PMLevyCOLPEm Resource

From: Habib, Donald
Sent: Friday, May 11, 2012 9:07 AM
To: LevyCOL Resource
Subject: FW: Response to Levy RAI Letter 108 - Non-Seismic Issues
Attachments: NPD-NRC-2012-014 - LNP RAI Resp Ltr 108_Signed.pdf

Donald C. Habib
NRO/DNRL
Licensing Branch 4
301-415-1035

From: Waters, David [mailto:David.Waters@pgnmail.com]
Sent: Thursday, April 26, 2012 11:21 AM
To: Habib, Donald
Subject: Response to Levy RAI Letter 108 - Non-Seismic Issues

Don

Attached is an electronic copy of the response to the non-seismic items from Letter 108 that was signed out yesterday by John Elnitsky. The Fedex to the Document Control Desk will go out later today.

If you have any questions, please let us know.

Dave Waters
Progress Energy New Generation Programs and Projects - NGPP Licensing
PEB 1095C, 344 Fayetteville Street (PO Box 1551), Raleigh, NC 27601
919-546-7171
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Hearing Identifier: Levy_County_COL_Public
Email Number: 1072

Mail Envelope Properties (E3D0DF334F617344BE38EB00C881B1B380487C7AD1)

Subject: FW: Response to Levy RAI Letter 108 - Non-Seismic Issues
Sent Date: 5/11/2012 9:06:30 AM
Received Date: 5/11/2012 9:06:32 AM
From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:
"LevyCOL Resource" <LevyCOL.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	750	5/11/2012 9:06:32 AM
NPD-NRC-2012-014 - LNP RAI Resp Ltr 108_Signed.pdf	721076	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
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Recipients Received:

Progress Energy

Serial: NPD-NRC-2012-014 10CFR52.79
April 25, 2012

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

Reference: 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.

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 Reference 1.

A response addressing three of the four NRC actions identified in the RAI is contained in the enclosure. The fourth action concerning seismic hazards at the Levy site will be addressed as set forth in Reference 2.

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 April 25, 2012.

Sincerely,

John Elnitsky
Vice President
New Generation Programs & Projects

Enclosure

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

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

bc: John Elnitsky, VP- New Generation Programs & Projects
Robert Kitchen, Manager-Nuclear Plant Licensing
Tillie Wilkins, NGPP-Licensing
Kenneth Allison (Shaw Power Group)
John O'Neill, Jr. (Pillsbury Winthrop Shaw Pittman, LLP)
A. K. Singh (Sargent & Lundy, LLC)
Cynthia Malecki (Sargent & Lundy, LLC)
Lorin Young (CH2M HILL)
John Archer (WorleyParsons)
NGPP Document Control Inbox (Records: Correspondence)
File: NGPP (Dana Rose)

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

NRC RAI #	Progress Energy RAI #	Progress Energy Response
01.05-1	L-0998	Future response per Serial: NPD-NRC-2012-012, 4/12/2012
01.05-1	L-0999	Response enclosed – see following pages
01.05-1	L-1000	Response enclosed – see following pages
01.05-1	L-1001	Response enclosed – see following pages

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 Recommendations

Bullet 2
Provide reasonable protection for equipment currently provided pursuant to 10 CFR 50.54(hh)(2) from the effects of design-basis external events and to add equipment as needed to address multi-unit events while other requirements are being revised and implemented (detailed Recommendation 4.2 - Enclosure 4 of SECY-12-0025).

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).

Bullet 4
Determine and implement the required staff to fill all necessary positions for responding to a multi-unit event, conduct periodic training and exercises for multiunit and prolonged station blackout (SBO) scenarios, ensure that emergency preparedness equipment and facilities are sufficient for dealing with multi-unit and prolonged SBO scenarios, provide a means to power communications equipment needed to communicate onsite and offsite during a prolonged SBO and maintain the Emergency Response Data System capability throughout the accident (detailed Recommendation 9.3 - Enclosure 7 to SECY-12-0025).

PGN RAI ID #: L-0999

PGN Response to NRC RAI:

Bullet 2

The LNP response to this item is based on Attachment 3 of SECY-12-0025 Enclosure 4. This attachment is identified as applicable to Vogtle Units 3 and 4 in the SECY. The basis for different requirements for Vogtle Units 3 and 4 in Attachment 3 from other plants in Attachment 2 was based on the passive design and other features characteristic to the AP1000 design. These AP1000 features are standard, and thus, are applicable to the LNP design also. Therefore, a license condition is proposed for LNP with similar content as was required for Vogtle Units 3 and 4 in Attachment 3 of SECY-12-0025. Performing these actions prior to initial fuel load is included as the required time of implementation. This would ensure the mitigation strategies for beyond design basis external events are in place prior to irradiation of fuel when the strategies could potentially be necessary.

Proposed LNP License Condition:

MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS

PROPOSED LICENSE CONDITION:
Prior to initial fuel load, PEF will fully implement the following actions associated with mitigation strategies including procedures, guidance, training, and acquisition, staging, or installing of equipment needed for the strategies:

A. Develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment and spent fuel pool cooling capabilities following a beyond-design-basis external event. These strategies must:
- Be capable of mitigating a simultaneous loss of all ac power and loss of normal access to the normal heat sink and,
- Have adequate capacity to address challenges to core cooling, containment, and spent fuel pool cooling capabilities at all units on the LNP site and,
- Have the capability to be implemented in all modes.

B. Provide reasonable protection for the associated equipment from external events. Such protection must demonstrate that there is adequate capacity to address challenges to core cooling, containment, and SFP cooling capabilities at all units on the LNP site.

PEF shall within one (1) year after issuance of the LNP COL, submit to the NRC for review 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 following submittal of the overall integrated plan described above which delineates progress made in implementing the requirements of this license condition.

Attachments/Enclosures:

None

PGN RAI ID #: L-1000

PGN Response to NRC RAI:

Bullet 3

The LNP response to this item is based on Attachment 3 of SECY-12-0025 Enclosure 6. This attachment is identified as applicable to Vogtle Units 3 and 4 in the SECY. The basis for different requirements for Vogtle Units 3 and 4 in Attachment 3 from other plants in Attachment 2 was based on the design features of the AP1000. These AP1000 features are standard, and thus, are applicable to the LNP design also. Therefore, a license condition is proposed for LNP with similar content as was required for Vogtle Units 3 and 4 in Attachment 3 of SECY-12-0025. Performing these actions prior to initial fuel load is included as the required time of implementation. This would ensure reliable spent fuel pool level instrumentation is in place prior to irradiation of fuel when the instrumentation could potentially be necessary.

Proposed LNP License Condition:

RELIABLE SPENT FUEL POOL LEVEL INSTRUMENTATION

PROPOSED LICENSE CONDITION:

Prior to initial fuel load, PEF will fully implement the following requirements for spent fuel pool level indication.

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, submit to the NRC for review 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 following submittal of the overall integrated plan described above which delineates progress made in implementing the requirements of this license condition.

Attachments/Enclosures:

None

PGN RAI ID #: L-1001

PGN Response to NRC RAI:

Bullet 4

The LNP response to this item will be based on the Recommendation 9.3 section of SECY-12-0025 Enclosure 7. The PEF response to the Recommendation 9.3 regarding requested actions and information on EP staffing and communications would be provided in response to a 50.54(f) letter issued to PEF from the NRC following LNP COL issuance similar to other AP1000 licensees.

Proposed LNP License Condition:

None

Attachments/Enclosures:

None