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October 18, 2000

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Numbers 50-269, 270, and 287
Request for Implementation Date revision related to
Technical Specification Amendment for Keowee
Voltage and Frequency Protection Modification
Technical Specification Change (TSC) Number 2000-09

Pursuant to Title 10, Code of Federal Regulations, Part 50, Section 90 (10 CFR 50.90), Duke Energy proposes to amend Appendix A, Technical Specifications, for Facility Operating Licenses DPR-38, DPR-47 and DPR-55 for Oconee Nuclear Station, Units 1, 2, and 3. Amendment number 312, 312 and 312 was issued by the NRC on June 6, 2000 to add a surveillance requirement to verify that the Keowee Hydro Units (KHU) out-of-tolerance logic trips and blocks closure of the appropriate overhead or underground power path breakers. A modification to install the out-of-tolerance logic had been planned for the October/November timeframe. The amendment was to be implemented by November 30, 2000.

Subsequent to the issuance of Amendment 312, 312 and 312, an issue has been identified relative to the adequacy of the existing KHU Surveillance Requirements (SR). In addition, the NRC has informed Duke of a disagreement regarding an interpretation of existing SR 3.8.1.9.a. This interpretation issue was addressed via a Notice of Enforcement Discretion (NOED) dated September 5, 2000. In the License Amendment Request (LAR) associated with the NOED, Duke proposed to add a note to the SR requiring a subsequent LAR, no later than April 5, 2001 to resolve the issues associated with the KHU SR.

This proposed LAR revises the implementation date associated with Amendment 312, 312 and 312. The implementation date will be determined during new engineering studies of the Keowee surveillance criteria described in the NOED and LAR

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discussed above. The new implementation date will be on or before implementation of the proposed amendment that will be submitted to the staff no later than April 5, 2001.

No technical specification pages are affected. The Technical Justification for the amendment request is included in Attachment 1. Attachments 2 and 3 contain the No Significant Hazards Consideration Evaluation and the Environmental Impact Analysis, respectively.

This proposed change to the Technical Specifications has been reviewed and approved by the Plant Operations Review Committee and Nuclear Safety Review Board. This change will not result in an undue risk to the health and safety of the public. In addition, the Oconee Updated Final Safety Analysis Report has been reviewed and no changes are necessary to support this amendment request.

The final disposition of this modification will be included with the proposed submittal of April 5, 2001. Approval of this proposed LAR is requested by November 30, 2000.

Pursuant to 10 CFR 50.91, a copy of this proposed amendment is being sent to the South Carolina Department of Health and Environmental Control for review, and as deemed necessary and appropriate, subsequent consultation with the NRC staff.

If there are any questions regarding this submittal, please contact Reene' Gambrell at (864)885-3364.

Very truly yours,



W. R. McCollum, Jr., Vice President
Oconee Nuclear Site

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W. R. McCollum, Jr., being duly sworn, states that he is Vice President, Oconee Nuclear Site, Duke Energy Corporation, that he is authorized on the part of said Company to sign and file with the U. S. Nuclear Regulatory Commission this revision to the Facility Operating License Nos. DPR-38, DPR-47, DPR-55; and that all the statements and matters set forth herein are true and correct to the best of his knowledge.



W. R. McCollum, Jr., Vice President
Oconee Nuclear Site

Subscribed and sworn to before me this 18th day of
October, 2000



Notary Public

My Commission Expires:

2-12-2003

ATTACHMENT 1

TECHNICAL JUSTIFICATION

ATTACHMENT 1

TECHNICAL JUSTIFICATION

Background

In approved Amendment Numbers 312, 312 and 312, the Nuclear Regulatory Commission (NRC) approved Surveillance Requirement (SR) 3.8.1.17 that verifies the Keowee Hydro Unit (KHU) out of tolerance logic trips and blocks closure of the appropriate overhead or underground power path breakers. This logic is being added as part of a modification to provide out-of-tolerance (OOT) voltage and frequency protection for the Oconee loads being powered from the KHUs. An implementation date of November 30, 2000 was requested. Amendment 312, 312 and 312 was approved and issued by the NRC on June 6, 2000, with an implementation date of November 30, 2000.

In recent discussions between Duke and the NRC, it has become clear that interpretation differences existed in the requirements of SR 3.8.1.9.a. SR 3.8.1.9.a states "Verify on an actual or simulated emergency actuation signal each KHU auto starts and: a. Achieves frequency ≥ 57 Hz and ≤ 63 Hz and voltage ≥ 13.5 kV and ≤ 14.49 kV in ≤ 23 seconds, and...". The NRC stated that their interpretation of this requirement is that the bands on frequency constitute upper and lower limits for operation of the KHU.

When a KHU is started, it reaches rated frequency and voltage within the required 23 seconds. Due to the characteristics of the KHUs, the speed of the KHUs continues to increase, causing the frequency to exceed the bands specified in SR 3.8.1.9.a for a short (approximately 9 seconds) period of time. Following this brief overshoot, the frequency returns to within the limits specified in SR 3.8.1.9.a.

Given the upper voltage and frequency limits associated with the requirements of SR 3.8.1.9.a, and the overshoot characteristics of the KHUs, this SR cannot be met. Consequently, both KHUs were declared inoperable on September 5, 2000, and a Notice of Enforcement Discretion (NOED) was also requested and verbally granted on September 5, 2000. The NOED was issued by the NRC on September 8, 2000. A proposed change to Technical Specification (TS) was also submitted to the NRC, on September 7, 2000, as a follow-up to the NOED. The proposed TS change added a note to SR 3.8.1.9.a that allowed the upper voltage and frequency

requirement to not be met temporarily until engineering evaluations can be conducted to define the appropriate limits. A submittal to clarify the KHU SR is to be submitted to the NRC no later than April 5, 2001.

The KHU voltage and frequency OOT modification, discussed in Amendment 312, 312, and 312, will also provide delayed loading for each KHU. Since Duke is pursuing plant changes to modify the overshoot, and these changes may impact the OOT modification, Duke requests that the KHU out-of-tolerance voltage and frequency modification be resolved in conjunction with the overshoot issue addressed in the NOED and license submittal dated September 7, 2000. This resolution will be provided to the NRC in a submittal on or before April 5, 2001.

Description of the Technical Specification Change

This proposed LAR revises the implementation date associated with Amendment 312, 312 and 312. The implementation date will be determined during new engineering studies of the Keowee surveillance criteria described in the NOED and LAR discussed above. The new implementation date will be on or before implementation of the proposed amendment that will be submitted to the staff no later than April 5, 2001.

Technical Justification

Subsequent to the issuance of Amendment 312, 312 and 312, an issue was identified relative to the adequacy of the existing KHU Surveillance Requirements (SR). In addition, the NRC has informed Duke of a disagreement regarding an interpretation of existing SR 3.8.1.9.a. This interpretation issue was addressed via a Notice of Enforcement Discretion (NOED) dated September 5, 2000. In the License Amendment Request (LAR) associated with the NOED, Duke proposed to add a note to the SR requiring a subsequent LAR, no later than April 5, 2001 to resolve the issues associated with the KHU SR.

Duke has initiated an Engineering Project to evaluate the Surveillance Requirement Program for the KHU relative to the overshoot characteristics. This project will utilize an improved overshoot modeling capability that Duke has recently developed. The results of this project could likely include additional modifications to address the overshoot issue, as well as revised Surveillance Requirements. Options are now being explored that may alter or render obsolete the installation of the planned out-of-tolerance modification.

This effort is being managed to support the LAR that is required to be submitted no later than April 5, 2001. Therefore, it is prudent to delay implementation of the planned out-of-tolerance modification pending the results of this project.

The KHU's and their role in the Oconee emergency power system currently meet the design/licensing basis requirements for the system. Duke committed to provide protection for OOT voltage and frequency on the Keowee generators to further improve the design in response to concerns from the NRC Emergency Power Report. The addition of the OOT logic is considered an enhancement to the emergency power system. In addition, test results from the most recent emergency power start surveillance, conducted on 9/29/00, demonstrated that the Keowee units were performing consistent with previous emergency start responses. The times to achieve rated speed and voltage, as well as the times the units were in the OOT region, were consistent with previous tests and within expected results. These results provide further assurance that the KHU governors have not degraded and are performing as expected. Therefore, Duke concludes that there is no safety significance associated with delaying the implementation of this modification.

ATTACHMENT 2

NO SIGNIFICANT HAZARDS CONSIDERATION

Attachment 2
No Significant Hazards Consideration

Pursuant to 10 CFR 50.91, Duke Power Company (Duke) has made the determination that this amendment request involves a No Significant Hazards Consideration by applying the standards established by the NRC regulations in 10 CFR 50.92. This ensures that operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

No. The License Amendment Request (LAR) involves revising the implementation date of November 30, 2000 for the Keowee Hydro Unit out-of-tolerance voltage and frequency modification. Revising this date will allow Duke to integrate resolution of the overshoot issues.

This LAR involves an administrative issue, rather than the inability of the KHU to perform its intended safety function. The out-of-tolerance voltage and frequency modification is considered an enhancement to the existing design. Changing the implementation date for the modification has no impact on existing plant equipment.

Revising the requirements for implementation does not involve: 1) a physical alteration to the Oconee Units; 2) operating any installed equipment in a new or different manner; or 3) a change to any set points for parameters which initiate protective or mitigative action.

There is no adverse impact on containment integrity, radiological release pathways, fuel design, filtration systems, main steam relief valve set points, or radwaste systems. No new radiological release pathways are created.

Therefore, the probability or consequence of an accident previously evaluated is not significantly increased.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

No. The LAR involves revising the implementation date for the KHU voltage and frequency OOT modification.

Delaying implementation does not involve a physical effect on the unit, nor is there any increased risk of a unit trip

or reactivity excursion. No new failure modes or credible accident scenarios are postulated from this activity.

Therefore, the possibility of a new or different kind of accident from any kind of accident previously evaluated is not created.

3. Involve a significant reduction in a margin of safety.

No. The LAR involves delaying implementation of the KHU voltage and frequency OOT modification. Delaying implementation will allow Duke to fully integrate the resolution of the overshoot issues.

Delaying implementation does not involve: 1) a physical alteration of the Oconee Units; 2) the installation of new or different equipment; 3) operating any installed equipment in a new or different manner; 4) a change to any set points for parameters which initiate protective or mitigative action; or 5) any impact on the fission product barriers or safety limits.

Therefore, this request does not involve a significant reduction in a margin of safety.

ATTACHMENT 3
ENVIRONMENTAL IMPACT ANALYSIS

ATTACHMENT 3

Environmental Impact Analysis

Pursuant to 10 CFR 51.22(b), an evaluation of the license amendment request (LAR) has been performed to determine whether or not it meets the criteria for categorical exclusion set forth in 10 CFR 51.22(c)9 of the regulations.

The LAR does not involve:

1. A significant hazards consideration.

This conclusion is supported by the determination of no significant hazards contained in Attachment 2.

2. A significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

This LAR does not make physical changes to the plant. The plant will continue to operate as before. Therefore, this LAR will not change the types or amounts of any effluents that may be released offsite.

3. A significant increase in the individual or cumulative occupational radiation exposure.

This LAR does not make physical changes to the plant. The plant will continue to operate as before. Therefore, this LAR will not increase the individual or cumulative occupational radiation exposure.

In summary, this LAR meets the criteria set forth in 10 CFR 51.22 (c)9 of the regulations for categorical exclusion from an environmental impact statement.