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December 15, 2004  
JAFP-04-0190

United States Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

SUBJECT: James A. FitzPatrick Nuclear Power Plant  
Docket No. 50-333  
**In-Vessel Visual Inspection Summary Report**  
**2004 Refuel Outage (Reload 16/Cycle 17)**

Dear Sir:

This letter and the associated attachments are being submitted by Entergy Nuclear Operations, Inc. (ENO) to provide the In-Vessel Visual Inspection (IVVI) Summary Report for Refuel Outage 16 (RO16) for the James A. FitzPatrick Nuclear Power Plant (Commercial Service Date: July 28, 1975). The IVVI examinations were conducted inside the reactor pressure vessel (RPV) by General Electric Nuclear Energy (GENE) utilizing personnel certified and qualified to ASME Code Section XI, and the guidelines as outlined in the Boiling Water Reactor Vessel Internals Project's (BWRVIP) BWRVIP-03, Revision 6, Section 2, "General Procedures" and Section 2.5, "Generic Standards for Visual Inspection of Reactor Pressure Vessel Internals, Components, and Associated Repairs", Sub-section 4.0, "Personnel Training/Experience". Per the requirements of these documents, specific training was provided for all inspection personnel addressing plant specific procedural requirements, core shroud, core spray, jet pump and steam dryer configuration details, previous inspection results, inspection procedures, and other pertinent information related to the IVVI inspections.

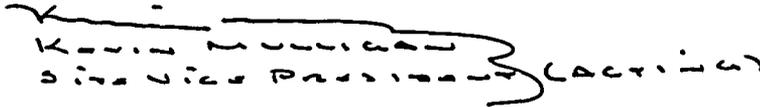
Attachment 1 provides a summary report for the IVVI examinations conducted during the plant's fall 2004 Refuel Outage (Reload 16/Cycle 17) and their results. As noted in Attachment 1, some examinations scheduled for RO16 were deferred to Refuel Outage 17 (RO17). As required by the applicable BWRVIP guidelines, the appropriate technical justification was prepared and documented in Reference 1, listed at the end of Attachment 1.

This letter contains one commitment to the NRC which is summarized in Attachment 2.

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Should you have any questions concerning this report, please direct them to Mr. Andy Halliday at (315) 349-6055.

Very truly yours,

Handwritten signature of T. A. Sullivan in black ink, written over a horizontal line.

T. A. Sullivan  
Site Vice President

TAS:GB  
Attachments

cc: Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
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King of Prussia, PA 19406

Mr. Patrick D. Milano, Senior Project Manager  
Project Directorate I  
Division of Licensing Project Management  
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U.S. Nuclear Regulatory Commission  
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**Attachment 1 to JAFP-04-0190  
IVVI Summary Report (RO16)  
James A. FitzPatrick Nuclear Power Plant**

<b>Components in BWRVIP and Industry Scope</b>	<b>Date or Frequency of Inspection</b>	<b>Inspection Method Used</b>	<b>Summarize the Following Information: Inspection Results, Repairs, Replacements, Re-inspections</b>
Core Shroud	Fall 2004 (RO16)	EVT-1	<p>Inspected accessible areas of vertical welds SV2A, SV8C, SV9A, SV9B and SV9C, per BWRVIP-76 guidelines. No relevant indications noted.</p> <p>Inspected two shroud support gusset plate welds and 12 inches along top side of H9 weld on each side of gussets, per BWRVIP 38 guidelines. No relevant indications noted.</p> <p>* Vertical weld SV8B and four gusset plate weld exams, scheduled for RO16, were deferred to RO17 based on technical justification provided in Reference 1 per the BWRVIP guidelines.</p>
Core Spray Piping	Fall 2004 (RO16)	EVT-1	Re-inspected accessible areas of all Loop "A" and "B" creviced and T-box-to-pipe welds; repair clamp welds at Loop "B" downcomer pipe; and rotating sample of pipe elbow upper/lower welds in Loop "A" (at 170° downcomer), per BWRVIP-18 guidelines. No relevant indications noted.
Core Spray Sparger	Fall 2004 (RO16)	VT-1	Re-inspected all sparger bracket support welds at "C" and "D" spargers, per BWRVIP-18 guidelines. No relevant indications noted.
Standby Liquid Control (SLC) System	Fall 2004 (RO16)	EVT-2	Performed Enhanced VT-2 on SLC nozzle-to-safe end weld during RPV System Leakage Test per BWRVIP-27 guidelines. Test was "Accepted" with no leakage noted.

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Jet Pump	Fall 2004 (RO16)	EVT-1  EVT-1  VT-1	<p>Inspected riser welds (“high-priority”) at Jet Pumps #1, #2, #3, #4, #17 and #18, per BWRVIP-41 guidelines. No relevant indications noted.</p> <p>Inspected diffuser/adaptor assembly welds (“high-priority”) at Jet Pumps #17 and #18, per BWRVIP-41 guidelines. No relevant indications noted.</p> <p>Inspected wedge bearing surfaces (WD-1) at Jet Pumps #17 and #18, per BWRVIP-41 guidelines. No relevant indications noted.</p> <p>* Thirty “high priority” ranked weld exams for Jet Pumps #1, #2, #3, #4, #19 and #20, scheduled for RO16, were deferred to RO17 based on technical justification provided in Reference 1 per the BWRVIP guidelines.</p>
Steam Dryer and Moisture Separator	Fall 2004 (RO16)	VT-1 and VT-3  EVT-1 and VT-3  VT-3	<p>Inspected steam dryer integrity per GE SIL 644 Supplement 1 (“Steam Dryer Integrity”), and per INPO OE 18796 (“Steam Dryer Hood Crack and Tie Bar Recordable Visual Indications”) guidelines. Two relevant indication areas were noted. These indications resulted in expanded scope with additional brushing and evaluations. These indications are in the heat affected zone of welds at eight vibration blocks and at a drain channel. All indications were satisfactorily dispositioned by calculations. Plans are to re-inspect the indications in RO17. This activity was entered into the FitzPatrick corrective action system. (See Attachment 2 for the commitment to perform this activity.)</p> <p>Inspected steam dryer hold-down brackets, steam dryer support brackets and attachment welds. No relevant indications noted.</p> <p>Inspected steam separator lifting rod eye assemblies, and 25% of shroud head bolts. No relevant indications noted.</p>

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Core Plate	Fall 2004 (RO16)	VT-3	Inspected a total of six core plate plugs at two locations. No relevant indications noted.
Instrument Penetrations	Fall 2004 (RO16)	VT-2	Performed a VT-2 ISI System Leakage Exam Test at six instrument nozzles (during RPV System Test) per BWRVIP-49 guidelines. Test was "Accepted" with no leakage noted.
Vessel ID Brackets	Fall 2004 (RO16)	EVT-1	Inspected shroud support gusset plate welds to RPV wall at two locations. No relevant indications noted.
		EVT-1	Inspected all four steam dryer support brackets attachment welds to RPV wall. No relevant indications noted.
		VT-3	Inspected all four steam dryer hold-down brackets attachment welds to RPV top head, with no relevant indications noted.
		VT-3	Inspected guide rod and bracket attachment welds to RPV wall at 180°, with no relevant indications noted.
Top Guide			* Two top guide hold-down assembly weld exams, scheduled for RO16, were deferred to RO17 based on technical justification provided in Reference 1 per the BWRVIP guidelines.

Reference 1: JAF-RPT-04-00476, Rev. 0, BWRVIP Program – Technical Justification RO16, dated 12/8/04.

**Attachment 2 to JAFP-04-0190  
IVVI Summary Report (RO16)  
James A. FitzPatrick Nuclear Power Plant**

The following table identifies those actions committed to by Entergy Nuclear Operations, Inc. (ENO) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

**SUMMARY OF REGULATORY COMMITMENTS**

<b>Commitment</b>	<b>Description</b>	<b>Completion Schedule</b>
JAFP-04-0190-01	The relevant indications on the steam dryer (identified in Attachment 1) will be re-inspected.	Refuel Outage 17