

August 27, 2004

Mr. Thomas Saporito
National Environmental Protection Center
Post Office Box 1173
Jupiter, Florida 33458

Dear Mr. Saporito:

Your petition addressed to the U.S. Nuclear Regulatory Commission (NRC) Executive Director for Operations, dated June 10, 2004, as supplemented on June 24, 2004, has been referred to the Office of Nuclear Reactor Regulation pursuant to Title 10, *Code of Federal Regulations* (10 CFR), Section 2.206. You requested that the NRC take immediate action to cause the cold shutdown of the Turkey Point Nuclear Power Plant, Units 3 and 4, operated by the Florida Power and Light Company (FPL). As the basis for your request, which relates to a relaxation from the reactor vessel head Order EA-03-009, you state:

Examination of the 65 RPV [reactor pressure vessel] head penetration nozzles in accordance with Section IV, paragraph C.(1)(b), of EA-03-009 would NOT result in hardship without a compensating increase in the level of quality and safety. Further, the licensee's proposed alternative examination of the 53 RPV head penetration nozzles from 2 inches above the J-groove weld to a level at least 1 inch below the J-groove weld does NOT provide reasonable assurance of the structural integrity of the RPV head, VHP [vessel head penetration] nozzles, and welds. Thus, the licensee has not demonstrated "good cause" in accordance with Section IV, paragraph F of EA-03-009, for any relaxation of the safety inspection requirements imposed upon the licensee therein.

The Petition Review Board (PRB) considered the information provided in your petitions as well as the information you provided during a teleconference with the PRB on June 24, 2004. The staff considered your petition as well as your supplemental letter, and determined that there was no need for action to immediately shutdown Turkey Point Units 3 and 4. The staff has also concluded that your petition does not meet the criteria for consideration under 10 CFR 2.206. In accordance with NRC Management Directive 8.11, "Review Process for 10 CFR 2.206 Petitions," the staff will not review a petition if the petition does not contain supporting facts that constitute the bases for taking the particular action beyond the bare assertion. Those supporting facts must be credible and sufficient to warrant further inquiry. In your request, you have not provided any technical basis to support a conclusion that the NRC staff's evaluation of the licensee's request is incorrect, nor that any of the information provided by the licensee was incomplete, inaccurate, or of such poor technical quality as to warrant denial of the application.

In a letter dated December 19, 2003, as supplemented by letter dated March 24, 2004, FPL requested a reduction in the coverage area for 65 nozzles because the ultrasonic testing blade probe design prevented full examination to the bottom of the nozzle. This relaxation was retroactive, in that the examinations had been successfully completed during the March 2003 outage. This submittal supplemented the licensee's original relaxation. The original submittal was approved by the NRC staff on March 20, 2003, while the supplemental request was

approved by the NRC staff on May 25, 2004. The May 2004 approval was based on the uninspected areas being in a lower stress area, verification of the integrity of the RPV head and the absence of ongoing degradation as a result of the bare metal vessel inspections, successful "leak path" indicating no circumferential cracking or through-wall leakage, and the crack-growth results indicating a very low likelihood for a flaw in the unexamined area to grow through-wall and cause leakage and degrade the low-alloy steel RPV head prior to the next inspection/replacement of the RPV head.

In your initial submittal dated June 10, 2004, you assert that the NRC staff's acceptance of the structural integrity and crack-growth analyses provided by the licensee were "... not based on any valid scientific analysis, nor is it supported by an NRC-approved crack-growth formula." On the contrary, the fracture analysis was carried out using crack-growth rates which are consistent with industry service experience and recommended by the Electric Power Research Institute Materials Reliability Program (MRP). The flaw evaluations contained in WCAP-16027-P "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation: Turkey Point Units 3 and 4," Revision 0, were based on the plant-specific stresses in the nozzle penetrations at Turkey Point, and the flaw evaluation methodology identified in the report was approved for Turkey Point on March 20, 2003. The flaw evaluation guidelines were developed by the NRR staff and were needed since no guidance or rules existed by the American Society of Mechanical Engineers (ASME) Code, Section XI to evaluate flaws found in the control rod drive mechanism pressure boundary. The NRC staff has also issued flaw evaluation guidelines which were provided in a letter from R. Barrett, NRC, to A. Marion, Nuclear Energy Institute (ADAMS Accession No. ML030980322). The Barrett letter provided revised guidance consistent with actions approved by Section XI of the ASME Code, on February 27, 2003. The Code action consisted of a Code addition and an enabling Code Case to establish rules for flaw evaluation for pressurized-water reactor vessel upper head penetration nozzles. The NRR staff, through its representation on the cognizant Section XI committees, supported the development of these new flaw-evaluation rules. These guidelines use the same Alloy 600 crack growth rate equation as provided in MRP-55.

Your letters also make various assertions of inappropriate actions by the NRC staff. Both letters have been referred to the Office of the Inspector General for review.

Thank you for bringing these issues to the attention of the NRC.

Sincerely,

/RA JLyons for/

Ledyard B. Marsh, Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure: NEPC 2.206 Request

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NRR-106

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