



FPL Energy
Seabrook Station

FPL Energy Seabrook Station
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DEC 18 2003

Docket No. 50-443
NYN-03104

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Seabrook Station
Summary of Reactor Pressure Vessel Head Inspections

Reference: NYN-03026; FPL Common Letter L-2003-051; Order Establishing Interim Inspection Requirements For Reactor Pressure Vessel Heads at Pressurized Water Reactors Answer to Order (EA-03-009); dated February 28, 2003

FPL Energy Seabrook, LLC (FPLE Seabrook) in accordance with NRC Order EA-03-009, *Issuance of Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors* dated February 11, 2003 is enclosing a summary of inspections performed during refueling outage OR09. This report is being submitted within (60) days from plant restart from refueling outage OR09 on October 29, 2003.

On October 6, 2003 during reactor vessel disassembly, a stream of boric acid was discovered on the Reactor Pressure Vessel (RPV) head emanating from the under the Control Rod Drive Mechanism (CRDM) shroud. Further investigation revealed the source to be from a leaking canopy seal weld. FPLE Seabrook has performed inspections of the affected RPV head surface and penetrations and verified the integrity of the affected area and penetrations.

Should you have any questions regarding this letter, please contact Mr. James M. Peschel, Regulatory Programs Manager, at (603) 773-7194.

Very truly yours,
FPL Energy Seabrook, LLC

Mark E. Warner
Site Vice President

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U.S. Nuclear Regulatory Commission
NYN-03104

cc:

H. J. Miller, NRC Region 1 Administrator
V. Nerses, NRC Project Manager, Project Directorate I -2
G. T. Dentel, NRC Senior Resident Inspector

Oath and Affirmation

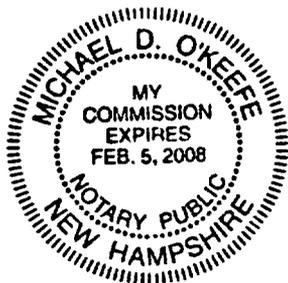
I, Mark E. Warner, Site Vice President of FPL Energy Seabrook, LLC, hereby affirm that the information and statements contained within this document are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed
before me this

18 day of December, 2003

Michael O'Keefe
Notary Public

Mark E. Warner
Mark E. Warner
Site Vice President



Enclosure 1 to NYN-03104

FPLE Seabrook submits this report pursuant to NRC Order EA-03-009, *Issuance of Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors* dated February 11, 2003. This report is being submitted within (60) days from plant restart from refueling outage OR09 on October 29, 2003.

Paragraph E of EA-03-009 states, "For each inspection required in Paragraph C, the Licensee shall submit a report detailing the inspection results within sixty (60) days after returning the plant to operation. For each inspection required in Paragraph D, the Licensee shall submit a report detailing the inspection results within (60) days after returning the plant to operation if a leak or boron deposit was found during the inspection."

Paragraph D of EA-03-009 states, "During each refueling outage, visual inspections shall be performed to identify potential boric acid leaks from pressure-retaining components above the RPV head. For any plant with boron deposits on the surface of the RPV head or related insulation, discovered either during the inspections required by this Order or otherwise and regardless of the source of the deposit, before returning the plant to operation the Licensee shall perform inspections of the affected RPV head surface and penetrations appropriate to the conditions found to verify the integrity of the affected area and penetrations."

Although no inspections were required by paragraph C during this refueling outage as FPLE Seabrook falls in the low susceptibility category, leakage and boric acid were discovered. On October 6, 2003 during reactor vessel disassembly, a stream of boric acid was discovered on the RPV head emanating from the under the CRDM shroud. Further investigation revealed the source to be from a leaking canopy seal weld. The CRDM tube and associated leak path along the head were cleaned and evaluated for integrity. The affected tube-to-head interface and the carbon steel head surface as well as downstream tubes and head surfaces exhibited no degradation.

Several other CRDMs exhibited dried boric acid staining from above the canopy seal weld area, but none of the staining streams left any deposits on the insulation, tube-to-head interface or on the head. During this evaluation, one tube-to-head interface was found with a small amount of white substance with no obvious leak path. A sample was obtained and analyzed and determined not to be boric acid. Cleaning of this area was not required since obtaining the sample removed evidence of the substance. During repair of the leaking canopy seal weld, an adjacent CRDM canopy seal was also found to be leaking. This leak was small and did not deposit any boric acid on the insulation or below the insulation on the head. An extent of condition inspection was performed on the remaining CRDM canopy seal welds. This inspection was performed using a pole camera, which was capable of viewing 360° around each weld. No additional canopy seal weld leaks were observed.