain its designed accuracy following a power interruption or change in power source without recalibration.

5. Display: The display shall provide on-demand or continuous indication of spent fuel pool water level.
- b. The spent fuel pool instrumentation shall be maintained available and reliable through appropriate development and implementation of a training program. Personnel shall be trained in the use and the provision of alternate power to the safety-related level instrument channels.

PEF shall within one (1) year after issuance of the LNP COL, develop an overall integrated plan, including a description of how compliance with the requirements described in this license condition will be achieved.

PEF shall provide to the NRC an initial status report sixty (60) days following issuance of the LNP COL and at six (6) month intervals thereafter which delineates progress made in implementing the requirements of this license condition.

To read:

B. RELIABLE SPENT FUEL POOL LEVEL INSTRUMENTATION

Prior to initial fuel load, PEF shall fully implement the following requirements for spent fuel pool level indication using the guidance contained in JLD-ISG-2012-03, Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation, Revision 0.

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 4. Accuracy: The instrument shall maintain its designed accuracy following a power interruption or change in power source without recalibration.
 5. Display: The display shall provide on-demand or continuous indication of spent fuel pool water level.

- b. The spent fuel pool instrumentation shall be maintained available and reliable through appropriate development and implementation of a training program. Personnel shall be trained in the use and the provision of alternate power to the safety-related level instrument channels.

PEF shall within one (1) year after issuance of the LNP COL, develop an overall integrated plan.

PEF shall provide to the NRC an initial status report sixty (60) days following issuance of the LNP COL and at six (6) month intervals thereafter which delineates progress made in implementing the requirements of this license condition.

Attachments/Enclosures:

None