

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of)
Duke Power Company) Docket Nos. 50-413 and 50-414
(Catawba Units 1 and 2)) License Nos. NPF-35 and NPF-52
EA 89-46

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Duke Power Company, Charlotte, North Carolina (licensee) is the holder of Operating License Nos. NPF-35 and NPF-52 (licenses) issued by the Nuclear Regulatory Commission (Commission or NRC) on January 17, 1985 and May 15, 1986, respectively. The licenses authorize the licensee to operate Catawba Units 1 and 2 in accordance with the conditions specified therein.

II

NRC inspection of the licensee's activities under the license was conducted on November 27, 1988 - February 4, 1989. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the licensee by letter dated May 19, 1989. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for Violation A. The licensee responded to the Notice by letter dated June 16, 1989. In its response, the licensee admitted the violations but contended that Violation A did not warrant escalation of the proposed civil penalty and requested that the civil penalty be partially mitigated. In addition, the licensee asserted that Violation B should be categorized as a Severity Level IV instead of a Severity Level III violation.

III

After consideration of the licensee's response and the statement of fact, explanation, and argument for partial mitigation of Violation A and recategorization of Violation B contained therein, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support (DEDS) has determined, as set forth in the Appendix to this Order, that the penalty proposed for Violation A designated in the Notice of Violation and Proposed Imposition of the Civil Penalty should be imposed, and that Violation B was properly categorized.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of Seventy-Five Thousand Dollars (\$75,000) within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

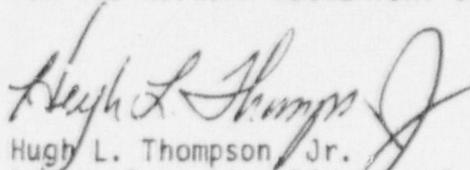
V

The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555, with copies to the Assistant General Counsel for Hearings and Enforcement, at the same address, the Regional Administrator, Region II, 101 Marietta Street, N.W., Atlanta, Georgia 30323, and a copy to the NRC Resident Inspector at Catawba.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions to this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be whether on the basis of Violation A set forth in the Notice of Violation and Proposed Imposition of Civil Penalty referenced in Section II above, which the licensee has admitted, the Order to pay a Seventy-Five Thousand Dollar civil penalty should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION



Hugh L. Thompson Jr.
Deputy Executive Director for
Nuclear Materials Safety, Safeguards
and Operations Support

Dated at Rockville, Maryland
this 31st day of August 1989

APPENDIX

EVALUATIONS AND CONCLUSIONS

On May 19, 1989, a Notice of Violation and Proposed Imposition of Civil Penalty was issued for violations identified during a routine NRC inspection. The Notice cited two Severity Level III violations, and proposed a civil penalty for Violation A. Duke Power Company (DPC) responded to the Notice on June 16, 1989. In its response, the licensee requested mitigation of the proposed Civil Penalty and a reduction in severity level of Violation B. The NRC's evaluation and conclusions regarding DPC's arguments are as follows:

RESTATEMENT OF VIOLATION

Violation A

Technical Specification 3.6.5.6 requires in Modes 1 through 4 that two independent Containment Air Return and Hydrogen Skimmer Systems (VX) be OPERABLE. With one Containment Air Return and Hydrogen Skimmer System (VX) inoperable, the inoperable system shall be restored to OPERABLE status within 72 hours or the unit is to be in at least HOT STANDBY within the next 6 hours, and in COLD SHUTDOWN within the following 30 hours.

Contrary to the above, during a period of 42 days from February 19, 1988 to April 1, 1988, Unit 2 operated in Modes 1 through 4 with one of the two independent Containment Air Return and Hydrogen Skimmer Systems (VX) inoperable. During this period, both trains of VX were required to be operable.

Proposed Civil Penalty - \$75,000

Summary of Licensee's Response:

Duke Power Company admits the violation occurred. However, the licensee maintains that escalation of the base civil penalty to \$75,000 was not warranted and proposes that the civil penalty be mitigated to \$25,000.

The licensee's response addresses the following three mitigation factors and other reasons for mitigation as summarized below.

Identification and Reporting

The licensee maintains that the NRC characterization that the post modification test should have been capable of detecting this unique problem is in error. The licensee contends that their Post Modification Testing and Independent Verification Programs work together in detecting problems, and that the performance test (the VX test), used as the post modification test in this situation, worked properly in evaluating VX operability. The impact of the "sneak-path" established by the wiring error was not fully understood for the VX performance test until lengthy and detailed tests were performed recreating the original miswired condition.

Corrective Action to Prevent Recurrence

The Notice stated, "the base penalty for Violation A was increased by 50 percent because initial corrective actions were narrowly focused on correcting the improperly installed electrical wiring and failed to address the broader problem of inadequate PMT."

The licensee's response states that the 50 percent escalation of the civil penalty was inappropriate for two reasons:

- A major effort was required to understand the reason for the failure of the VX Periodic Test to catch the unique error. The comprehensive aspect of that review and the revision to LER 414/88-33 that reported those findings showed initiative on their part to ensure this situation would not recur. The issues of licensee initiative and comprehensive action are both factors for mitigation in this category.
- The improvements made to the PMT process through the TOPFORM program have come about subsequent to this modification and as a result no other similar violations have occurred. Further, the additional "lessons learned" approach taken shows "extensive" corrective action in PMT to prevent recurrence.

The licensee contends that rather than a 50 percent escalation of the base penalty, a 50 percent reduction should be applied since the actions taken in regard to PMT and those that are ongoing have been complete and timely in preventing recurrence.

Past Performance

The licensee's reply contends that with no similar problems in the past two years and an overall SALP 2 rating, which is clearly "adequate," at least a 50 percent reduction in the base civil penalty should be applied.

Other Reasons for Mitigating the Civil Penalty

The licensee's response argues that the issue of safety significance must play a part in establishing a final level of the civil penalty. The licensee's response states that in the Enforcement Conference it was shown through analysis that equipment qualification profiles were not exceeded and the damper could be reopened within 30 minutes as demonstrated in a drill. The licensee also argues that the "B" train of VX being out of service for a total of 7 hours during the 42 days that "A" train was unknowingly inoperable was relatively insignificant in that the probability of a LOCA event having a "one train response" from the VX system was low.

NRC's Evaluation of Licensee's ResponseIdentification and Reporting

The Licensee's Post Modification Testing and Independent Verification Programs failed to detect a significant VX system operability problem due to a control circuit wiring error prior to placing the reactor in a mode that required the VX system to be operable. Regardless of the failure of the Independent Verification Program to detect the wiring error during the design modification process, an adequate post modification test should have identified the error. The performance test chosen by the licensee as the post modification test was inadequate for this situation because it did not verify operability of that portion of the VX control circuit that would be activated by the Solid State Protection System (SSPS) during an actual emergency, even though the modification was to the control circuit. The error was discovered during reactor operation by performance of the SSPS logic test, which verifies the slave relay actuation of the VX control circuit. Clearly, the licensee's post modification test should have identified the installation error prior to reactor startup, and the NRC, therefore, does not consider this factor as adequate to justify mitigation.

Corrective Action to Prevent Recurrence

In evaluating this event in terms of corrective actions, it was noted that immediate corrective actions on April 1, 1988, were to correct the wiring error, retest the damper in accordance with the original post modification test and declare the system operable. Although the VX damper inoperability and wiring error had been detected by a Technical Specification (TS) required SSPS surveillance test, once the wiring error had been corrected, this test was not repeated prior to declaring the system operable. Instead the same test which had originally failed to detect the wiring error in January 1988 was used to determine operability. Not only did the licensee rely on a test (VX functional) that had already proven itself inadequate, but the system was returned to service without performing the failed TS required SSPS surveillance test that initially identified the deficiency. This, in terms of corrective action, is both unacceptable and narrow in focus.

Substantial changes have subsequently been made in the Post-Modification Test Program and full implementation is in progress. As presented in Duke's meeting with the NRC at Region II on August 15, 1989, the changes include focusing responsibility on the "system expert," verifying that the design basis has not been compromised, and verifying that the system is functionally operable after modification. The new procedures were first used in April, 1989 for S/G PORV modification, but full development is still in progress, including additional training of system experts. However, while these are extensive and appropriate corrective actions, these actions were not sufficiently timely to warrant mitigation. The licensee's June 16, 1989 response to this enforcement action continued to take the narrow view of post modification test requirements. Therefore, the NRC considers the 50 percent escalation of the civil penalty based on this factor warranted.

Past Performance

With regard to the licensee's contention that a base civil penalty be mitigated 100 percent for a SALP 1 rating, 50 percent for a SALP 2 rating, and 0 percent for a SALP 3 rating, the NRC does not believe that application of such a rigid formula serves to appropriately explain the need to improve performance. The Enforcement Policy clearly allows application of broad discretion in this area by allowing the base civil penalty to be either escalated or mitigated by up to 100 percent. Application of discretion (in either direction) can only be taken after due consideration of the many facts that make up each case.

The NRC recognizes that the licensee's general past performance has been adequate as evidenced by an overall SALP 2 rating in all functional areas. However, upon examination of the details in several of the last SALP's functional areas (Operations, Maintenance and Surveillance, and Safety Assessment) that are related to the violations cited here, it was noted that the licensee has experienced past problems with the proper classification and reporting of safety component failures and significant events in a timely manner. Other specific concerns also addressed by the last SALP included the adequacy of maintenance and modification retesting and the need to improve the support provided by the Compliance and Design Engineering groups in determining technical specification compliance. Although these concerns were judged not to be significant enough to warrant a category 3 SALP rating, they were indicative of a need for further improvement. While the licensee's overall past performance was adequate, the staff has determined that the past performance was not such as to merit mitigation in this case.

Other Reasons for Mitigating the Civil Penalty

Once the Severity Level is determined in accordance with the Enforcement Policy (Policy), the base civil penalty is established in Table IB of the Policy. The escalation and mitigation factors are then considered to determine what adjustments, if any, to the base civil penalty are warranted. Safety significance is not an escalation or mitigation factor but a determinant of the severity level. In this case, the NRC appropriately considered safety significance in establishing the severity level of the violation. Specifically, the licensee's Post Modification Testing Program did not ensure that a technical specification required safety system train was operable prior to placing the reactor in a mode where that system was required to be operable. Such program errors are considered significant because they could be applied to any safety system.

Restatement of Violation

Violation B

10 CFR 50.73(a)(2) requires the submittal of a Licensee Event Report within 30 days after discovery of any operation or condition prohibited by the plant's Technical Specifications.

Contrary to the above, on September 14, 1988, the licensee determined that

Catawba Unit 2 had previously operated for 42 days in a condition prohibited by the plant's Technical Specifications because train A of the Containment Air Return and Hydrogen Skimmer (VX) System had been inoperable and a Licensee Event Report was not submitted until January 27, 1989.

Summary of Licensee's Response

Duke Power Company admits the violation. In the response, however, the licensee contends that as they interpret the enforcement policy a Severity Level III should not have been imposed in this case and that the violation should have been characterized as a Severity Level IV. The response states that because of the complexity of the circuit as a result of the wiring swap and the time required to understand the effects, an unusual amount of time was taken to report the problem.

NRC Evaluation of Response to Violation B

As stated in the NRC letter of May 19, 1989, Violation B concerned the excessive amount of time that it took to report this event. It is not acceptable to take 10 months to evaluate an event to determine reportability. The NRC was particularly concerned that after the licensee correctly determined that the system was previously inoperable, it took an additional 4 months to issue the LER. This represents a significant programmatic weakness with the licensee's event evaluation and reporting system. The staff recognizes that the Enforcement Policy provides an example at a Severity Level IV for a violation involving the failure to submit an LER. However, the examples in the Supplement are just that. In accordance with the Enforcement Policy they are neither controlling nor exhaustive. Under the circumstances of this case the staff concluded that the delay in submitting this report represented a significant regulatory concern therefore justifying a Severity Level III categorization. After review of the licensee's response, which provided no additional information not already considered, the NRC determined that there is insufficient cause to reduce the severity level of Violation B.

Duke Power Company

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