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M. S. Tuckman
Executive Vice President
Nuclear Generation

July 2, 2001

U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Duke Energy Corporation

Catawba Nuclear Station Units 1 and 2
Docket Nos. 50-413, 50-414
Application For Technical Specification
Improvement To Eliminate Requirements For Post-
Accident Sampling Systems (PASS) Using The
Consolidated Line Item Improvement Process

Pursuant to 10CFR50.90, attached is a Duke Energy Corporation ("Duke") license amendment request (LAR) for the Catawba Nuclear Station ("Catawba") Facility Operating License and Technical Specifications.

The proposed amendment would delete Technical Specification (TS) 5.5.4, "Post Accident Sampling," and thereby eliminate the requirements to have and maintain the Post Accident Sampling System (PASS) at the Catawba Nuclear Station. The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 [65FR65018] as part of the Consolidated Line Item Improvement Process (CLIIP).

The contents of this amendment package are as follows:

Attachment 1 provides a description of the proposed changes, the requested confirmation of applicability, and plant-specific verifications.

Attachment 2 provides a marked copy of the existing Technical Specifications for Catawba Units 1 and 2. Related

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changes to Technical Specification Bases are also included. These marked copies show the proposed changes.

Attachment 3 provides the reprinted Technical Specifications pages for Catawba Units 1 and 2. Related reprinted Technical Specification Bases are also included.

Attachment 4 provides a summary of the regulatory commitments made in this submittal.

Duke requests an implementation period of 180 days following receipt of NRC approval of the proposed License Amendment Request.

Implementation of this LAR in the Facility Operating Licenses and Technical Specifications will impact the Catawba Updated Final Safety Analysis Report (UFSAR) and Site Emergency Plan. Permanent changes to the UFSAR and Emergency Plan will be made in accordance with 10CFR50.71(e) and 10CFR50.54(q), respectively.

This LAR has been categorized as a Cost Beneficial Licensing Action with an estimated cost savings in excess of \$25,000 per year through the remainder of the 40-year life of the Catawba Nuclear Station.

In accordance with Duke administrative procedures and the Quality Assurance Program Topical Report, the changes contained in this LAR have been reviewed and approved by the Catawba Plant Operations Review Committee and the Duke Nuclear Safety Review Board.

Pursuant to 10CFR50.91, a copy of this proposed amendment is being sent to the appropriate State of South Carolina official. Inquiries on this matter should be directed to J. A. Effinger at (704) 382-8688.

Very truly yours,



M. S. Tuckman

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Attachments: 1. Description and Assessment
 2. Proposed Technical Specification and
 Technical Specification Basis Changes
 3. Revised Technical Specification and
 Technical Specification Basis Changes
 4. Regulatory Commitments

xc w/Attachments:

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D. J. Roberts
Senior Resident Inspector (CNS)
U. S. Nuclear Regulatory Commission
Catawba Nuclear Site

R. Wingard, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management
Department of Health and Environmental Control
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Columbia, SC 29201

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bxc w/Attachments:

C. J. Thomas
G. D. Gilbert
K. E. Nicholson
D. P. Rochester
R. L. Gill
R. D. Hart
L. J. Rudy
P. H. Cox
L. B. Jones
Catawba Owners: NCMPA-1, SREC, PMPA, NCEMC
ELL
Catawba Group File: 801.01 (T. K. Pasour)
Catawba Document Control File: 801.01 (T. K. Pasour)

AFFIDAVIT

M. S. Tuckman, being duly sworn, states that he is Executive Vice President of Duke Energy Corporation; that he is authorized on the part of said corporation to sign and file with the Nuclear Regulatory Commission these amendments to the Catawba Nuclear Station Facility Operating Licenses Nos. NPF-35 and NPF-52 and associated Technical Specifications; and that all statements and matters set forth within this submittal dated July 2, 2001 are true and correct to the best of his knowledge.

M. S. Tuckman

M. S. Tuckman, Executive Vice President

Subscribed and sworn to me: July 2, 2001
Date

Mary P. Nelson, Notary Public

My commission expires: JAN 22, 2006

SEAL

Attachment 1

Description and Assessment

1.0 DESCRIPTION

The proposed License Amendment deletes the program requirements of Technical Specification (5.5.4) "Post Accident Sampling."

The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366. The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 [65FR65018] as part of the consolidated line item improvement process (CLIIP).

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

Duke has reviewed the safety evaluation published on October 31, 2000 as part of the Consolidated Line Item Improvement Process. This verification included a review of the NRC staff's evaluation as well as the supporting information provided to support TSTF-366 (i.e., WCAP-14986A, Rev.2, "Post Accident Sampling System Requirements: A Technical Basis," submitted October 26, 1998, as supplemented by letters dated April 28, 1999, April 10, 2000, and May 22, 2000). Duke has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to the Catawba Nuclear Station, Units 1 and 2, and justify this amendment for the incorporation of the changes to the Catawba Nuclear Station Technical Specifications.

2.2 Optional Changes and Variations

The elimination of PASS results in changes to the discussion in the Bases section 3.3.3(G.1). The current Bases mention the capabilities of PASS as part of the justification for allowing both hydrogen monitor channels to be out of service for a period of up to 72 hours. Marked up and revised Bases discussion for 3.3.3(G.1) are provided in Attachments 2 and 3, respectively.

Attachment 1

Description and Assessment

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Determination

Duke has reviewed the proposed no significant hazards consideration determination published on October 31, 2000 as part of the CLIIP. Duke has concluded that the proposed determination presented in the notice is applicable to the Catawba Nuclear Station and the determination is hereby incorporated by reference to satisfy the requirements of 10CFR50.91(a).

3.2 Verification and Commitments

Catawba is not proposing any variations or deviations from the technical specification changes described in TSTF-366 or the NRC staff's model safety evaluation published on October 31, 2000.

As discussed in the notice of availability published in the Federal Register on October 31, 2000 for this technical specification improvement, plant-specific verifications were performed as follows:

1. Catawba will develop contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in chemistry and radiation protection procedures and implemented 180 days after amendment approval consistent with the overall implementation schedule for this LAR. The establishment of these contingency plans is considered a regulatory commitment.
2. Catawba will develop the capability for classifying fuel damage events at the Alert level threshold at the radioactivity levels of $\geq 300 \mu\text{Ci/ml}$ dose equivalent iodine. This capability will be described in Catawba emergency plans and applicable emergency classification procedures and implemented within 180 days of the approval of the amendment. The capability for classifying fuel damage events is considered a regulatory commitment.

Attachment 1

Description and Assessment

3. Catawba has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in Catawba emergency plans and applicable emergency procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

4.0 ENVIRONMENTAL EVALUATION

Duke has reviewed the environmental evaluation included in the model safety evaluation published on October 31, 2000 as part of the CLIIP. Duke has concluded that the staff's findings presented in that evaluation are applicable to the Catawba Nuclear Station and the evaluation is hereby incorporated by reference for this application.

Attachment 2

Catawba Units 1 and 2 Technical Specifications
and
Technical Specification Bases

Marked Copy

5.5 Programs and Manuals

5.5.2 Containment Leakage Rate Testing Program (continued)

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a , is 14.68 psig. The maximum allowable containment leakage rate, L_a , at P_a , shall be 0.3% of containment air weight per day.

Leakage Rate acceptance criteria are:

- a. Containment leakage rate acceptance criterion is $\leq 1.0 L_a$. During the first plant startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.75 L_a$ for Type A tests.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

5.5.3 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include Containment Spray, Safety Injection, Chemical and Volume Control, and Nuclear Sampling. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.4 Post Accident Sampling

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~~This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines, gases, and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:~~

- a. ~~Training of personnel;~~
- b. ~~Procedures for sampling and analysis; and~~
- c. ~~Provisions for maintenance of sampling and analysis equipment.~~

(continued)

BASES

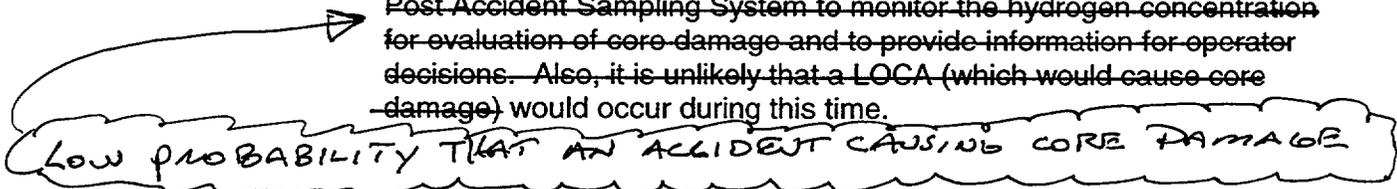
ACTIONS (continued)

F.1

Condition F applies when one or more Functions have two inoperable required channels (i.e., two channels inoperable in the same Function). Required Action F.1 requires restoring one channel in the Function(s) to OPERABLE status within 7 days. The Completion Time of 7 days is based on the relatively low probability of an event requiring PAM instrument operation and the availability of alternate means to obtain the required information. Continuous operation with two required channels inoperable in a Function is not acceptable because the alternate indications may not fully meet all performance qualification requirements applied to the PAM instrumentation. Therefore, requiring restoration of one inoperable channel of the Function limits the risk that the PAM Function will be in a degraded condition should an accident occur. Condition F is modified by a Note that excludes hydrogen monitor channels.

G.1

Condition G applies when two hydrogen monitor channels are inoperable. Required Action G.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on the ~~backup capability of the Post Accident Sampling System to monitor the hydrogen concentration for evaluation of core damage and to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.~~



LOW PROBABILITY THAT AN ACCIDENT CAUSING CORE DAMAGE

H.1 and H.2

If the Required Action and associated Completion Time of Conditions E, F, or G are not met, the unit must be brought to a MODE where the requirements of this LCO do not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and MODE 4 within 12 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

Attachment 3

Catawba Units 1 and 2 Technical Specifications
and
Technical Specification Bases

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Remove Page

B 3.3.3-14
5.5-2

Insert Page

B 3.3.3-14
5.5-2

BASES

ACTIONS (continued)

F.1

Condition F applies when one or more Functions have two inoperable required channels (i.e., two channels inoperable in the same Function). Required Action F.1 requires restoring one channel in the Function(s) to OPERABLE status within 7 days. The Completion Time of 7 days is based on the relatively low probability of an event requiring PAM instrument operation and the availability of alternate means to obtain the required information. Continuous operation with two required channels inoperable in a Function is not acceptable because the alternate indications may not fully meet all performance qualification requirements applied to the PAM instrumentation. Therefore, requiring restoration of one inoperable channel of the Function limits the risk that the PAM Function will be in a degraded condition should an accident occur. Condition F is modified by a Note that excludes hydrogen monitor channels.

G.1

Condition G applies when two hydrogen monitor channels are inoperable. Required Action G.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on the low probability that an accident causing core damage would occur during this time.

H.1 and H.2

If the Required Action and associated Completion Time of Conditions E, F, or G are not met, the unit must be brought to a MODE where the requirements of this LCO do not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and MODE 4 within 12 hours.

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The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a , is 14.68 psig. The maximum allowable containment leakage rate, L_a , at P_a , shall be 0.3% of containment air weight per day.

Leakage Rate acceptance criteria are:

- a. Containment leakage rate acceptance criterion is $\leq 1.0 L_a$. During the first plant startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.75 L_a$ for Type A tests.

The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.

The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.

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This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include Containment Spray, Safety Injection, Chemical and Volume Control, and Nuclear Sampling. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.4 DELETED

(continued)

Attachment 4

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Duke in this document. Any other statements in this submittal are provided for informational purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to J. A. Effinger at (704) 382-8688.

REGULATORY COMMITMENTS	Due Date/Event
<p>Catawba will develop contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. The contingency plans will be contained in chemistry and radiation protection procedures and implemented 180 days after amendment approval consistent with the overall implementation schedule for this LAR. The establishment of these contingency plans is considered a regulatory commitment.</p>	<p align="center">180 days from date of approval</p>
<p>Catawba will develop the capability for classifying fuel damage events at the Alert level threshold at the radioactivity levels of $\geq 300 \mu\text{Ci/ml}$ dose equivalent iodine. This capability will be described in emergency plan implementing procedures and implemented 180 days after amendment approval consistent with the overall implementation schedule for this LAR. The capability for classifying fuel damage events is considered a regulatory commitment.</p>	<p align="center">180 days from date of approval</p>
<p>Catawba has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in the Catawba emergency plans and applicable emergency procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.</p>	<p align="center">Complete</p>