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June 25, 2002

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

Subject: Amendment 1 to the Application to Renew the Facility Operating Licenses of McGuire Nuclear Station, Units 1 & 2 and Catawba Nuclear Station, Units 1 & 2

Docket Nos. 50-369, 50-370, 50-413 and 50-414

Dear Sir:
By letter dated June 13, 2001, Duke Energy Corporation (Duke) submitted an Application to Renew the Facility Operating Licenses of McGuire Nuclear Station and Catawba Nuclear Station (Application). In accordance with 10 CFR 54, §54.21(b), Duke is required to submit a summary of the CLB changes that have occurred during the NRC review of the Application that materially affects the contents of the Application, including the UFSAR Supplement. Duke has reviewed the CLB for McGuire Nuclear Station, Units 1 and 2 and for Catawba Units 1 and 2. The results of this review are contained in Amendment 1, attached.

If there are any questions, please contact Bob Gill at (704) 382-3339.

Very truly yours,

M. S. Tuckman

M. S. Tuckman

Attachment:

A085

Affidavit

M. S. Tuckman, being duly sworn, states that he is Executive Vice President, Nuclear Generation Department, Duke Energy Corporation; that he is authorized on the part of said Corporation to sign and file with the U. S. Nuclear Regulatory Commission the attached information relative to its review of the Application to Renew the Facility Operating Licenses of McGuire Nuclear Station and Catawba Nuclear Station, Docket Nos. 50-369, 50-370, 50-413 and 50-414 dated June 13, 2001, and that all the statements and matters set forth herein are true and correct to the best of his knowledge and belief. To the extent that these statements are not based on his personal knowledge, they are based on information provided by Duke employees and/or consultants. Such information has been reviewed in accordance with Duke Energy Corporation practice and is believed to be reliable.

M. S. Tuckman

M. S. Tuckman, Executive Vice President
Duke Energy Corporation

Subscribed and sworn to before me this 25TH day of June 2002.

Mary P. Nehus

Notary Public

My Commission Expires:

JAN 22, 2006

xc: (w/ Attachment)

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Amendment 1
Application to Renew the Operating Licenses of
McGuire Nuclear Station and Catawba Nuclear Station

Annual Update Required by 10 CFR §54.21(b)

1.0 INTRODUCTION

The License Renewal Rule in §54.21(b) requires that the Application information be updated to reflect changes during the period of time that the NRC is processing the application. The changes to be identified are those that materially affect the contents of the application, including the UFSAR Supplement.

> **§54.21 Contents of application - technical information.**
>
> *Each application must contain the following information:*
> ...
> *(b) CLB changes during NRC review of the application. Each year following submittal of the license renewal application and at least 3 months before scheduled completion of the NRC review, an amendment to the renewal application must be submitted that identifies any change to the CLB of the facility that materially affects the contents of the license renewal application, including the FSAR supplement.*

Attachment 1 provides a brief description of the review process Duke used to identify the CLB changes that materially affect the contents of the Application and the results of this review for McGuire and Catawba.

2.0 REVIEW PROCESS

All changes that could potentially affect the Application were initially identified. These changes include plant modifications, current licensing basis changes, operating experience, and changes to time limited aging analyses that have occurred since the Application was prepared. Each identified change was then reviewed to determine if it could materially affect the contents of the Application. The results of these reviews are presented below.

3.0 MCGUIRE RESULTS

Based on the review of the McGuire plant changes, the following change was identified that materially affects the contents of the Application:

At the time of the preparation of the Application, a plant modification was proposed to downgrade all piping within the McGuire Recirculated Cooling Water System to a nonsafety class of piping. At the time the Application was submitted, none of this piping was included within the scope of license renewal. Subsequent to the submittal of the Application, the proposed modification was implemented; however, some portions of the Recirculated Cooling Water System were not downgraded, remained as Class F piping, and thus remained within the scope of license renewal.

The Recirculated Cooling Water System is a closed cooling system that delivers clean, rust-inhibited cooling water of a regulated temperature to various equipment in the Turbine Buildings, Auxiliary Building, and Service Building. The Recirculated Cooling Water System is a non-safety system whose postulated failure could prevent satisfactory accomplishment of certain safety-related functions. To preclude these postulated failures, portions of this system are designated Class F (see Application Section 2.1.1.2.1). All components within the Class F designated piping boundaries of this system are within the scope of license renewal per §54.4(a)(2). The mechanical components subject to aging management review, their intended functions, and materials of construction for the McGuire Recirculated Cooling Water System are listed in Table 1 below.

The results of the aging management review for the Recirculated Cooling Water System are presented in Table 1 below. Information contained in this table was obtained in the same manner as described in Section 3.3 of the Application and as repeated below:

Column 1 – The component types listed in Column 1 were identified through the screening methodology described in Section 2.1.2 of the Application and are on the marked plant drawing attached to this submittal.

Column 2 – The component functions listed in Column 2 were obtained from plant specific engineering documents using the screening methodology described in Section 2.1.2.

Column 3 – The materials listed in Column 3 were obtained from the drawing attached to this submittal and other plant specific engineering documents.

Column 4 – The internal and external environments listed in Column 4 were obtained from plant specific engineering documents. External environments are also noted on the drawing attached to this submittal. These environments are as follows:

- **Sheltered Environment** – The ambient conditions within the sheltered environment may or may not be controlled. The sheltered environment atmosphere is a moist air environment. Components in systems with external surface temperatures the same or higher than ambient conditions due to normal system operation are expected to be dry.

- **Treated water** – Treated water is demineralized water that may be deareated, treated with a biocide or corrosion inhibitors, or a combination of these treatments. Treated water does not include borated water, which is separately evaluated.

Column 5 – The aging effects listed in Column 5 were obtained using the following aging effects identification process. The aging effects that require management during the period of extended operation have been determined by reviewing the plant-specific materials of construction (Column 3) and operating environments (Column 4) for each structure and component (Column 1) that is subject to an aging management review.

To provide reasonable assurance that the aging effects that require management for a specific material-environment combination are the only aging effects of concern for McGuire and Catawba, Duke also has performed a review of industry experience and NRC generic communications relative to these structures and components. Finally, relevant McGuire and Catawba operating experience have been reviewed to provide further confidence that the set of aging effects for the specific material-environment combinations have been identified. Taken together, the steps of this methodology provide reasonable assurance that the aging effects that require management during the period of extended operation for McGuire and Catawba structures and components have been identified.

This aging effects identification process is consistent with that process that had been used in Section 3.5 of the Oconee Nuclear Station license renewal application. Furthermore, in NUREG-1723, the staff concluded that based on its review of the information provided in Sections 3.5.1 and 3.5.2 of the Oconee application, "the applicant has identified the aging effects that are associated with mechanical systems components reviewed in [Section 3.5]." This aging effects identification process provides reasonable assurance that the aging effects that require management during the period of extended operation have been identified.

Column 6 – The aging management programs and activities listed in Column 6 are credited to manage the effects of aging for the period of extended operation.

Table 1
Recirculated Cooling Water System (KR)
Component Screening and Aging Management Review Results
(McGuire Nuclear Station)

Component Type	Component Function	Material	Internal Environment / External Environment	Aging Effect	Aging Management Programs and Activities
Pipe	Pressure Boundary	Carbon Steel	Treated Water	Loss of Material	Chemistry Control Program
				Cracking	Chemistry Control Program
			Sheltered	Loss of Material	Inspection Program for Civil Engineering Structures and Components
				Loss of Material	Fluid Leak Management Program

The following aging management programs and activities are credited to manage the effects of aging for the McGuire Recirculated Cooling Water System and have been previously described in Appendix B of the Application as indicated:

- Chemistry Control Program (B.3.6)
- Fluid Leak Management Program (B.3.15)
- Inspection Program for Civil Engineering Structures and Components (B.3.21)

No changes to these programs are required as a result of this plant change. Based on the evaluations provided in Appendix B of the Application, the aging effects listed above will be adequately managed such that the intended functions of the components will be maintained consistent with the current licensing basis for the period of extended operation.

The following flow diagram has been marked to indicate the license renewal evaluation boundary for the McGuire Recirculated Cooling Water System:

- MCFD-1600-01-01 (copy attached)

4.0 CATAWBA RESULTS

Based on the review of the Catawba plant changes, the following change was identified that materially affects the contents of the Application:

- Due to a plant modification that abandoned in place the NV "PD" Pump and associated piping and components, the "Reciprocating Charging Pump and associated dampeners" are deleted from Table 3.3-5 (page 3.3-31, rows 3-5 and page 3.3-32, rows 1 and 2) of the Application.

5.0 CONCLUSION

The changes to the McGuire CLB and the Catawba CLB identified above are the only changes that Duke has identified that materially affect the contents of the Application, including the UFSAR Supplement, that have occurred during the staff's review of the Application. Accordingly, Amendment 1 meets the requirements of §54.21(b) – CLB changes during NRC review of the application.