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May 11, 1983

Mr Richard C DeYoung, Director
Office of Inspection and Enforcement
U S Nuclear Regulatory Commission
Washington, D C 20555

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

Response to NRC Enforcement Letter Dated April 11, 1983

This refers to the Notice of Violation and Proposed Imposition of a Civil Penalty issued by the Regional Administrator of the Office of Inspection and Enforcement, NRC, to Mr. C. E. Larson, NSP, on April 11, 1983. Four violations were identified. Pursuant to 10CFR 2.201 and 10CFR 2.205, the following report is herewith submitted.

Corporate and plant management task force reviews of this event were conducted to ensure that all applicable actions to prevent future similar events have been identified and are being addressed. The results of these reviews are contained, where appropriate, in the response to each of the violations.

The following is submitted in response to the violation designated in Section I of the Notice:

Description of Violation

Technical Specification 3.7.A.2 states in part, "Primary containment integrity, as defined in Section 1, shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel...."

Technical Specification 1.0.P states in part, "Primary containment integrity means that the drywell and pressure suppression chamber are intact and.... All manual containment isolation valves on lines connecting to...containment which are not required to be open during accident conditions are closed...."

Contrary to the above, it was found on January 8, 1983 that primary containment integrity had not been maintained during reactor operation for approximately 13 days between December 10 and 27, 1982, with the reactor water temperature above 212°F and fuel in the reactor vessel. The manual inboard containment isolation valve and local leak rate test line isolation valves on

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the pressure suppression chamber penetration for the combustible gas control system (CGCS) west return line were found open. These open valves, which are not required to be open during accident conditions, provided a leakage path from primary to secondary containment and primary containment leakage exceeded specified leak rate limits.

Admission or Denial Statement

NSP agrees that Technical Specification 3.7.A.2 was violated as described in Section I of the Notice.

Reasons for the Violation

The reason for this violation was personnel error. It is believed that a number of factors contributed to the personnel error including errors in judgement, insufficient training, high workload of the involved individuals and, to a lesser extent, administrative process weaknesses.

Corrective Steps Taken and Results Achieved

1. The CGCS isolation valve and local leak rate test connection valves were closed and leak test connection cap replaced.
2. All other recombiner isolation valves and leak test connection valves were verified to be closed with the associated leak test connection caps installed.
3. All accessible local leak test connection valves were verified to be closed.
4. All accessible primary containment isolation valves were verified to be properly positioned.
5. The contractor QC supervisor involved with this violation is restricted from work at the site.
6. Management meetings were held with involved personnel to:
 - a. review the requirements of applicable administrative control directives (ACD's) and,
 - b. emphasize the importance of complying with ACD's.
7. Limitations have been established on overtime hours.
8. Valve prestart checklists were revised to include independent verification of appropriate leak test valves and caps.
9. Procedures were revised to include independent verification that appropriate valves/caps/plugs associated with hot fluid piping penetrations, double gasketed seals and electrical penetrations are closed/installed properly.

10. A valve prestart checklist was prepared for CGCS valves.
11. The master valve checklist was revised to include the CGCS
12. Local leak rate test procedures and their associated operations controlling documents provide control of leak rate test connection valves, isolation valves, system valve line-up and leak test connection cap replacement. These documents were reviewed to verify that all valves are listed as required.
13. A quality assurance audit of design change activities was completed. This audit identified a programmatic weakness involving operating procedures affected by design changes. The design change process was revised to ensure that appropriate operating procedures are written or revised, approved and distributed prior to the time they are operationally required.
14. Project coordinators are required to be present during Operations Committee review of design change documentation.
15. A process was implemented to ensure that the shift supervisor is advised of plant work in progress on a shift by shift basis.
16. The equipment control procedure was revised to ensure that qualified personnel position valves, lock valves and install tags on equipment that can affect facility operation.
17. Northern States Power Company has joined with the Institute of Nuclear Power Operations to consider this event with other events involving human error in an effort to develop generic industry recommendations for reducing human errors.

These corrective steps provide assurance that all valves required for primary containment integrity are properly positioned. It is felt that these steps will prevent future similar occurrences.

<u>Corrective Steps to be Taken</u>	<u>Expected Completion Date</u>
1. A revised schedule of training requirements is being prepared.	8/31/83
2. Manpower requirements will be reviewed by involved organizations and actions initiated as needed.	10/31/83
3. The modification process is being revised to provide a process that is common to all departments within NSP. The new process will provide improved interface between modification organizations and the operating organization.	11/30/83

4. A modification turnover checklist is being developed to ensure that operational requirements are satisfied.

11/30/83

The following is submitted in response to the violation designated in Section II.A of the Notice:

Description of the Violation

Administrative Control Directive 4ACD-3.6, "Work Request Authorizations" (WRA), establishes a method of identifying, controlling, documenting, and authorizing work affecting the quality of safety-related structures, systems and components:

1. Step 5.5.e, requires that the job supervisor shall be responsible for assuring that identified procedures, including changes, noted on a WRA are properly completed and processed. Step 6.2.18 requires that the job supervisor shall assure that work is performed in accordance with those procedures including the recording of data and signoffs. Step 6.2.20 requires that the job supervisor shall review the work for adequacy and acceptability after completion of the work and sign the "Work Completed and Released By" blank on the WRA.
2. Step 5.4.e, requires that the shift supervisor shall be responsible for determining and documenting that adequate equipment alignment verification will be made through completion of appropriate system or valve checklists. Step 6.2.24 requires that the shift supervisor assure that a qualified person verifies that all plant equipment involved in any manner with the prework equipment alignment, conduct of work activities, realignment following the work, and post-work testing is properly aligned to the desired operating condition. Step 6.2.24 specifies that equipment alignment verification following work performed during outages can be accomplished through system and valve checklist completion prior to a requirement for operability of that system. The identification of the required system checklist shall be documented by the shift supervisor in the "System Alignment" blank on the WRA.
3. Step 6.2.23, requires that the responsible person shall sign the "Quality Assurance Requirements Satisfied" blank on the WRA when Quality Assurance/Quality Control requirements are satisfied following completion of work.
4. Step 6.2.18, requires that temporary changes to safety-related procedures identified on the WRA are processed in accordance with 4ACD-3.11. 4ACD-3.11, Step 6.3.1, requires that temporary changes that might change the intent of an approved procedure shall not be made. 4ACD-3.11, Step 6.3.2, requires that temporary changes that clearly do not change the intent of an approved procedure may be made only with the concurrence of two licensed senior reactor operators.

Contrary to the above, the WRA procedure, 4ACD-3.6 was not followed during performance of WRA 82-8126. That WRA required the completion of a local leak rate test procedure (CGCS-LLRT-2) for the CGCS torus penetration isolation valves.

1. The job supervisor responsible for the work authorized by WRA 82-8126 signed the "Work Completed and Released By" blank on the WRA. However, the local leak rate test procedure required to be completed by the WRA was only partially performed, and unauthorized changes were made to the procedure that were not properly processed.
2. The shift supervisor did not ensure that adequate equipment alignment verification following completion of work authorized by WRA 82-8126 would be made through the completion of appropriate system and valve checklists and did not list any system or valve checklist in the "System Alignment" blank on the WRA. The "System Alignment" blank contained the words "Verified on Startup". The CGCS west return line torus penetration isolation valves and local leak rate test line isolation valves were not listed on any system or valve checklists.
3. The "Quality Assurance Requirements Satisfied" blank on the WRA was signed by the Quality Control Supervisor and the Quality Assurance Engineer even though the local leak rate test procedure was not completed and the "Quality Control Supervisor Review" blank on the procedure was not signed.
4. Temporary changes were made to the local leak rate test procedure, CGCS-LLRT-2, for the CGCS west return line torus penetration isolation valves which were not approved by two licensed senior reactor operators. Those temporary changes changed the intent of the procedure by altering the valve alignment for the testing thereby deleting the requirements to perform the local leak rate test of the isolation valves.

Admission or Denial Statement

NSP agrees that 4ACD3.6, Work Request Authorization, was not followed as described in Section II.A of the Notice.

Reasons for the Violation

The reason for this violation was personnel error. It is believed that a number of factors contributed to the personnel error including errors in judgement, insufficient training, high work load of the involved individuals and, to a lesser extent, administrative process weaknesses.

Corrective Steps Taken and Results Achieved

1. Other documentation involving the outside contractor was reviewed for completion and accuracy.
2. Plant management emphasized the importance of complying with ACD requirements to construction management.
3. Directive requirements concerning system alignment verification were reviewed with shift supervisors during a management meeting.
4. The contractor QC supervisor involved with this violation is restricted from work at the site.
5. Instructions identifying requirements for completion of WRA's have been posted at the shift supervisor's office.
6. Instructions have been issued to require NSP construction supervisors and QA engineers to review construction procedures for proper completion.
7. Job supervisors have been verbally instructed on the process for procedure changes.
8. Limitations have been established on overtime hours.

These corrective steps provide assurance that other work completed during the outage meets operational requirements and that adherence to the requirements for procedure completion will be improved. It is felt that these steps will prevent future similar occurrences.

Corrective Steps to be Taken

Expected
Completion Date

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| 1. The ACD addressing WRA's and WRA forms is being revised to improve the work control process. This includes a clarification of system alignment verification requirements. | 6/1/83 |
| 2. Training is being provided on the revised WRA process for appropriate personnel. | 6/1/83 |
| 3. A new ACD on work supervision addressing supervisor responsibilities is being prepared. | 8/1/83 |
| 4. Supervisor training will be provided on the new ACD. | 1/1/84 |
| 5. Manpower requirements will be reviewed by involved organizations and actions initiated as needed. | 10/31/83 |

The following is submitted in response to the violation designated in Section II.B of the Notice:

Description of the Violation

Administrative Control Directive 4ACD-4.5, "Equipment Control Procedure", implements the tagging requirements in 10 CFR Part 50, Appendix B, Criterion XIV in the following manner:

1. Concerning the identification of the valve to be tagged, Step 6.1.3.1.c of 4ACD-4.5 requires that the valve number, valve type and/or best functional description for the valve be entered on the front side of each "Secure" card.
2. Concerning installation of "Secure" cards, Step 6.4.4 of 4 ACD-4.5 requires the performance of independent verification of the installation of all "Secure" cards installed on safety related equipment and Step 6.4.4.d requires the name of the individual performing that independent verification to be entered in the appropriate "Secure Open" or "Secure Closed" blank on the front side of each card. WRA 82-10023 required the placement of cards (tags) on the four CGCS return line torus penetration isolation valves to prevent inadvertent opening of those valves.

Contrary to the above:

1. The valve identification section of the "Secure" cards for the CGCS return line torus penetration isolation valves did not include valve numbers or valve types and the four "Secure" cards for those valves had the identical misleading valve descriptions ("Drywell Recombiner Outlet"). Consequently, those cards were placed on the CGCS supply line drywell penetration isolation valves, not the CGCS return line torus penetration isolation valves as intended.
2. No name of an individual who performed an independent verification of the installation of those "Secure" cards was entered on the cards and no evidence existed that indicated an independent installation verification was performed.

Admission or Denial Statement

NSP agrees that 4ACD-4.5, Equipment Control Procedure, was not followed as described in Section II.B of the Notice.

Reasons for the Violation

The reason for this violation was personnel error. It is believed that a number of factors contributed to the personnel error including error in judgement, insufficient training, high work load of the involved individuals and, to a lesser extent, administrative process weaknesses.

Corrective Steps Taken and Results Achieved

1. Properly completed "Secure" cards were hung on all CGCS isolation valves.
2. Proper valve position and "Secure" card placement for all CGCS isolation valves were independently verified.
3. Proper placement and control of equipment control tags were verified.
4. This occurrence and the ACD requirements concerning valve tagging were discussed with the shift supervisors during a management meeting.
5. Operators received training on the proper method to be used for completing and installing equipment control cards.
6. The project coordinator is now required to review WRA's associated with modifications. This assures, in part, that equipment is properly identified.
7. Limitations have been established on overtime hours.
8. 4ACD-4.5 was revised to clarify card completion and to require that if tags are hung on new equipment with no assigned number the operator shall have the requesting individual accompany him to ensure the correct equipment is positioned and tagged.

These corrective steps provide assurance that existing equipment control cards are properly applied and that adherence to the requirements for preparing, hanging and verifying equipment control cards will be improved. It is felt that these steps will prevent future similar occurrences.

Corrective Steps to be Taken

Expected
Completion Date

- | | |
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| 1. Hold and Secure cards are being revised to provide specific blanks for entering equipment number and location and for documenting independent verification. | 12/1/83 |
| 2. The ACD addressing equipment control will be revised, as necessary, to address the new Hold and Secure cards. | 12/1/83 |
| 3. Valve position verification requirements will be established. | 8/1/83 |

The following is submitted in response to the violation designated in Section II.C of the Notice:

Description of the Violation

Technical Specification 6.5.C.1 requires detailed written procedures covering testing of engineered safeguards and equipment required by the facility license shall be prepared, approved and followed.

10CFR Part 50, Appendix J, Section IV.A, requires that the appropriate leak rate test shall be performed following any major modification to the primary containment.

Contrary to the above, an appropriate leak rate test was not performed using an approved procedure following a major modification to primary containment whereby a six-inch penetration was made into the torus for the CGCS west return line and a local leak rate test was not performed following a prepared, approved procedure before operations.

Admission or Denial Statement

NSP agrees that the local leak rate testing done on the CGCS west return line primary containment isolation valves was not conducted with an approved procedure.

Reasons for the Violation

The system engineer did the leak rate test for informational purposes only using an approved procedure for an identical set of valves on the CGCS east return line. It was not intended that the test be done to satisfy Technical Specification requirements. It was later improperly agreed that the test results could be used as the official test of the valves.

Corrective Steps Taken and Results Achieved

1. The local leak rate test procedure was revised to include the west torus return line isolation valves. The valves have been retested using this approved procedure.
2. A plant nonconformance report was issued for the use of an unapproved procedure.
3. The requirements for the use of approved procedures and the requirements for processing of temporary changes to procedures were discussed with personnel involved with the performance of local leak rate tests. The importance of having and adhering to approved procedures written specifically for the job was emphasized to these personnel.

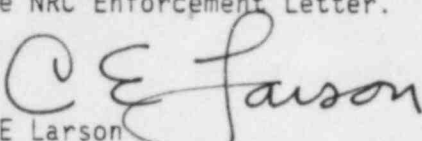
These corrective steps provide assurance that primary containment leak rate specifications are met. It is felt that these steps will prevent future similar occurrences.

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Corrective Steps to be Taken

The corrective actions taken to date when coupled with future training activities should prevent this type of violation from recurring. Full compliance with the requirements referenced in this violation was achieved when the valves were retested with a prepared, reviewed and approved procedure on January 8, 1983.

Northern States Power will not protest the civil penalties imposed. Accordingly, enclosed is a check for \$20,000 which is the amount specified in the NRC Enforcement Letter.


C E Larson
Director, Nuclear Generation

CEL/akr

cc J.G. Keppler
C. Brown
G. Charnoff