

official file

FEB 19 1988

Docket Nos. 50-369, 50-370
License Nos. NPF-9, NPF-17

Duke Power Company
ATTN: Mr. H. B. Tucker, Vice President
Nuclear Production Department
422 South Church Street
Charlotte, NC 28242

Gentlemen:

SUBJECT: NRC INSPECTION REPORT NOS. 50-369/85-06 AND 50-370/85-06


Thank you for your response of July 26, 1985, to our Notice of Violation issued on June 28, 1985, for violation 369/85-06-04 and 370/85-06-03. Due to an administrative oversight, we did not respond earlier to your request regarding the noted violations. We are hereby documenting our actions relative to your request.

In your response you deny the violation. You feel the violation raised two concerns, lack of notification to plant operations personnel of a potential backleakage problem past auxiliary feedwater check valves and the failure to take prompt corrective action for the improper installation of the turbine driven auxiliary feedwater pump discharge stop check valve, which you adequately addressed.

After careful consideration of the bases for your denial of the violation, we have concluded, for the reasons presented in the enclosure to the letter, that the violation occurred as stated in the Notice of Violation. As discussed in your response, we understand the stop check valves have been replaced on both Units 1 and 2 and you have stated that you are in full compliance. We will examine the implementation of your corrective action during future inspections.

We appreciate your cooperation in this matter.

Sincerely,



J. Nelson Grace
Regional Administrator

Enclosure:
Evaluations and Conclusions

cc w/encl:
T. L. McConnell, Station Manager
Senior Resident Inspector - Catawba

bcc w/encl: (See page 2)

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Duke Power Company

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Leyes MErnst
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ENCLOSURE

EVALUATION AND CONCLUSIONS

On June 28, 1985, a Notice of Violation was issued for violation 369/85-06-04, 370/85-06-03 identified during a routine NRC inspection. Duke Power Company responded to the Notice on July 26, 1985. Duke denied the violation on the basis that they promptly identified and corrected the problem associated with the auxiliary feedwater pump suction piping overpressurization.

Restatement of Violation

10 CFR 50, Appendix B, Criterion XVI as implemented by Duke Power Company (DPC) Topical Report, Quality Assurance Program Duke-1-A, Amendment 7, Section 17.2.16 requires that conditions adverse to quality be promptly identified and corrected and that the identification of the significant condition, the cause of the condition and the corrective action shall be documented and reported to appropriate levels of management.

Contrary to the above, conditions adverse to quality were not promptly identified and corrected, as detailed below:

An occurrence of August 25, 1981, on Unit 1 as reported in Licensee Event Report 369/81-136, caused overpressurization of the suction side of the turbine driven auxiliary feedwater pump. Identified as contributing to this problem was the stop check valve on the outlet of the pump being mounted in a horizontal position which prevents the closure of this valve to be aided by gravity as designed. Furthermore, on November 11, 1981, Westinghouse notified DPC of a potential problem concerning the design of the auxiliary feedwater pump discharge piping valve arrangement such that damage could occur which would compromise the safety-related function of the auxiliary feedwater system. Westinghouse in this letter, recommended system modifications and an operating procedures amendment to detect and correct this problem.

No actions were taken on these items identified above until September 5, 1984, when NSM 1-1705 for Unit 1 and NSM 2-0550 for Unit 2 were generated to replace the existing stop check valves with a different design valve, and NSM's 1-1706 and 2-0551 were generated to install a temperature monitoring system as recommended by Westinghouse. As of March 12, 1985, NSM 1-1706 and NSM-20551 were in the process of being installed and NSM 1-1705 and NSM 2-0550 were scheduled for outages in 1986 due to material delivery.

Summary of Licensee's Response

The licensee contends that following the August 25, 1981 overpressurization appropriate corrective action was taken. The licensee feels two concerns were raised by the violation.

The first concern was a lack of notification to plant operations personnel of a potential problem with backleakage past auxiliary feedwater check valves. The backleakage pertains to a waterhammer resulting from check valve leakage. The licensee states that plant operations personnel were not notified in 1981 of potential waterhammer problems because a Duke Power evaluation found this particular situation did not exist at McGuire Nuclear Station.

The second concern involved a failure to take prompt corrective action for the improper installation of the turbine driven auxiliary feedwater pump (TDAFWP) discharge stop check valve. On August 25, 1981, the suction piping of the TDAFWP was overpressurized. The licensee felt their solution to install a relief valve in the suction piping and ensure that the mini-flow line to the upper surge tank would always be open when the pump was not operating was appropriate considering the knowledge of the potential problems at the time.

Since the 1981 solution, the licensee states recurrence of the TDAFWP suction overpressurization and industry studies have made it more apparent that the addition of relief valves may not provide a total solution and that more insurance against loss of auxiliary feedwater was required.

As discussed in the licensee's response, as of July 26, 1985, further corrective steps have been taken. Temperature indication on discharge piping was installed and the stop check valves were replaced on both McGuire units.

NRC Evaluation

The NRC has reviewed the licensee's response and does not agree that the licensee's corrective action was prompt or adequate. The licensee's investigation following the August 25, 1981 overpressurization event discovered the stop check valve (ICA-22) in the discharge line of the Unit 1 TDAFWP was improperly installed. The identification of the improperly installed valve should have been sufficient to initiate replacement of the valves on both units. Also following a January 1984 industry report and a review by the licensee a DPC memorandum dated June 24, 1984, identified the discharge stop check valves as being improperly installed on both units and should be corrected. On August 26 and again on August 30, 1984, the TDAFWP suction piping was overpressurized due to backleakage. Contributing to this problem was the stop check valve on the outlet of the pump being improperly installed. It was not until September 5, 1984, that Nuclear Station Modifications (NSM) were initiated by the licensee to replace the valves.

NRC Conclusion

From the evaluation given above the NRC concludes that conditions adverse to quality were not promptly identified and corrected and the violation occurred as stated.