



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 19, 2010

Mr. Mano Nazar  
Executive Vice President and  
Chief Nuclear Officer  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNITS 3 AND 4 –  
ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT  
IMPACT (TAC NOS. ME1007 AND ME1008)

Dear Mr. Nazar:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated March 18, 2009. The proposed exemption would exempt Turkey Point, Units 3 and 4 from the requirements of Appendix G to the Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50 and 10 CFR 50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events," to revise certain Turkey Point reactor pressure vessel material initial (unirradiated) properties using Framatome Advanced Nuclear Power Topical Reports BAW-2308, Revisions 1A and 2A.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Paige".

Jason C. Paige, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure:  
Environmental Assessment

cc w/encl: Distribution via Listserv

UNITED STATES NUCLEAR REGULATORY COMMISSION  
FLORIDA POWER AND LIGHT COMPANY  
DOCKET NOS. 50-250 AND 50-251  
TURKEY POINT NUCLEAR GENERATING UNITS 3 AND 4  
ENVIRONMENTAL ASSESSMENT AND FINDING OF  
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering the issuance of an Exemption, pursuant to 10 CFR 50.12 and 10 CFR 50.60(b) from the requirements of 10 CFR 50.61 and 10 CFR Part 50, Appendix G for Facility Operating License Nos. DPR-31 and DPR-41, issued to Florida Power and Light Company (the licensee), for operation of the Turkey Point Units 3 and 4, located in Miami, Florida. In accordance with 10 CFR 51.21, the NRC prepared an environmental assessment documenting its finding. The NRC concluded that the proposed actions will have no significant environmental impact.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt the licensee from certain requirements of 10 CFR 50.61, "Fracture Toughness Requirements for Protection Against Thermal Shock Events," and 10 CFR Part 50, Appendix G, "Fracture Toughness Requirements."

The proposed action is in accordance with the licensee's application dated March 18, 2009.

The Need for the Proposed Action:

The proposed exemption would allow the licensee to use an alternative method, described in Framatome ANP Topical Report BAW-2308, Revisions 1-A and 2-A

(supplemental), for determining the adjusted  $RT_{NDT}$  (reference nil-ductility temperature) of the Linde 80 weld materials present in the beltline region of the Turkey Point Units 3 and 4 reactor pressure vessels.

Environmental Impacts of the Proposed Action:

The NRC has completed its environmental assessment of the proposed exemption. The staff concluded that the change would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring. The proposed action would not result in an increased radiological hazard beyond those previously analyzed. There will be no change to radioactive effluents that effect radiation exposures to plant workers and members of the public. The proposed action will be performed inside existing plant buildings. No changes will be made to plant buildings or the site property. Therefore, no changes or different types of radiological impacts are expected as a result of the proposed exemption.

The proposed action does not result in changes to land use or water use, or result in changes to the quality or quantity of non-radiological effluents. No changes to the National Pollution Discharge Elimination System permit are needed. No effects on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or impacts to essential fish habitat covered by the Magnuson-Steven's Act are expected. There are no impacts to the air or ambient air quality. There are no impacts to historical and cultural resources. There would be no impact to socioeconomic resources. Therefore, no changes or different types of non-radiological environmental impacts are expected as a result of the proposed exemption. Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

The details of the staff's safety evaluation will be provided in the exemption that will be issued as part of the letter to the licensee approving the exemption to the regulation if granted.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed actions, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the exemption request would result in no change in current environmental impacts. The environmental impacts of the proposed exemption and the "no action" alternative are similar.

Alternative Use of Resources:

The action does not involve the use of any different resources than those considered in the Final Environmental Statement for the Turkey Point Units 3 and 4, Docket No. 50-250 and 50-251, issued in 1972.

Agencies and Persons Consulted:

In accordance with its stated policy, on January 6, 2010, the staff consulted with the Florida State official, Charles Hamilton of the Bureau of Radiation Control, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated March 18, 2009 (Agencywide Document Access and Management System (ADAMS) No. ML090920408). Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 1555 Rockville Pike, Rockville,

Maryland 20852. Publicly available records will be accessible electronically from the ADAMS

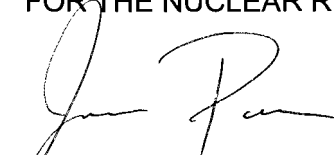
Public Electronic Reading Room on the Internet at the NRC Website:

<http://www.nrc.gov/reading-rm/adams.html>.

Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or send an e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this 19 day of January 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Jason C. Paige". The signature is written in a cursive style with a large initial "J" and "P".

Jason C. Paige, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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*/RA/*

Jason C. Paige, Project Manager  
Plant Licensing Branch II-2  
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Docket Nos. 50-250 and 50-251

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Environmental Assessment

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**ADAMS Accession Nos.** Letter ML100070715 EA FRN ML100080076 \*via email NRR-044

OFFICE	DORL/LPL2-2/PM	DORL/LPL2-2/LA	NRR/DLR/RERB/BC	OGC NLO	DORL/LPL2-2/BC
NAME	JPaige	BClayton	BPham*	MSpencer	TBoyce
DATE	01/11/10	01/11/10	6/11/09	01/19/10	01/19/10

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