PMLevyCOLPEm Resource

From: Habib, Donald
Sent: Tuesday, May 19, 2015 11:56 AM
To: PMLevyCOLPEm Resource
Subject: Levy COL Condensate Return Design Change 2015 Audit Plan 05-19-2015.docx
Attachments: Levy Condensate Return 2015 Audit Plan05-19-2015.docx

Hearing Identifier: Levy_County_COL_Public
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Subject: Levy COL Condensate Return Design Change 2015 Audit Plan 05-19-2015.docx
Sent Date: 5/19/2015 11:55:45 AM
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From: Habib, Donald

Created By: Donald.Habib@nrc.gov

Recipients:
"PMLevyCOLPEm Resource" <PMLevyCOLPEm.Resource@nrc.gov>
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Audit Plan
forLevy Nuclear Plant Units 1 and 2
Design Change Related to the Containment
Condensate Return Pathway

A. Background

By letter dated May 5, 2015, Duke Energy Florida (DEF) responded to request for additional information No. 124 that addressed DEF's request for exemption from the AP1000 rule and a description of associateddesign change departure from the AP1000 Design Control Document(DCD) Revision 19 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15131A021). The Levy Nuclear Plant Combined License Application incorporates the AP1000 DCD by reference.

The design change modifies the interior of the containment vessel in support of the condensatereturn portion of the passive core cooling system. The changes involve the addition ofcomponents to tables contained in Tier 1 of the DCD and associated changes to Tier 2 tablesand figures.The applicant justified this exemption from the certified design as necessary because the current generic certified design information would not achieve the underlying purpose of the rule.

The May 5, 2015, submittal supplements related 2014 submittals (e.g., ADAMS Accession No. ML14206A951) and includes Revision 2 of a reportdeveloped for the AP1000 by Westinghouse Electric Company, LLC (Westinghouse) that describes the change and the basis for the change.APP-GW-GLR-161, "Changes to Passive Core Cooling System Condensate Return,"includes a regulatory evaluation of the updated condensatereturn design that addresses compliance with the applicable regulatory requirements.The nonproprietary version of this document is identified as APP-GW-GLR-607, with the same title (ADAMS Accession No. ML15131A021). The submittal reflects a modified calculation approach described by DEF and Westinghouse in a public meeting held by NRC on March 26, 2015 (ADAMS Accession Nos. ML15082A072 and ML15092A287).

The purpose of the audit is for the staff to review the supporting documentation to ensure that the proposed design changes meet NRC regulations. The expected outcome of the audit is for the staff (1) to gain a better understanding of how the design changesmeet NRC regulations, (2) to develop requests for additional information in areas not adequately covered in the available documentation, and (3) to identify supplemental information that should be added to the Levy FSAR, which the staff will rely on to make its safety finding.

The staff has previously conducted an audit for this issue when the applicant was using a different analytical approach that was later found to contain errors. The previous audit was completed in 2014.(ADAMS Accession No.ML14219A200).

B. Audit Bases

This regulatory audit is based on the following:

- Title 10 *Code of Federal Regulations* (10 CFR), Part 52, Appendix D, Section VIII
- General design criteria (GDC) from Appendix A to 10 CFR Part 50
  - GDC 2, "Design bases for protection against natural phenomena"
  - GDC 4, "Environmental and dynamic effects design bases"

- GDC 34, “Residual heat removal”
- GDC 35, “Emergency core cooling”
- GDC 36, “Inspection of emergency core cooling system”

- 10 CFR 50.46 and Appendix K to 10 CFR Part 50, as they relate to analysis of passive residual heat removal heat exchanger performance
- Standard Review Plan Section 6.2.2 “Containment Heat Removal Systems”
- DC/COL-ISG-011, “FinalizingLicensing-basis Information.”
- StandardReview Plan Section 6.3, “Emergency Core Cooling System”

C. Audit Scope or Methodology

The audit will focus on the following calculations identified in a public meeting that the staff held on May 14, 2015:

- APP-PXS-M3C-071, “Containment Response Analysis for the Long Term PRHR Operation,” Revision 2
- APP-PXS-M3C-072, “Condensate Return to IRWST for Long Term PRHR Operation,” Revision 2
- APP-SSAR-GSC-536, “AP1000 Safe Shutdown Temperature Evaluation,” Revision 3

Documents from the previous 2014 audit continue to be available.

The staff will conduct this audit in accordance with the guidance provided in NRO-REG-108, “Regulatory Audits” (Reference 3).

D. Information and Other Material Necessary for the Audit

The staff will need documents listed above and may require other supporting information during the conduct of the audit.

E. Team Assignments

The audit team includes

Boyce Travis,NRC Staff (Containment)
Jim O’Driscoll, NRC Staff (Containment)
Chris Van Wert,NRC Staff (Reactor Systems)
Timothy Drzewiecki, NRC Staff (Reactor Systems)
John McKirgan, NRC Staff (Reactor Systems)
Donald Habib, NRC Project Manager

E. Logistics

Dates: Beginning May 18, 2015, and lasting for approximately 10 weeks.

NRC Project Manager will inform DEFin advance of specifics and any changes to the audit schedule and agenda.

Location: Westinghouse Electric Company, LLC
Washington Operations
11333 Woodglen Drive, Suite 203
Rockville, MD20852
Telephone: 301-881-7040/7042

F. Special Requests

NRC staff requests that Westinghouse provide:

1. aconference room for the NRC staff use
2. secure Internet access
3. telephones to support teleconferencing (i.e., with microphone and speaker)
4. as needed, telephone access to Westinghouse technical staff to answer questions related to the material subject to the audit (with reasonable notice).

G. Deliverables

Once the regulatory audit is completed, the audit team will issue an audit summary within 90 days.

H. References

1. NRO-REG-108, “Regulatory Audits”, April 2, 2009 (ML081910260)