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**DUKE POWER**

March 30, 1994

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  
Proposed Technical Specifications Changes  
Increase in Radiation Monitoring Instrumentation Surveillance Interval from  
Monthly to Quarterly

Gentlemen:

Pursuant to 10CFR50.4 and 10CFR50.90, attached are license amendment requests to Appendix A, Technical Specifications, of Facility Operating Licenses NPF-35 and NPF-52 for Catawba Nuclear Station Units 1 and 2, respectively. The requested amendments allow the analog channel operational test interval for radiation monitoring instrumentation to be increased from monthly to quarterly. The proposed amendments are consistent with NRC staff recommendations and guidance contained in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements" and Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation".

Attachment 1 contains a background and description of the enclosed amendment request. Attachment 2 contains the required justification and safety evaluation. Pursuant to 10CFR50.91, Attachment 3 provides the analysis performed in accordance with the standards contained in 10CFR50.92 which concludes that the requested amendments do not involve a significant hazards consideration. Attachment 3 also contains an environmental impact analysis for the requested amendments. Attachment 4 contains the marked-up technical specification amendment pages for Catawba. Duke Power Company is forwarding a copy of this amendment request package to the appropriate South Carolina state official.

This amendment request is being submitted as a Cost Beneficial Licensing Action (CBLA) item. Approval and implementation of this amendment request is expected to result in substantial savings in resources relative to conducting surveillance activities for radiation monitoring instrumentation. Accordingly, timely approval of this proposed amendment is requested.

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Should there be any questions concerning this amendment request or should additional information be required, please call L.J. Rudy at (803) 831-3084.

Very truly yours,



D.L. Rehn

LJR/s

Attachments

xc (W/Attachments):

S.D. Ebnetter, Regional Administrator  
Region II

R.J. Freudenberger, Senior Resident Inspector

R.E. Martin  
ONRR

Heyward Shealy, Chief  
Bureau of Radiological Health, SC

American Nuclear Insurers

M&M Nuclear Consultants

INPO Records Center

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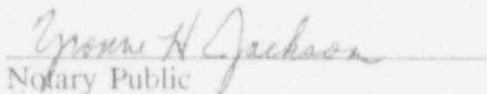
March 30, 1994

D.L. Rehn, being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this revision to the Catawba Nuclear Station License Nos. NPF-35 and NPF-52 and that all statements and matters set forth therein are true and correct to the best of his knowledge.



D.L. Rehn, Vice President

Subscribed and sworn to before me this 30th day of March, 1994.



Notary Public

My commission expires:

Nov. 21, 2000

ATTACHMENT 1

BACKGROUND AND DESCRIPTION OF AMENDMENT REQUEST

## **Background**

Radiation monitoring (EMF) instrumentation at Catawba is divided into two basic types: process radiation monitors and area radiation monitors.

Process radiation monitors monitor primary and secondary systems within the station during normal operations, including anticipated operational occurrences. They provide continuous monitoring of radioactive liquid and gas discharge to the environment. They also provide interlocks to automatically terminate discharge from waste systems at preset activity levels. Finally, they provide monitoring of airborne and liquid activity in selected locations and effluent paths during postulated design basis accidents.

Area radiation monitors indicate radiation levels at various locations throughout the station where personnel exposure is likely. In addition, they sound local alarms when radiation levels exceed the respective alarm setpoint.

Technical specifications delineate surveillance requirements for certain EMFs at Catawba. Included in the specified surveillance requirements is a monthly analog channel operational test.

In December 1992, the NRC issued NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements". In Section 5.14 of the NUREG, "Radiation Monitors", the NRC recommended that the frequency of radiation monitor channel functional tests be changed from monthly to quarterly. This would result in increased availability of radiation monitoring equipment, as well as decreased licensee burden relative to testing requirements.

On September 27, 1993, the NRC issued Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation". In this generic letter, the NRC transmitted guidance to assist licensees in preparing license amendment requests to implement the recommendations of NUREG-1366 as line-item technical specifications improvements.

## **Description of Amendment Request**

In Technical Specification Table 4.3-3, Radiation Monitoring Instrumentation for Plant Operations Surveillance Requirements, the frequency of the analog channel operational test specified is changed from monthly (M) to quarterly (Q) for all EMFs listed in the table.

No changes to the associated Bases section for this technical specification are required.

**ATTACHMENT 2**

**JUSTIFICATION AND SAFETY EVALUATION**

### Justification and Safety Evaluation

The proposed amendments are consistent with the NRC staff position set forth in NUREG-1366 and also with the guidance transmitted in Generic Letter 93-05. In addition, they are also compatible with observed plant operating experience as it pertains to the tolerance history of the radiation monitors at Catawba.

Catawba personnel performed a review of a sample of completed analog channel operational test procedures for the radiation monitors listed in Catawba's Technical Specifications. Two hundred completed procedures were reviewed. These procedures had been completed in 1991, 1992, and 1993, with the majority completed in 1993. This emphasized the most recent test history of the radiation monitors. The as-found data indicated that in all but eight cases, the radiation monitor trip setpoints were within tolerance and no problems with the channels were identified. For the eight cases where a trip setpoint was out of tolerance, the cases were distributed among multiple monitors and did not suggest an adverse performance history for any particular monitor. The cases of out-of-tolerance trip setpoints were generally attributed to inaccuracy of the analog trip instrumentation (i.e., only a slight out-of-tolerance condition was present) and were not indicative of monitor failure. Hence, it has been demonstrated that radiation monitor operating history supports the proposed technical specification changes. It is the position of Catawba personnel that the radiation monitor performance history as observed over the review period is typical of performance history over the plant operating life. The completed analog channel operational test procedures are available for NRC inspection.

The proposed amendments will not be detrimental from a safety standpoint. For the radiation monitors listed in Technical Specification Table 4.3-3, no credit is taken in the plant accident analyses contained in Chapter 15 of the Final Safety Analysis Report for any automatic actuation function generated as a result of a radiation monitor signal. Finally, changing the surveillance interval from monthly to quarterly will increase the availability of the affected radiation monitors as indicated in NUREG-1366 and Generic Letter 93-05.

**ATTACHMENT 3**

**NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION  
AND ENVIRONMENTAL IMPACT ANALYSIS**



## No Significant Hazards Consideration Determination

As required by 10CFR50.91, this analysis is provided concerning whether the requested amendments involve significant hazards considerations, as defined by 10CFR50.92. Standards for determination that an amendment request involves no significant hazards considerations are if operation of the facility in accordance with the requested amendment would not: 1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or 2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or 3) Involve a significant reduction in a margin of safety.

The requested amendments increase the surveillance interval (i.e., decrease the analog channel operational test frequency) of radiation monitoring instrumentation (EMFs) from monthly to quarterly.

In 48FR14870, the Commission has set forth examples of amendments that are considered not likely to involve significant hazards considerations. Example vii describes a change to make a license conform to changes in regulations, where the license change results in very minor changes to facility operations clearly in keeping with the regulations. The requested amendments are similar to example vii in that they result in minor changes to plant surveillance requirements and are consistent with the existing NRC position and guidance contained in NUREG-1366 and Generic Letter 93-05. While the issuance of NUREG-1366 and Generic Letter 93-05 does not constitute a change in existing regulations, it nevertheless establishes the NRC staff's position concerning the acceptability of increasing the surveillance interval for radiation monitoring instrumentation from monthly to quarterly. The requested amendments are consistent with the position of NUREG-1366 and with the guidance of Generic Letter 93-05.

### Criterion 1

The requested amendments will not involve a significant increase in the probability or consequences of an accident previously evaluated. Decreasing the frequency of the radiation monitor analog channel operational test from monthly to quarterly will have no impact upon the probability of any accident, since the radiation monitors are not accident initiating equipment. Also, no credit is taken in accident analyses for automatic actions performed by radiation monitors contained in Catawba's Technical Specifications, so the requested amendments will have no adverse impact upon the consequences of any accident.

### Criterion 2

The requested amendments will not create the possibility of a new or different kind of accident from any accident previously evaluated. As stated above, the radiation monitors are not accident initiating equipment. No new failure modes can be created from an accident standpoint. The plant will not be operated in a different manner.

### Criterion 3

The requested amendments will not involve a significant reduction in a margin of safety. Plant safety margins will be unaffected by the proposed changes. No safety equipment which is taken credit for in accident analyses will be affected by the requested amendments. The availability of the affected radiation monitors will be increased as a result of the proposed amendments.

because the monitors will not have to be made unavailable for testing as frequently. In addition, radiation monitor operating experience supports the proposed amendments. Finally, the proposed amendments are consistent with the NRC position and guidance set forth in NUREG-1366 and Generic Letter 93-05.

Based upon the preceding analyses, Duke Power Company concludes that the requested amendments do not involve a significant hazards consideration.

### Environmental Impact Analysis

The proposed technical specification amendment has been reviewed against the criteria of 10CFR51.22 for environmental considerations. The proposed amendment does not involve a significant hazards consideration, nor increase the types and amounts of effluents that may be released offsite, nor increase individual or cumulative occupational radiation exposures. Therefore, the proposed amendment meets the criteria given in 10CFR51.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.