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U.S. Nuclear Regulatory Commission  
Document Control Room  
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Perry Nuclear Power Plant  
Docket No. 50-440  
Response to Notice of Violation

Gentlemen:

This letter provides the Perry Nuclear Power Plant response to the Notice of Violation contained within Inspection Report 50-440/93023 dated February 18, 1994. The report documented the results of the routine unannounced safety inspection performed by NRC resident inspectors December 19, 1993 through January 29, 1994.

The subject Notice of Violation identified concerns in the maintenance area regarding procedural compliance, and failure to correctly sample reactor water for conductivity measurements. The response to the Notice of Violation is provided by Attachment 1.

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

Very truly yours,

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Response to  
Notice of Violation

50-440/93023-01  
Restatement of the Violation

Technical Specification Surveillance Requirement 4.4.4.c requires, in part, that when the plant is in Operational Condition 1 and the continuous recording conductivity monitor is inoperable, an in-line conductivity measurement be obtained at least once every 4 hours. Based on the allowed 25 percent grace period, the measurement must be obtained within 5 hours of the previous reading or within 5 hours of inoperability of the continuous recording conductivity monitor.

Contrary to the above:

On January 16, 1994 with the plant in Operational Condition 1, in-line conductivity measurements were not obtained within the required 5 hours on three occasions. Also, on January 19, 1994, an in-line conductivity sample was not obtained until 8:48 a.m. which was not within 5 hours of the previous sample.

Reason for the Violation

Perry Nuclear Power Plant acknowledges the violation as stated above with the following exception. A representative in-line reactor water conductivity sample was taken at 0545 on January 19, 1994.

The reason for this violation is personnel error. Personnel involved in obtaining in-line reactor water conductivity measurements failed to read the information tag attached to the sample point isolation valve. The upstream isolation valves for the sample point utilized were closed and therefore a representative sample of reactor water was not obtained. Contributing to this was a lack of awareness of the status of all possible reactor water sample points due to inadequate communications, and preparation for the surveillance activity.

Corrective Action Taken and Results Achieved

Continuous reactor water conductivity measurement was restored at 2120 on January 16, 1994. In-line representative reactor water conductivity measurement was properly completed at 0545 and 0848 on January 19, 1994.

Chemistry supervisors discussed the event at turnovers with all technicians, reminding them of their responsibility for reactor water sampling and knowledge of available sample points. At that time, status of all reactor water sample points was posted in the chemistry laboratory, and will be updated as necessary for each shift turnover.

#### Actions to Avoid Further Violations

A Human Performance Enhancement System (HPES) evaluation was initiated to identify the cause and corrective actions for this event. Immediate corrective actions were to counsel the involved individuals. Additional corrective actions were to include the event in the next quarterly Chemistry Continuing Training session and incorporate the event permanently in the semiannual Post Accident Sampling System training sessions.

A means to identify to appropriate personnel the status and availability of sample points associated with Technical Specification samples is also being developed.

#### Date When Full Compliance Will Be Achieved

Full compliance was achieved when continuous reactor water monitoring was restored on January 16, 1994 and when representative samples were taken on January 19, 1994.

50-440/93023-02

#### Restatement of the Violation

Technical Specification 6.8.1.a, requires that written procedures be established, implemented, and maintained covering activities recommended in Appendix A of Regulatory Guide (RG) 1.33, Revision 2, February 1978. RG 1.33, Appendix A, Item 1.d recommends maintenance procedures for procedure adherence.

Perry Administrative Procedure PAP-0905, Revision 12, "Work Order Process," Step 6.4.2, states that for maintenance work, "the work shall be performed as identified on the Work Order or Job Traveler, instruction, and/or drawings provided by the Work Order package."

Contrary to the above:

On January 6, 1994, a maintenance crew failed to perform the work as identified in Work Order 93-740, step 030.11, by not removing the sluice gate operator from the stem.

#### Reason for the Violation

The root cause of this violation was personnel error, in that the responsible personnel failed to follow the work order procedure. The following two contributing causes were identified:

- 1) Inadequate Work Instruction- The work order could not be performed as written. The work order instructed the mechanics to remove the sluice gate motor operator and lift the gate without removing the motor operator mounting beam. This was physically impossible.

2) Responsible personnel did not perform an adequate review of the work order prior to performing work to identify and either make needed changes or get the procedure revised. Work supervisors are procedurally permitted to make limited changes to work order packages in the field. These allowed changes include deleting steps when job performance and personnel/equipment safety is not affected (this provision does not apply to the deletion of retest requirements, acceptance criteria, and Design Output Document requirements). The work supervisor incorrectly believed that by making the types of changes permitted by procedure, he could correct the inadequacy in the instruction. However, he failed to make the necessary changes to the affected step in the work order prior to performing the work, nor did he request a revision to the procedure.

#### Corrective Action Taken and Results Achieved

Several actions were taken to ensure that maintenance personnel are aware of the requirements for procedural compliance. As a result of this event, several meetings were held with the maintenance craft and supervisory personnel between 1/19/94 and 1/21/94. These meetings emphasized the absolute requirement for procedural compliance. Additionally, a meeting was held on 1/24/94 by the Manager, Plant Maintenance with Maintenance Supervisors, Field Engineers and Plant Helper Supervisors, further emphasizing management's expectations in this area. Also on 1/24/94, the Manager, Plant Maintenance, conducted a one-on-one meeting with the work supervisor involved in this incident.

A revision to the work order was processed to address the reassembly and reinstallation. An Action Request was initiated by the Quality Assurance Section concerning this event. A review of the work was done and a Nonconformance Report was initiated to facilitate engineering evaluation of this component. A revision to the work order procedure used to perform this work will incorporate the results of this evaluation and additional information obtained from the vendor; this revision will be used during the performance of future maintenance on this component.

#### Actions to Avoid Further Violations

A review of station procedures was conducted regarding the scope of field changes work supervisors are allowed to make to work packages and procedure requirements concerning when a work package revision is required.

This review determined that the current procedures are adequate and provide sufficient guidance in the above areas. The training conducted as part of the immediate corrective action for this event was intended to reinforce these existing procedures and eliminate any misunderstandings as to how work order procedures are to be implemented in the field and when revisions are required.

In addition to the above, as part of the Perry Course of Action, the Maintenance Section has initiated a Maintenance Performance Monitoring program. This program is designed to use Performance Monitoring and Peer Evaluation teams to periodically observe and evaluate work order processing and field execution from job planning through paperwork closure. These teams will be made from a multi-discipline task force of supervisory and craft personnel, familiar with all aspects of the work being performed. This evaluation process will ensure that maintenance activities will be performed in a manner consistent with management's expectations. This program is not fully implemented yet, but will be in place by July 1, 1994.

Date When Full Compliance Will Be Achieved

Full compliance was achieved on January 24, 1994 when training to the requirements of PAP 0905, Work Order Process, and reiteration of management expectations relative to procedural compliance were completed.