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October 27, 2010
L-2010-250
10 CFR §50.55a

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Turkey Point Unit 3
Docket No. 50-250
Fourth Inservice Inspection Interval
Relief Request No. 9
Visual Examination of Containment Liner Repair

In accordance with 10CFR 50.55a (a)(3)(i), Florida Power & Light (FPL) requests Nuclear Regulatory Commission (NRC) approval of a proposed alternative for implementation during the current Turkey Point Unit 3 maintenance and refueling outage. FPL proposes a visual examination (VT-1) of the containment liner pressure boundary repair weld as an alternative to the detailed visual examination requirement of American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, sub-article IWE-5240 during the pressure test. The details of the alternative are described in the enclosure.

This proposed alternative is similar to that requested on April 28, 2009 by FirstEnergy Nuclear Operating Company for Beaver Valley Power Station, Unit 1 and approved by NRC on May 22, 2009.

There are no regulatory commitments contained in this letter. FPL requests approval of the proposed alternative by November 4, 2010 to support restart from the current Turkey Point Unit 3 maintenance and refueling outage.

If there are any questions regarding the information contained in this submission, please contact Mr. Robert J. Tomonto, Turkey Point Licensing Manager, at 305-246-7327.

Very truly yours,

Michael Kiley
Vice President
Turkey Point Nuclear Plant

Enclosure 1: 10 CFR 50.55a Relief Request No. 9

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Nuclear Plant
Project Manager, NRR, USNRC

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NRR

Turkey Point Unit 3 Fourth Inservice Inspection Interval
Relief Request Number 9

Proposed Alternative to Visual Examination During Testing in Accordance with 10 CFR 50.55a(a)(3)(i)

1.0 ASME CODE COMPONENTS AFFECTED

The affected component of this request is the Turkey Point Unit 3 containment liner. The containment liner is not an American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) pressure vessel. However, the containment liner is included in the Turkey Point Unit 3 ASME Code Section XI Inservice Inspection (ISI) Program and Section XI Repair/Replacement Program.

2.0 APPLICABLE CODE EDITION AND ADDENDA

ASME Code Section XI, 2001 Edition, 2003 Addenda.

3.0 APPLICABLE CODE REQUIRMENTS

Article IWE-5000 of ASME Code Section XI, 2001 Edition, 2003 Addenda, "SYSTEM PRESSURE TESTS," sub-article IWE-5240, "VISUAL EXAMINATION," states:

> *During the pressure test required by IWE-5220, a detailed visual examination (IWE-2310) shall be performed on areas affected by repair/replacement activities.*

Although not the applicable Code year for Turkey Point Unit 3; Article IWE-5000 of ASME Code Section XI, 2004 Edition, 2006 Addenda, sub-article IWE-5240, "VISUAL EXAMINATION," has been revised to permit performance of the visual examination upon completion of the pressure test.

4.0 REASON FOR REQUEST

During the 2010 maintenance and refueling outage for Turkey Point Unit 3, a scheduled visual examination of the containment liner plate in the sump area revealed significant corrosion in a localized region of the vertical wall section, immediately adjacent to the concrete floor. Further investigation with visual and volumetric inspection methods revealed that that the corrosion degradation initiated on the inside surface of the liner plate and that localized repairs were required.

The planned repairs include removing the degraded portion of the liner plate and welding a replacement plate, measuring approximately 4" x 32", in place. Following the repairs, a pneumatic leakage test is required in accordance with sub-article IWE-5221.

A local leak rate test is planned to be performed on the repaired area. The local leak rate test requires the use of a test device that will make the areas affected by the repair

activities inaccessible during the local leak rate test. The outside surface of the repair area is also inaccessible as it is covered with concrete.

Relief is requested from the direct visual examination requirement specified in sub-article IWE-5240 during the leakage test required by sub-article IWE-5221.

5.0 PROPOSED ALTERNATIVE AND BASIS FOR USE

In accordance with 10 CFR 50.55a(a)(3)(i), FPL requests approval of an alternative to the detailed visual examination requirement of ASME Code Section XI, sub-article IWE-5240 during the pressure test. FPL proposes to perform a visual examination (VT-1) of the affected area both prior to and following the local leak rate test.

Visual examination (VT-1) prior to the performance of the local leak rate testing provides assurance that the affected area has been properly prepared for testing and no abnormalities exist in the affected area. The local leak rate test will provide an accurate and direct method of assuring the leak-tight integrity of the repair welds. Post leak rate test visual examination (VT-1) provides assurance that the tested area is free of abnormalities that may be exposed by the local leak rate test.

The required nondestructive examination of the repair will provide additional assurance of the integrity of the repair welds. The proposed visual examination (VT-1) provides an adequate level of quality and safety prior to and following the local leak rate test even though the concrete side of the repair is inaccessible.

6.0 DURATION OF PROPOSED ALTERNATIVE

The proposed alternative is requested in support of containment liner repairs made during the current 2010 Turkey Point Unit 3 maintenance and refueling outage.