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Serial: NPD-NRC-2014-008
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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
REVISED AP1000 COMBINED LICENSE APPLICATION DEPARTURE REPORT UPDATE**

Ladies and Gentlemen:

Duke Energy Florida, Inc. (DEF) 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 a revision to the update of the report describing plant-specific departures from the AP1000 Design Control Document (i.e., Departures Report). Letter serial NPD-NRC-2014-007 was submitted on January 30, 2014, as required by 10 CFR 52, Appendix D, paragraph X.B.1 and X.B.3.b. This letter supersedes letter NPD-NRC-2014-007.

There have been two changes to the departures contained in the Levy Nuclear Plant, Units 1 and 2 "Departures and Exemption Requests" identified in the most recent six-month reporting period, instead of one as previously reported. See Enclosure 1 for the Report.

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 February 17, 2014.

Sincerely,

Christopher M. Fallon
Vice President
Nuclear Development

DOA4
NRD

Enclosure:

1) LNP Six Months Departure Report

cc:

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

Enclosure 1 to Serial NPD-NRC-2014-008

LNP Six Months Departure Report
(3 pages including cover page)

Departure Number: LNP DEP 3.2-1

Title: Addition of downspouts to the condensate return portion of the Polar Crane Girders and flow holes between the boxes

Activity Description:

Addition of downspouts to the condensate return portion of the Passive Core Cooling System - Modifications to the Polar Crane Girder (PCG), Internal Stiffener, and Passive Core Cooling System (PXS) gutter design were made. The fabrication holes at the top surface of the PCG and in the stiffener are blocked, and flow communication holes between PCG boxes are added. A downspout piping network was added to collect and transport condensation from the PCG and stiffener to PXS Collection Boxes. Eight new PXS downspout screens were added at the entrance of each of the downspouts at the top of the PCG and stiffener to prevent any larger debris from blocking the downspout piping.

Summary of Evaluation:

The proposed change does not involve a significant reduction in the margin of safety. The proposed change does not reduce the redundancy or diversity of any safety-related SSCs. The proposed changes increase the amount of condensate available in the In-containment Refueling Water Storage Tank (IRWST) after the initiation of a design basis event.

The proposed change does not result in an adverse effect as a modification, addition to, or removal of a structure, system, or component (SSC), and has no adverse impact on plant operating procedures or a method of control, and does not result in an adverse effect on a change or a method of evaluation, or use of an alternate method of evaluation. This activity does not represent a test or experiment outside the reference bounds of the design basis, and does not alter the assumptions or results of the ex-vessel severe accident assessment. Therefore, this departure has no safety significance.

In conclusion, based on the considerations discussed above; 1) there is reasonable assurance the health and safety of the public will not be endangered by operation in the proposed manner, 2) such activities will be conducted in compliance with the Commission's regulations, and 3) the implementation of the change will not be inimical to the common defense and security or to the health and safety of the public.

This departure requires an exemption from the requirements of 10 CFR Part 52, Appendix D, Section III.B, which requires compliance with Tier 1 requirements of the AP1000 DCD.

Departure Number: LNP DEP 3.7-1

Title: Changes to the use of drilled shafts for vertical and horizontal support of the Annex, Radwaste and Turbine buildings

Activity Description:

AP1000 DCD Revision 19, Tier 2 subsections 3.7.2.8.1 and 3.7.2.8.3 for the Annex Building and the Turbine Building, respectively, states that the portions of the Annex and Turbine Buildings that are classified as seismic Category II are analyzed for the six soil profiles described in subsection 3.7.1.4. Additionally, DCD subsection 3.7.2.8.4 states that the seismic Category II buildings are designed using envelope response spectra for the six soil profiles based on the AP1000 CSDRS spectra input at plant grade.

The Levy plant foundation design for the adjacent buildings (Annex, Radwaste and Turbine) is based on the use of drilled shafts for vertical and horizontal support of the buildings. Although the vertical seismic demand for the seismic Category II structures is based on the AP1000 generic analysis (e.g., CSDRS), the lateral (horizontal) seismic demand is based on site-specific analyses (e.g., PBSRS) which take advantage of the lower seismicity of the Levy site in order to meet the horizontal limitations of building interaction with the Nuclear Island and building foundation support requirements without having to design the drilled shafts to meet the AP1000 CSDRS.

A drilled shaft design as presented in FSAR Subsection 3.8.5.9 was chosen to support the building foundations rather than improving the existing soil to meet the CSDRS criteria. This design utilizing drilled shafts was not analyzed as an acceptable support system for adjacent buildings in the AP1000 generic analysis. The site-specific analysis applied to the building support system to determine their adequacy is allowable under the requirements of DCD Subsection 3.7.2.8.4, in that the DCD discussion allows a COL applicant to perform a site-specific analysis if one or more of the four criteria discussed in the last paragraph of this Subsection are not met (the support system for the adjacent buildings is not one of the six soil types analyzed in the Westinghouse generic design).

Since the drilled shaft configuration is not one of the six soil types used in the AP1000 generic analysis, this constitutes a departure from the AP1000 generic design.

Summary of Evaluation:

The proposed change is based on an evaluation methodology that is consistent with the plant-specific DCD and NRC requirements, and thus is not a revision or replacement of a plant-specific DCD described evaluation methodology; nevertheless since the drilled shaft foundation is not one of the soil types considered in the DCD evaluations, the proposed change is a departure that requires prior NRC review.

In conclusion, based on the considerations discussed above; (1) there is reasonable assurance the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) approval of the change will not be inimical to the common defense and security or to the health and safety of the public.