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DUKE POWER

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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, 414/97-01

Attached is Duke Power Company's response to the two (2) Level IV violations cited in Inspection Report 50-413, 414/97-01, dated March 20, 1997. These violations were identified during inspections conducted between February 10, 1997, through February 14, 1997.

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

Sincerely,

W. R. McCollum, Jr.

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xc: L. A. Reyes, Regional Administrator
P. S. Tam, ONRR
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CATAWBA NUCLEAR STATION
REPLY TO NOTICE OF VIOLATION
413, 414/97-01-01

Notice of Violation

10 CFR 50.65(b) establishes the scoping criteria for selection for safety-related and non-safety related structures, systems, or components to be included within the Maintenance Rule program. Scoping criteria shall include, in part, non-safety related structures, systems, or components that are relied upon to mitigate accidents or transients, or are used in the plant emergency operating procedures, or whose failure could prevent safety-related structures, systems, and components from fulfilling their safety-related function, or whose failure could cause a reactor scram or actuation of a safety-related system.

Catawba Nuclear Station Administrative Procedure, EDM,210, REQUIREMENTS FOR MONITORING THE EFFECTIVENESS OF MAINTENANCE AT THE NUCLEAR POWER PLANTS OR THE MAINTENANCE RULE, Revision 3, implemented the requirements of 10 CFR 50.65(b).

Contrary to the above, as of February 10, 1997, the licensee failed to include a number of structures, systems, and components within the scope of the Maintenance Rule as required. Specifically, the following systems and components were not included within the scope of the Maintenance Rule.

1. *Nuclear Sampling Systems NM-3 and NM-4; and Auxiliary Building Chilled Water System YN-1 (maintains chilled water to the NM sample flow Heat exchanger). These non-safety related systems were not included in the scope of the Maintenance Rule even though they are relied upon to mitigate accidents or transients.*

2. *Main Steam to Auxiliary Equipment System SA-3 (maintains steam supply to the three condensate steam air ejectors on each unit). This non-safety related system was not included in the scope of the Maintenance Rule even though its failure could cause a reactor scram or the actuation of a safety-related system.*

3. *Ice Condenser Hitch Pins 073S (maintains configuration of the ice baskets). These non-safety related components were not included in the scope of the Maintenance Rule even though their failure could prevent safety-related structures, systems, and components from fulfilling their safety-related function.*

This is a Severity Level IV Violation (Supplement I)

1. **Reason for Violation**

Duke Power Company acknowledges the violation. This violation was a result of incorrectly concluding that a number of structures, systems, and components fell outside the scope of the Maintenance Rule.

Nuclear Sampling (NM.3) for normal operations was considered a delayed method of indication and was not considered the practical method for operator detection. Therefore it was not scoped into the Maintenance Rule.

Nuclear Sampling (NM.4), as referenced in the Emergency Operating Procedures (EOPS), was considered a long term recovery function that did not contribute significantly to the mitigation of an accident due to the delay in acquiring sample results; therefore, it was not included in the scoping of the Maintenance Rule. It is now recognized that EOP scoping for accident mitigation, as opposed to a recovery function, is not time dependent.

Nuclear Sampling cooling (YN.1) was not scoped in the Maintenance Rule due to its support function for nuclear sampling.

Main Steam to Auxiliary Equipment (SA.3), particularly the Condensate Steam Air Ejectors (CSAEs), is a backup supply to the Auxiliary Steam (AS) system. The AS system provides the primary steam flow to the CSAEs. Originally, any failure of the CSAEs would be tracked through the AS system. It was not realized that the "could cause" issue must include backup supplies to a function (steam supply to the CSAEs), regardless of the system priority. It was therefore not included in the scoping of the Maintenance Rule.

The Ice Condenser Hitch Pins (073S) were not scoped into the Maintenance Rule because of the down graded status to non safety related for part procurement. Only items 072S (Cruciform J-bolt washer) and 073S are within this category. The other components of the Ice Condenser are safety related. It is recognized that this down grading of the Ice Condenser Hitch Pins from Safety Related to Non Safety Related changed the applicable scoping criteria to "a non safety related SSC which could cause a safety related SSC to fail".

The original philosophies with respect to scoping were incorrect.

2. Corrective Actions Taken and Results Achieved

The site Maintenance Rule Coordinator maintains the Maintenance Rule Systems, Structures, and Components (SSC) database. Changes to include the above SSCs into the scope of the Maintenance Rule were proposed and presented to a site "Expert Panel" for review and approval. The site Expert Panel approved the addition of the above SSCs into the scope of the Maintenance Rule. As a result of this review and approval the site Maintenance Rule database has been revised as follows:

NM.3, NM.4, and YN.1 and SA.3 have been scoped into the Maintenance Rule. 073S has been scoped into the Maintenance Rule and is included into NF.2 with the other Maintenance Rule scoped Ice Condenser subcomponents.

3. Corrective Action to be Taken to Avoid Future Violations

A review of the 239 functions excluded from the Maintenance Rule will be conducted for generic applicability to ensure that other SSCs do not exist that need to be included within the scope of the Maintenance Rule. This review will include the generic concerns listed above. The review will be completed by 12/31/97. This completion of this commitment will be documented in PIP 0-C97-0419.

4. Date of Full Compliance

Duke Power Company is now in full compliance.

CATAWBA NUCLEAR STATION
REPLY TO NOTICE OF VIOLATION
413, 414/97-01-04

Notice of Violation

10 CFR 50.65(a)(1) requires, in part, that holders of an operating license shall monitor the performance or condition of structures, systems, or components, against licensee established goals, in a manner sufficient to provide reasonable assurance that such structures, systems, and components, within the scope of the Maintenance Rule, are capable of fulfilling their intended functions. When the performance or condition of a striker, system, or component does not meet established goals, appropriate corrective action shall be taken. 10 CFR 50.65(a)(2) requires, in part, that monitoring as specified in paragraph (a)(1) is not required where it has been demonstrated that the performance or condition of a structure, systems, or component is being effectively controlled through the performance of appropriate preventive maintenance, such that the structure, system, or component remains capable of performing its intended function.

Catawba Nuclear Station Administrative Procedure, EDM-210, REQUIREMENTS FOR MONITORING THE EFFECTIVENESS OF MAINTENANCE AT THE NUCLEAR POWER PLANTS OR THE MAINTENANCE RULE, Revision 3, provided instructions for implementation of the requirements of 10 CFR 50.65(a)(1) and (a)(2). Appendix D, Section D.2.3 of EDM-210 identified a Forced Outage Rate of no more than 8% per fuel cycle as a plant level performance criteria.

Contrary to the above, as of February 10, 1997, the licensee was not monitoring the performance or condition of structures, systems, or components, against licensee established goals, or demonstrating that the performance or condition of a structure, system, or component was being effectively controlled through the performance of appropriate preventive maintenance, in a manner sufficient to provide reasonable assurance that such structures, systems, and components, within the scope of the Maintenance Rule, are capable of fulfilling their intended functions, in that:

Procedure EDM-210 did not provide adequate performance criteria at the plant level relating to load reductions. Four examples were identified where load reductions of approximately 50 percent were initiated as a result of maintenance relates issues; however, no criteria existed to identify maintenance preventable functional failures of these load reductions.

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

CATAWBA NUCLEAR STATION
REPLY TO NOTICE OF VIOLATION
413, 414/97-01-04

1. **Reason for Violation**

Duke Power acknowledges the violation. Catawba Nuclear Station Administrative Procedure EDM-210 (Requirements for Monitoring the Effectiveness of Maintenance at the Nuclear Power Plants for The Maintenance Rule) did provide adequate performance criteria for reactor trips and safety system actuations. However, EDM-210 did not provide adequate performance criteria at the plant level relating to load reductions.

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

NUMARC 93-01 suggests the use of Unplanned Capability Loss Factor as an acceptable means to address the Balance Of Plant Performance Criteria. As a response to this violation, Duke Power has incorporated the Plant Transient Criteria, in addition to the Forced Outage Rate Criteria. This combination of criteria will ensure the intent of the Balance of Plant Performance Criteria provides the appropriate equivalent defense in depth monitoring as the suggested Unplanned Capability Loss Factor.

Specifically, a Plant Level Performance Criteria, called Plant Transients, which defines unacceptable (a)(1) performance was added to EDM-210 as follows: "No more than 3 events of unplanned load changes greater than 10 % MWe due to maintenance preventable causes. This includes both manual and automatic load changes." This enhancement to EDM-210 was approved on 3/31/97 and incorporated into EDM-210 as Revision 4.

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

Revision 4 to EDM-210, which was approved on 3/31/97, will become effective on 4/30/97. The effective date is based on the need for site training for personnel and other program updates. completion of this commitment will be documented in PIP 0-C97-0401.

4. **Date of Full Compliance**

Duke Power Company will be in full compliance on 4/30/97 which is the effective date of Revision 4 to EDM-210.