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**DUKE POWER**

April 26, 1990

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

Subject: Catawba Nuclear Station, Units 1 and 2  
Docket Nos. 50-413 and 50-414  
NRC Inspection Report Nos. 50-413 and 50-414/90-06  
Reply to a Notice of Violation and a Notice of Deviation

Gentlemen:

Enclosed is the response to the Notice of Violation and Notice of Deviation issued March 30, 1990 by Alan R. Herdt concerning inadequate procedures, failure to follow procedures and failure to complete procedure change corrective action by commitment date.

Very truly yours,

A handwritten signature in cursive script, reading 'Hal B. Tucker'.

Hal B. Tucker

WRC148/lcs

Attachment

xc: Mr. Stewart D. Ebner  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., NW, Suite 2900  
Atlanta, Georgia 30323

Mr. W. T. Orders  
NRC Resident Inspector  
Catawba Nuclear Station

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**DUKE POWER COMPANY  
REPLY TO A NOTICE OF VIOLATION  
413/90-06-02**

Technical Specification 6.8.1 requires that written procedures be established, implemented, and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Implicit in this is the stipulation that the procedure be adequate for the task being performed.

Station Directive 3.1.15, Activities Affecting Station Operations or Operating Conditions, requires that the Nuclear Control Operator be notified prior to performing any function which may affect the unit and prohibits personnel other than operators from operating any valve without the permission of the Shift Supervisor with the exception of cases specified in the Directive.

Contrary to the above:

- A) On or about January 12, 1990, the refrigerant isolation valve on the Train A Control Room Ventilation (VC/YC) Chiller condenser pressure sensing line was inappropriately throttled by a Maintenance Engineering Services representative without notifying the Nuclear Control Operator or obtaining authorization from the Shift Supervisor. This resulted in the inoperability of the VC/YC Chiller from January 21-24, 1990 due to its inability to successfully start on demand as evidenced by a failure to start on January 24, 1990.
- B) PT/0/A/4971/06R, Routine Test Procedure Brown Boveri Type ITE 27H Relay and PT/0/A/4971/10R, Routine Test Procedure Brown Boveri Type ITE 27D Relay, specified incorrect acceptance criteria for actuation of the Engineered Safety Features loss of offsite power and degraded bus voltage relays. This resulted in the failure to adjust as found actuation values which were less conservative than the Trip setpoint values of Technical Specification 3.3.2.
- C) On January 12, 1990, during the performance of troubleshooting maintenance on the A Train of the shared Control Room Area Chilled Water System, Procedure IP/0/A/3190/01, YC Control Room Area Chilled Water System Safety Related Instrument Calibration, was found to be inadequate in that the procedure did not embody adequate detail to facilitate successful reinstallation of the valve actuator on Hot Gas Bypass Valve 1YC-362. This resulted in the actuator being reinstalled with indicator opposite the actual valve position.



**RESPONSE:**

**1. Admission or Denial of Violation**

Duke Power admits the violation.

**2. Reasons for Violation if Admitted**

Item A. The violation occurred due to the inability of an employee in the Maintenance Engineering Services section to adequately understand the requirements of the maintenance work control system and nuclear safety-related system, structure or component operability. This lack of understanding by the employee resulted in his adjusting the controller isolation valve without a work request and leaving the valve in an unanalyzed position causing the chiller to become inoperable.

Item B. This incident was attributed to a Management Deficiency, due to a lack of procedure control in the areas of procedure preparation and procedure review. This incident is assigned a contributing cause of Design Deficiency, due to the incomplete documentation of the trip setpoint change for the Type ITE 27H relay.

Item C. This incident was attributed to inadequate procedure. The procedure did not specify a method to verify correct actuator installation after maintenance.

**3. Corrective Actions Taken to Avoid Further Violations**

Item A. Work request 2311MES was initiated to open the controller isolation valve. Controller response was tuned by I&E using approved instrument procedures.

As a result of the employee's actions in this incident and his demonstrated lack of knowledge of the requirements of the maintenance work control system and nuclear safety-related system, structure or component operability, this employee was reassigned to a position in the Mechanical Maintenance section in which he will perform no work or operability evaluations on safety-related structures, systems, or components. This is considered an isolated incident and is not a reflection on the understanding by the rest of the personnel in the Maintenance Engineering Services section on the requirements of properly

maintaining safety-related systems, structures or components.

- Item B. Transmission personnel promptly recalibrated Brown-Boveri, Type ITE-27D and Type ITE-27H relays to comply with Technical Specifications.

Transmissions personnel promptly recalibrated the NC Pump undervoltage relays for NC Pumps 2A, 2B and 2D.

The following Transmission procedures were revised to comply with Technical Specifications:

PT/O/A/4971/06R, PT/O/A/4971/10R,  
PT/O/A/4971/12/R, PT/O/A/4971/13/R, and  
PT/O/A/4973/05/R.

Transmission personnel recalibrated the NC Pump undervoltage relays for NC Pumps 1A, 1B and 1D as part of the normal monthly surveillance.

All new or rewritten safety-related Transmission procedures are receiving a cross-disciplinary review, by Maintenance Department personnel, to ensure that Technical Specifications are being complied with.

Training was provided to the QA Audit team to ensure that during future QA Audits, the Audit team will promptly initiate a PIR when audit items are identified that potentially affect compliance with Technical Specification and/or FSAR requirements.

- Item C. Actuator for hot gas bypass valve 1YC-362 was removed and correctly re-installed on February 2, 1990.

Procedure IP/O/B/3190/01 "YC Control Room Area Chilled Water System Safety Related Instrument Calibration" was changed to specify method to verify correct actuator installation under change #22 on February 10, 1990. The change addressed the valve actuator on both trains' chillers.

An internal memorandum initiated and routed to all IAE Supervisors for dissemination to crews, to increase awareness of the potential for this type problem to occur.

4. Corrective Actions to be Taken to Avoid Further Violations

- Item A. Action taken in Section 3 (above).
- Item B. A change to Technical Specifications will be initiated by 2/23/91, to reflect the desired setpoints for the relays addressed in Table 3.3-4, Items 10.a and 10.b, and in Table 2.2-1, Item 14, and to reflect the desired action to be taken when a setpoint value is found to be between the Allowable Value and the Trip Setpoint Value. (Compliance/Design)
- Item C. Action taken in Section 3 (above).

5. Date of Full Compliance

- Item A. Date of full compliance occurred when the subject was transferred to the Mechanical Maintenance section effective February 1, 1990.
- Item B. Duke Power will be in full compliance pending approval of the Technical Specification change.
- Item C. The internal memorandum will be complete by May 2, 1990.



DUKE POWER COMPANY  
REPLY TO A NOTICE OF VIOLATION  
414/90-06-01

Final Safety Analysis Report, volume 9 section 9.2.2.2 page 9.2-13 second paragraph from the bottom states " Any piping connecting the two trains of component cooling equipment is provided with two isolation valves. Where this piping is seldom used, manual isolation valves are provided and are locked closed. " Catawba Chemistry procedure PT/2/A/4208/08, Post Accident Liquid Sampling System Periodic Test contains the steps to unlock/open and lock/close 2KCD05. 2KCD05 is the manual isolation valve for component cooling (KC) train 2A return header. When the periodic test is being performed this periodic test is logged into the Control Room log book and 2KCD05 is unlocked and opened. When this periodic test is completed the valve must be closed and locked prior to logging the periodic test out of the Control Room logbook.

Contrary to the above on June 15, 1989, the 2KCD05 was found by the Resident NRC Inspector to be open and unlocked. It was later determined that PT/2/A/4208/08 lacked the procedural clarity needed to ensure this valve was locked closed upon completion of the periodic test. It was agreed that this periodic test would be corrected and clarified by September 20, 1989 to ensure that this violation would not occur again. This periodic test was not approved until February 22, 1990.

RESPONSE:

1. Admission or Denial of Violation  
Duke Power Company admits the violation.
2. Reasons for Violation if Admitted
  - a. A tracking system was initiated in September 1989. This item was not properly included in this tracking system. This particular commitment was not properly tracked until early 1990.
3. Corrective Actions Taken and Resulted Achieved
  - a. 2KCD05 was returned to the closed position and locked.
  - b. 2KCD03 (KC train 2A supply) was inspected and found to be locked and in the closed position. This valve prevented the completion of any flow path which greatly eliminate any possibility of a compromise to the KC system.
  - c. All other KC valves that are operated within the three procedures were inspected. No other discrepancies were discovered.
  - d. An editorial Station Problem Report (SPR) was written and completed on a PALSS KC valve identified as FC which should have been LC (locked closed).

- e. PT/2/A/4208/08 was corrected and approved. Also all other possible problems were corrected and resolved. The other problems were valves and procedure steps that were duplicated between the three procedures.
  - f. Interfacing procedures PT/1/A/4208/08 and OP/0/A/6200/21 were also corrected and approved.
  - g. Group training was completed on the importance of locking and closing the KC valves upon completion of either PALSS periodic test.
  - h. A formal Commitment Tracking System was initiated in late 1989 and is now used to reduce the likelihood of deviations of this nature in the future.
4. Corrective Actions be Taken to avoid further Violations  
The actions taken in Section 3 above will ensure avoidance of further violations.
5. Date of Full Compliance  
Duke Power Company is now in full compliance.