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Perry Nuclear Power Plant
Docket Number 50-440
License Number NPF-48

Subject: Reply to a Notice of Violation; EA-03-197

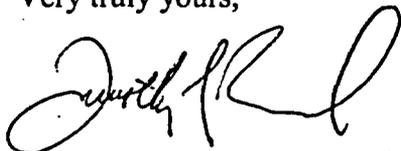
Ladies and Gentlemen:

Enclosed is a response to Notice of Violation EA-03-197 issued to the Perry Nuclear Power Plant (PNPP) by the Nuclear Regulatory Commission on January 28, 2004. The details of the violation were documented in NRC Inspection Report Number 50-440/2003-006 issued on October 30, 2003. The violation was issued for failure to develop a procedure that adequately incorporated instructions for proper reassembly of the emergency service water pump, in violation of Technical Specification 5.4. The violation is associated with a White significance determination process finding.

There are no regulatory commitments contained in this submittal. Any actions discussed in this document that represent intended or planned actions, are described for the NRC's information, and are not regulatory commitments.

If you have any questions or require additional information, please contact Mr. Vernon Higaki, Manager-Regulatory Affairs, at (440) 280-5294.

Very truly yours,



for William R. Kanda
Enclosure

cc: NRC Region III Administrator
NRC Senior Resident Inspector - PNPP
NRR Project Manager - PNPP

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REPLY TO A NOTICE OF VIOLATION; EA-03-0197

RESTATEMENT OF THE VIOLATION

Technical Specification 5.4 requires, in part, that procedures shall be established, implemented and maintained as recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, Appendix A, Section 9, "Procedures for Performing Maintenance," recommends, in part, that maintenance activities that can affect the performance of safety-related equipment be performed in accordance with written procedures appropriate to the circumstances. The licensee developed Procedure GMI-0039, "Disassembly of the Emergency Service Water Pumps," to disassemble and reassemble the Division 1 and 2 emergency service water pumps. This procedure provides direction for the coupling of the pump shaft sections during reassembly.

Contrary to the above, the licensee failed to establish written procedures appropriate to the circumstances. Specifically, the vendor procedure specified that the setscrew holes should align with the groove in the slip ring such that the setscrews should be flush with the coupling sleeve. The licensee failed to transfer this requirement to the procedure for pump reassembly resulting in improper alignment of the coupling components when the pump was reassembled on July 24, 1997, using GMI-0039, Revision 3. As a result, the pump subsequently failed on September 1, 2003.

REASON FOR THE VIOLATION

A procedure content deficiency contributed to the failure of the Emergency Service Water (ESW) pump A shaft coupling, as discussed in the root cause analysis report approved on October 15, 2003 for Condition Report (CR) 03-05065. The CR stated the procedure GMI-0039, "Disassembly of Emergency Service Water Pumps," did not adequately detail installation of the coupling assemblies. Proper installation was dependent partially on the maintenance personnel's knowledge based skills to correctly assemble the pump shaft couplings.

An assessment of the root cause analysis report approved on October 15, 2003 was performed in early February 2004 and concluded that the circumstances that led to the off-center installation of the pump shaft coupling sleeve must be better understood. Additional investigation of the cause for failure of the ESW A shaft coupling is in progress. Further correspondence will be submitted if there are substantive changes to the information provided to date.

CORRECTIVE STEPS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

Procedure GMI-039, "Disassembly of Emergency Service Water Pumps," was revised (revision 6 effective September 4, 2003) to provide more explicit instructions for ESW pumps A & B coupling installation and alignment. Revision 7 of the procedure (effective December 16, 2003) was completed and provides additional detail on pump disassembly and re-assembly.

Procedure GMI-040, "Disassembly of Div 3 Emergency Service Water Pump," was revised (revision 1 effective November 18, 2003) for ESW pump C to provide more explicit instructions on pump disassembly and reassembly, paying particular attention to the shaft coupling for both threaded and sleeve style installation.

Procedure GMI-041, "Disassembly of Emergency Service Water Screen Wash Pump," was revised (revision 2 effective December 16, 2003) for ESW Screen Wash Pumps A & B to provide more explicit instructions on pump disassembly and reassembly, paying particular attention to threaded shaft coupling sleeve installation.

CORRECTIVE STEPS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

An extent of condition review was performed for safety and non-safety related vertical shaft pumps installed at the Perry Nuclear Power Plant that have a similar configuration, similar coupling sleeve and similar written instructions when compared to the ESW pumps. Pumps included, that take suction from an untreated water source, were the traveling screen wash pumps, the non-safety related service water pumps, the diesel driven fire pump, the motor driven fire pump, the motor driven fire jockey pump, and the non-safety related circulating water pumps. Other vertical shaft pumps considered that take suction from sources other than untreated lake water were the residual heat removal pumps, the low pressure core spray pump, the high pressure core spray pump, the condensate hotwell pumps and the feedwater booster pumps. This review found that procedures GMI-040, "Disassembly of Div 3 Emergency Service Water Pump," and GMI-041, "Disassembly of Emergency Service Water Screen Wash Pump" should also be revised. Revisions completed for procedures GMI-040 and GMI-041 are corrective steps that will contribute to avoiding further violation for assembly and disassembly of pumps similar to the ESW A pump.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

A rebuild of the ESW A pump was completed on September 5, 2003, and the pump was declared operable at 1855 hours that day. Four new coupling sleeves were installed and the correct coupling sleeve installation was verified. The revised procedure GMI-0039, revision 7, was made effective on December 16, 2003.