

**GPU Nuclear Corporation**

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April 28, 1994

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Reply to a Notice of Violation
Inspection Report 94-03

In accordance with 10 CFR 2.201, Attachment 1 provides GPUN's response to the violations identified in the subject inspection report.

If you should have any questions or require further information, please contact Brenda DeMerchant, OC Licensing Engineer at (609) 971-4642.

Very truly yours,

For John J. Barton
Vice President & Director
Oyster Creek

JJB/BDEM:jc
cc: Administrator, Region 1
Senior NRC Resident Inspector
Oyster Creek NRC Project Manager

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Violation:

- A. 10 CFR 50, Appendix B, Criterion VI (Document Control), requires, in part, that measures shall be established to control the issuance of documents, such as instructions and procedures, affecting quality. These measures shall assure that documents, including changes, are reviewed for adequacy.

Contrary to the above, on March 7, 1994, Job Order No. 47790, calibration of the "B" string main feedwater flow, was implemented without receiving an adequate technical review. The review that was performed failed to identify that main feedwater pump runout protection could not be bypassed and resulted in the closure of the "B" main feedwater regulating valve while operating at full power.

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

Response:

GPUN concurs with the violation as stated.

The cause for this violation has been determined to be inadequate work instructions. During the job preparation and review it was not identified that an adverse control system response would occur.

Normal operation of the Feedwater Control System is three element control. This mode of operation of the Feedwater Control System monitors, steam flow, feedwater flow and reactor level to maintain the reactor level at a predetermined setpoint on the Master Controller.

There was a lack of experience in task performance in that calibration of a feedwater flow transmitter while on line had not been previously performed. This does not imply a lack of proficiency in calibrating flow transmitters, but rather performing the calibration of a transmitter in the Feedwater Control System during plant operation at power.

Personnel in the planning and the review chain of the Job Order overlooked the fact that the run out protection would be activated during the calibration process. They believed that since single element control only monitors reactor water level, that any changes in indicated feedwater flow would not affect reactor level control. During review of the job order and associated feedwater flow control electrical connection diagrams, the connection between the feedwater flow transmitter and the run out controller was overlooked.

It is imperative that certain evolutions which carry the risk of initiating a plant transient undergo more scrutiny and preparation before they are allowed to begin. It is clear from this incident that the present work control process failed to provide the type of job preparation required to safely accomplish this task.

A contributing cause to this incident was that the Feedwater System was not on the list of critical components or systems that requires a risk assessment prior to performing troubleshooting. Therefore, no risk assessment was performed.

The I & C Department has reviewed all outstanding work in its backlog to ensure no other work is scheduled during this run cycle which might result in a similar incident.

The following corrective actions will be taken:

- A. The event narrative and causal factors for this event will be reviewed by Operations and Maintenance personnel (including Planning personnel) to ensure that they understand the response of the Feedwater Control System to varying flow signals while in all modes of operation.
- B. Improvements will be made in the work planning process for complex or otherwise critical jobs to include more detailed, step by step work instructions in the work controlling document. This will include appropriate prerequisites, precautions and limitations.
- C. A "Shelf Life", or other expiration information will be added for unused work orders on risk significant systems so that if they "expire" they must be re-planned, reviewed and verified to ensure referenced documents are current prior to the start of work.
- D. The troubleshooting procedure 2400-ADM-3660.01 will be revised to include additional critical components and systems, including feedwater system for future troubleshooting work orders.

Full compliance will be achieved by August 31, 1994 when the above corrective actions are completed.

Violation:

- B. 10 CFR 50 Appendix B, Criterion XVI (Corrective Action) requires, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, the licensee failed to promptly identify and initiate corrective actions for conditions adverse to quality related to temporary strainers in plant systems. The need to identify and remove temporary strainers was initially identified in NRC Information Notice 85-96, which was closed by an administrative review. In August 1993, and in February 1994, the NRC identified three possible temporary strainers that had not been identified or corrected; one in the reactor building closed cooling water system, and two in the core spray system suction flowpaths from the condensate storage tank.

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

Response:

GPUN concurs with the violation as stated.

This violation occurred due to an inadequate review of the original Information Notice (85-96).

In January of 1986, a review of the Oyster Creek Test Program documents was performed to ensure that all construction strainers installed on pumps added to the plant as part of a modification would either be removed at the conclusion of testing or turned over to the plant and recorded as a mechanical temporary variation. Due to a misunderstanding of the scope of the review required, and the department responsible for completing the walkdowns, this review did not include a comprehensive walkdown of existing plant pumps to determine if any construction strainers were still in place.

As a result of reissuing the Information Notice for additional review, a walkdown of all systems containing pumps was initiated to determine if construction strainers might still be installed. All walkdowns will be completed by May 15, 1994.

To date, one additional suspected strainer located in the CRD vessel return line has been identified. A work request has been submitted to inspect this condition during the upcoming 15R outage.

The strainer identified by the NRC in the RBCCW 1-2 pump has been verified removed.

Both core spray pump suction strainers identified by the NRC will be removed during the 15R refueling outage which is currently scheduled to begin in September, 1994. Since these strainers are only in the flow path from the condensate storage tank to each of the main core spray pumps and this flow path is not routinely used for test purposes, there is no reason to currently suspect strainer plugging. Additionally, the backup core spray pumps in each system have been inspected to ensure no strainers are present.

Currently, all system walkdowns are scheduled to be completed by **May 15, 1994**. Full compliance will be achieved when all identified strainers are verified removed at the conclusion of the 15R refueling outage.