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

Perry Nuclear Power Plant
Docket No. 50-440
Reply to a Notice of Violation

Ladies and Gentlemen:

Enclosed is the Perry Nuclear Power Plant reply to the Notice of Violation contained in NRC Inspection Report 50-440/96-11, which was transmitted by letter dated January 15, 1997. The Notice of Violation involves a change to an instruction that had made the instruction unusable as written.

If you have questions or require additional information, please contact Mr. Henry L. Hegrat, Manager-Regulatory Affairs, at (216) 280-5606.

Very truly yours,

LW Bormen for

Lew W. Myers
Vice President-Nuclear

Enclosure

cc: NRC Region III Administrator
NRC Resident Inspector
NRC Project Manager

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REPLY TO A NOTICE OF VIOLATION

VIOLATION 96011-02

Restatement of the Violation

1. During an NRC inspection conducted on September 15 through November 1, 1996, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG 1600, the violation is listed below:

   Technical Specification 5.4.1 requires that written instructions be maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Startup of the emergency diesel generators is an applicable procedure recommended in Regulatory Guide 1.33. For a written instruction to be properly maintained, errors must not be introduced when the instruction is changed.

   Contrary to the above , on September 11, 1996, when a change to SOI R43 was made effective, it introduced an error into the instruction (50-440/96011-02 (DRP)).

   This is a Severity Level IV violation (Supplement 1).

Issue

In NRC Inspection Report No. 50-440/96-11, it was noted that Perry Nuclear Power Plant (PNPP) personnel identified an error in an instruction during a surveillance activity. The NRC stated that once the error was identified, remedial actions were prompt and appropriate. However, earlier opportunities to identify the error had been missed. The NRC noted that the error in the instruction had not been identified either during the procedure/instruction change process or during multiple uses of the instruction. The NRC expressed concern regarding the delay in identifying the error, in addition to PNPP personnel failing to identify the error during review of the instruction prior to use. The NRC concluded that this demonstrated inattention to detail during the instruction review process, poor questioning attitudes by the operators who performed the incorrect instruction, and poor follow-through in monitoring implementation of expectations for use of written instructions. The NRC determined that, collectively, these weaknesses had potential safety consequences.

Background

On October 23, 1996, surveillance instruction (SVI) R43-T1318, "Diesel Generator Start and Load Division 2," was being performed. SVI performance involves licensed operator activities in the control room and nonlicensed operator activities in the Division 2 Emergency Diesel Generator (EDG) Room. Successful SVI completion requires branching into selected portions of System Operating Instruction (SOI) R43, "Division 1 and 2 Diesel Generator System (Unit 1)."

Shortly after a nonlicensed operator began reading SOI-R43, he determined that the instruction could not be performed as written because a step in Section 7.1 (Pre-Startup Inspection or Post Shutdown Engine Roll) did not appear to support the expected EDG physical configuration. Specifically, Step 1. stated, "Verify the following:" and included four items. Item b. was "Proper operation of the shutdown cylinder by observing proper extension of the cylinder plunger, and that the fuel rack is closed." This step could not yet be

performed since the EDG had not been taken to "inop" as specified in step 7.1.4 (i.e., Place the INOP/NORMAL/START keylock in INOP at Engine Control Panel 1H51-P054A(B)). The Shift Supervisor and Responsible System Engineer were notified and concluded that the SOI would have to be changed to complete the surveillance. A Potential Issue Form (PIF) was initiated to document, determine cause, and correct the error in the instruction. The PIF initiator included a statement that the EDG had been tested on September 16, 1996, which had required three prior uses of Section 7.1.

Procedure/Instruction Change (PIC) 10, which became effective on September 11, 1996, revised Section 7.1 such that verification of proper shutdown cylinder operation is performed prior to placing the INOP/NORMAL/START keylock in INOP. However, this verification cannot be accomplished unless the EDG is placed in INOP. During the subsequent corrective action investigation, it was determined that in addition to the September 16-17, 1996, instances of using SOI-R43 Section 7.1 during testing of the Division 1 EDG, there were also four occasions during September 25-27, 1996, which required use of Section 7.1 during Division 2 EDG testing as well.

Reason for the Violation

Personnel errors and ineffective communication of management expectations were identified as the cause of the event. Several personnel errors occurred on different occasions. The first error occurred when PIC-10 was reviewed and approved with a fault that made it impossible to perform Section 7.1 as written. Subsequent personnel errors occurred when nonlicensed operators failed to follow procedures. If the nonlicensed operators had read the verification step and complied with the definition of the term 'verify' before proceeding to the next step, the event would have been limited to a faulted instruction.

Shortly after the issue was identified, Operations Section management had eleven nonlicensed operators simulate performance of the erroneous version of SOI-R43 one at a time in an EDG room. The investigation determined that only two of the eleven nonlicensed operators identified the error in the instruction. Errors were caused by nonlicensed operators either misreading the faulted step or interpreting the instruction with working knowledge of the evolution from past experience. Some of the nonlicensed operators indicated that they were sufficiently familiar with the evolution sequence and the response of the EDG systems to the actions taken during the air roll, that they did not notice that Section 7.1 could not be performed as written. An additional concern identified was that supervision was insufficiently sensitive to procedural compliance and does not consistently provide adequate supervisory oversight of the performance of plant evolutions outside of the Control Room.

Consequently, Operations Section management concluded that they had not effectively communicated their expectations for instruction compliance to the nonlicensed operators and that supervisory oversight has not been consistent.

Corrective Steps Taken and Results Achieved

The faulted SOI-R43 verification step was corrected. Also the site policy on procedure compliance was revised and reissued.

At the direction of the Operations Section Manager, the involved nonlicensed operators were interviewed individually by the Superintendent Plant Operations to address technical issues related to EDG knowledge and integrity issues related to meeting performance and employment requirements. Nonlicensed operators were then interviewed by the PIF investigator to address human performance, procedural compliance, and

operating practice aspects of the issue. Following interview completion, the Superintendent Plant Operations held training sessions with the operating crews and operating training staff to address the event and to delineate the conclusion that inadequate procedural compliance and inattention to detail were significant contributors to the issue. These sessions reinforced procedural compliance requirements and attention to detail expectations as an immediate corrective action.

The Operations Procedure Unit Supervisor conducted training with his personnel regarding the event circumstances regarding the procedural inadequacy in SOI-R43. During training, emphasis was placed on the responsibilities and importance of the in-depth instruction reviewer.

The expectation for supervisory oversight of in-plant evolutions was increased. Increased supervisory presence in the plant will strengthen the internalization for procedural compliance and lower the threshold for relating concerns to crew supervision. This is being monitored by Operations Section management via the Shift Supervisor's Monthly Activity Log. The number of required procedural compliance observations has been increased.

Job Performance Measures, which are used for practical demonstrations of operator knowledge and abilities, will now be conducted by Shift Supervisors or Unit Supervisors instead of a training instructor. This enhancement commenced with requalification cycle 2 which started November 12, 1996. This provides another opportunity for Operations Section management to reinforce expectations through direct observation and correction of procedural compliance issues.

Corrective Steps that Will be Taken to Avoid Further Violations

To fully address the extent of procedural compliance issues, the Operations Section Manager has determined that a self-assessment will be performed. The self-assessment will be established in a documented plan approved by both the Operations Section Manager and the Perry Nuclear Power Plant Department General Manager. Corrective actions and enhancements will be developed and implemented as appropriate. A follow-up self assessment will be performed to evaluate the effectiveness of these actions. These issues are being tracked via the PNPP Corrective Action Program.

Date When Full Compliance Was Achieved

On October 23, 1996, full compliance was achieved when a revision to SOI-R43 corrected the faulted instruction.

The following table identifies those actions which are considered to be regulatory commitments. Any other actions discussed in this document represent intended or planned actions, are described for the NRC's information, and are not regulatory commitments. Please notify the Manager - Regulatory Affairs at the Perry Nuclear Power Plant of any questions regarding this document or any associated regulatory commitments.

COMMITMENT
None