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**DUKE POWER**

August 1, 1996

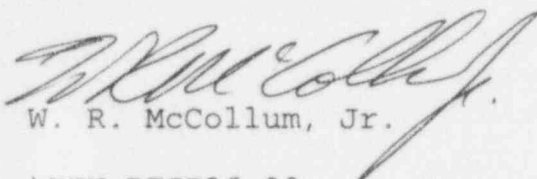
U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Subject: Catawba Nuclear Station  
Dockets 50-413 and 50-414  
Reply to Notice of Violation (NOV)  
Inspection Report 50-413, 414/96-08

Attached is Duke Power Company's response to the one (1) Level IV violation cited in Inspection Report 50-413, 414/96-08, dated July 3, 1996. This violation was identified during inspections conducted May 5, 1996 through June 15, 1996.

If there are any questions concerning this response, please contact K. E. Nicholson at (803) 831-3237.

Sincerely,



W. R. McCollum, Jr.

\\KEN:RESP96.08

xc: S. D. Ebnetter, Regional Administrator  
P. S. Tam, ONRR  
R. J. Freudemberger, SRI

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**CATAWBA NUCLEAR STATION  
REPLY TO NOTICE OF VIOLATION  
413, 414/96-08-02**

**Notice of Violation**

Technical Specification 6.8.1, Procedures and Programs, requires, in part, that written procedures be established, implemented and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, which includes specific procedures for the performance of maintenance that can affect the performance of safety-related equipment.

Procedure IP/0/A/3010/09B, Nitrogen Charging for Main Feedwater Isolation Valve Actuators, Step 10.2.24, directs that accumulator nitrogen pressure be checked and, if appropriate, adjusted until the test rig pressure gauge indicates that accumulator nitrogen pressure is as close as possible to desired pressure.

Contrary to the above, on June 5, 1996, during a check of actuator accumulator nitrogen pressure on main feedwater isolation valve 1CF-42, accumulator pressure was determined to be higher than desired pressure and subsequently was reduced to a pressure significantly below the desired pressure for approximately two minutes. At the reduced nitrogen accumulator pressure, the valve was potentially incapable of performing its safety function.

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

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RESPONSE:

1. Reason for Violation

Duke Power Company acknowledges this violation. The root cause of this violation is attributed to deviation from an approved procedure.

This violation occurred as a result of IAE personnel making a conscious decision to deviate from the procedure due to an immediate personnel safety concern, while performing work on 1CF-42 (Main Feedwater Isolation Valve). Subsequent to completing the work activity, IAE did not follow the appropriate administrative guidelines for documenting the procedure deviation nor the reason for the deviation due to unfamiliarity with this documentation requirement.

On June 5, 1996, IAE personnel were requested to check the nitrogen pressure on the actuator for valve 1CF-42 in order to gather data to be used to develop a plan to stop a large packing leak on this valve. The valve packing leak was creating equipment and environmental concerns and was being monitored by Operations, Maintenance, and Safety personnel as well as station management.

The IAE personnel assigned this work activity were experienced with the operation of valve 1CF-42 and its actuator. In preparing to do this work activity, IAE discussed personnel safety since the packing leak was creating environmental conditions which were different from the normal conditions under which the nitrogen check is usually performed. Based on the assessment of the environmental conditions, and having observed the work area on the previous day, it was concluded that the nitrogen check could be performed safely and correctly.

Following a pre-job discussion and work sign on discussion with the Work Control Center Senior Reactor Operator, IAE proceeded to the work area (Unit 1 - Interior Doghouse) to perform the nitrogen check in accordance with procedure IP/0/A/3010/09B (Nitrogen Charging for Main Feedwater Isolation Valve Actuators). This procedure provides guidance for measurement of the pressure and temperature of nitrogen, and also for adjustment of the nitrogen pressure if necessary. Although IAE continued to believe that the work activity could be completed safely, it was noticed that the steam and noise environment created by the packing leak, had worsened from the previous day.

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In performing the procedure to check the nitrogen pressure, the as-found pressure of the nitrogen charge was 2775 psi, and the measured temperature was 90 degrees F. Per the procedure, the correct nitrogen charge should have been at 2725 psi, so IAE reduced the pressure by 50 psi as specified by the procedure. Due to previous experience with the valve and previous discussion with Engineering on the opening/closing forces expected to be present on the valve, IAE did not expect any change in the valve position with the 50 psi adjustment of nitrogen pressure. However, with this slight adjustment, the valve did move in the open direction towards its backseated position and the magnitude of the packing leak decreased.

The valve movement was an unexpected response which had not been considered in the pre-job discussion. After a brief evaluation, the lead individual, an IAE supervisor, made the decision to deviate from the procedure by further reducing the nitrogen pressure in an attempt to move the valve further toward the open position and further decrease the steam packing leak. The basis for this decision was a concern for personnel safety due to the fact that the valve packing which had degraded from the steam leak would be further challenged by leaving the valve in its present position.

Since the valve had moved with the 50 psi pressure reduction, the IAE supervisor felt that a further reduction in pressure would place the valve in the fully open (backseated) position and could greatly reduce or stop the steam leak. IAE reduced the nitrogen pressure to approximately 1700 psi and valve 1CF-42 immediately moved to its full open (backseated) position and the packing leak stopped. The nitrogen pressure remained at this value for approximately 20 to 30 seconds, then IAE returned the pressure to the value of 2725 psi as specified by the procedure. When the packing leak stopped, IAE contacted the control room to inquire whether a nitrogen low pressure alarm had been received; the control room concurred and cleared the alarm.

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It is management's expectation to follow procedures, however, in rare circumstances, situations may arise which necessitate deviations from procedures. Nuclear System Directive (NSD) 704, Technical Procedure Use and Adherence, provides administrative guidelines for deviating from procedure steps due to changing plant conditions. It is required that all procedure deviations and the reason for such deviations be documented. IAE failed to document the procedure deviation and its reason in accordance with the requirements of NSD 704.

**2. Corrective Actions Taken and Results Achieved**

Problem Investigation Process (PIP) 1-C96-1341 was initiated on 06/05/96 to document this event. This PIP will be the tracking document for completion of all corrective actions associated with this violation.

Management expectations with respect to deviating from procedure steps due to changing plant conditions were reviewed with the personnel involved. Completion of this action is documented in corrective action (CA) #10 of PIP 1-C96-1341.

Work order 95024430-01 package for valve 1CF-42 nitrogen check was updated to document the procedure deviation, including the reason for the deviation. Completion of this action is documented in CA #11 of PIP 1-C96-1341.

Management expectations for performing a thorough evaluation of the safe working conditions for the planned work scope were discussed with the IAE personnel involved with this event. The discussion stressed the individual's role in evaluating plant conditions and work scope prior to beginning a task and, as an ongoing activity, during performance of the task, to determine if the work can be performed safely and correctly. Completion of this action is documented in CA #10 of PIP 1-C96-1341.

**3. Corrective Action to be Taken to Avoid Future Violations**

A communication will be made to all maintenance personnel to emphasize the need to perform a thorough evaluation of working conditions prior to and during work activity execution. This activity will be assigned to IAE to be completed by 08/19/96, with completion to be documented in CA #12 of PIP 1-C96-1341.

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In addition, a training package will be developed by 10/01/96 and sent to all site personnel to reinforce the requirements of NSD 704, with emphasis on procedure adherence and when it is acceptable to deviate from approved procedures. This corrective action will be assigned to OPI and completion will be documented in CA #13 of PIP 1-C96-1341.

4. Date of Full Compliance

Duke Power Company is now in full compliance.