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February 14, 2005

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555

Subject: Oconee Nuclear Station, Units 1, 2, and 3 Dockets Nos. 50-269,270, and 287 License Amendment Request: Extension of the Engineered Safeguards Protective System Digital Automatic Actuation Logic Channel Surveillance Requirement 3.3.7.1 Technical Specification Change Number 2004-03

Pursuant to 10 CFR 50.90, Duke Energy Corporation (Duke) hereby requests an amendment to its Facility Operating Licenses DPR-38, DPR-47 and DPR-55 for Oconee Nuclear Station (ONS), Units 1, 2, and 3, respectively. Technical Specification (TS) 3.3.7, Engineered Safeguards Protective System (ESPS) Digital Automatic Actuation Logic Channels, Surveillance Requirement (SR) 3.3.7.1 currently requires a channel functional test on a 31 day frequency. The proposed license amendment request (LAR) revises SR 3.3.7.1 to specify a channel functional test on a 92 day frequency.

This change is consistent with the recommended frequency that has been previously approved by the NRC in the Babcock and Wilcox Owners Group Topical Report, BAW-10182A, "Justification for Increasing Engineered Safety Features Actuation System (ESFAS) On-line Test Intervals," dated February 1994.

Attachment 1 provides the re-typed TS pages. Attachment 2 provides a mark-up of the affected TS pages. The technical justification for the amendment request is included in Attachment 3. Attachments 4 and 5 contain the No Significant Hazards Consideration Evaluation and the Environmental Impact Analysis, respectively.

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The proposed change to the TS has been reviewed and approved by the Plant Operations Review Committee and Nuclear Safety Review Board.

NRC approval for implementation of the Engineered Safeguards Protective System Analog subsystem surveillance test interval extension was previously granted on March 18, 2002.

NRC approval of this LAR is requested by December 31, 2005. This amendment will be implemented within 90 days following approval.

Implementation of these changes will not result in an undue risk to the health and safety of the public.

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The Oconee Updated Final Safety Analysis Report has been reviewed and no changes are necessary to support this LAR.

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 additional questions, please contact Reene' Gambrellat (864) 885-3364.

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R.A. Jones, Vice President Oconee Nuclear Site

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cc: Mr. L. N. Olshan, Project Manager Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Mail Stop 0-14 H25 Washington, D.C. 20555

> Dr. W. D. Travers, Regional Administrator U.S. Nuclear Regulatory Commission - Region II Atlanta Federal Center 61 Forsyth St., SW, Suite 23T85 Atlanta, Georgia 30303

Mr. M. C. Shannon Senior Resident Inspector Oconee Nuclear Station

Mr. Henry Porter, Director Division of Radioactive Waste Management Bureau of Land and Waste Management Department of Health & Environmental Control 2600 Bull Street Columbia, S.C. 29201 U.S. Nuclear Regulatory Commission February 14, 2005 Page 5

Ron Jones, 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 Renewed 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.

R.A. Jones, Vice President Oconee Nuclear Site

Subscribed and sworn to before me this μ^{th} day of μ^{th} , 2005

My Commission Expires:

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ATTACHMENT 1 REVISED TECHNICAL SPECIFICATIONS

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Remove Page 3.3.7-2 B 3.3.7-4

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Insert Page 3.3.7-2 B 3.3.7-4

ESPS Digital Automatic Actuation Logic Channels 3.3.7

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY	
SR 3.3.7.1	Perform digital automatic actuation logic CHANNEL FUNCTIONAL TEST.	92 days	

OCONEE UNITS 1, 2, & 3

Amendment Nos. XXX, XXX, & XXX

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BASES (continued)

SURVEILLANCE <u>SR_3.3.7.1</u> REQUIREMENTS SR 3.3.7.1 is the performance of a CHANNEL FUNCTIONAL TEST on a 92 day Frequency. The test demonstrates that each digital automatic actuation logic channel successfully performs the two-out-of-three logic combinations every 92 days. The test simulates the required one-out-of-three inputs to the logic circuit and verifies the successful operation of the automatic actuation logic. The Frequency is based on operating experience that demonstrates the rarity of more than one channel failing within the same 92 day interval. REFERENCES 1. 10 CFR 50.46. 2. UFSAR, Chapter 15. 3. 10 CFR 50.36.

OCONEE UNITS 1, 2, & 3

ATTACHMENT 2 MARKUP OF TECHNICAL SPECIFICATIONS

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SURVEILLANCE REQUIREMENTS					
	SURVEILLANCE		FREQUENCY		
SR 3.3.7.1	Perform digital automatic actuation logic CHANNEL FUNCTIONAL TEST.	<	92 \$(days) -		

OCONEE UNITS 1, 2, & 3

BASES (continued)

SURVEILLANCE REQUIREMENTS	SR-3,3.7.1 92 SR 3.3.7.1 is the performance of a CHANNEL FUNCTIONAL IEST on a 91 day Frequency. The test demonstrates that each digital automatic actuation logic channel successfully performs the two-out-of-three logic combinations every-91 days. The test simulates the required one-out-of-three inpute to the logic circuit and verifies the successful operation of the automatic actuation logic. The Frequency is based on operating experience that demonstrates the rarity of more than one channel failing within the same 31 day interval.			
REFERENCES	1.	10 CFR 50.46.		
	2.	UFSAR, Chapter 15.		
	3.	10 CFR 50.36.		

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OCONEE UNITS 1, 2, & 3

B 3.3.7-4

Amendment Nos. XXX, XXX, É XXX BASES REVISION DATED 04/10/03 |

ATTACHMENT 3

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TECHNICAL JUSTIFICATION

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ATTACHMENT 3 TECHNICAL JUSTIFICATION

Background and Description of Proposed Change

Technical Specification (TS) 3.3.7 Engineered Safeguards Protective System (ESPS) Digital Automatic Actuation Logic Channels, Surveillance Requirement (SR) 3.3.7.1 currently requires the channel functional test to be performed on a 31 day frequency.

The proposed change to TS 3.3.7 ESPS Digital Automatic Actuation Logic Channels, SR 3.3.7.1 will extend the current 31 day surveillance frequency to a 92 day surveillance frequency. No physical changes are being proposed to the ESPS as a result of this TS revision. The function and operation of the ESPS will remain the same as described in the Updated Final Safety Analysis Report (UFSAR).

Justification for the Proposed Change

The Babcock and Wilcox Owners Group issued Topical Report BAW-10182A, "Justification for Increasing Engineered Safety Features Actuation System (ESFAS) On-line Test Intervals" to provide the basis for increasing the Engineered Safeguards System online This report provides justification for surveillance interval. both the analog and digital subsystems. However, no test interval changes were proposed for the components that are outside the ESFAS system (and ESFAS TS) scope; specifically, the actuated ES devices and those power supply components that are external to the ESFAS cabinets, such as station batteries, inverters, and 4160 bus undervoltage relaying. Currently, the online surveillance for the Engineered Safeguards (ES) System must be performed on a monthly basis in accordance with Oconee TS. BAW-10182A utilized a risk analysis to determine that the extension of the ES online surveillance frequency from one month to three months was acceptable and had an insignificant effect on the plant risk.

However, BAW-10182A indicated that the impact of instrument drift over the proposed three month surveillance interval was not evaluated as part of the Topical Report. This was due to the fact that instrument drift was considered to be plant specific and could not be addressed on a generic basis. Thus, ATTACHMENT 3 February 14, 2005 Page 2

the Topical Report concluded that each plant should confirm that instrument drift would be within the acceptable limits over the period of the test interval.

The NRC Safety Evaluation Report, dated January 3, 1994, for BAW-10182A indicates that the NRC finds the Topical report acceptable and agreed that the surveillance test interval for the ES System could be extended to a three month interval. The NRC indicated that the acceptance was contingent upon each plant confirming the following: the instrument drift occurring over the proposed surveillance test interval would not cause the setpoint to exceed those values assumed in the plant safety analysis and specified in the TS, onsite records were maintained for the last two years, and a description of the current plantspecific setpoint methodology used to derive the safety margins was included.

Duke has evaluated instrument drift data for the analog subsystem and determined that the instrument drift data for the analog subsystem during the extended surveillance test interval would not exceed those values assumed in the TS or safety analysis. The instrument drift review was documented in calculation OSC-7688 "Drift Study for ES System to Support Technical Specification Change." The calculation contained maintenance records for a two year period. The setpoint methodology was described in the license amendment request. The NRC approved the license amendment request to extend the surveillance test interval for the analog subsystem on March 18, 2002. Compilation and evaluation of instrument drift data is only applicable to the Analog subsystem. By design, there is no instrument drift associated with the digital subsystem.

The extension of the surveillance test interval from 31 days to 92 days for the digital subsystem is acceptable based on the risk assessment documented in the Topical Report.

ATTACHMENT 4

NO SIGNIFICANT HAZARDS CONSIDERATION

ATTACHMENT 4 No Significant Hazards Consideration

Pursuant to 10 CFR 50.91, 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:

The proposed LAR extends the current 31 day surveillance frequency to a 92 day surveillance frequency. The proposed LAR does not alter the method of operating or configuration for any structure, system, or component. Extension of the surveillance interval will not affect any accident analysis or the plant safety system response to the accident. The extension of the surveillance interval will not affect the ability of ES to actuate Engineered Safeguards Protective System (ESPS) equipment. Therefore, the proposed LAR does not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) Create the possibility of a new or different kind of accident from any kind of accident previously evaluated:

The proposed change does not necessitate a change in parameters governing plant operation. Consequently, the proposed LAR does not alter the nature of events postulated in the UFSAR nor does the LAR introduce any unique precursor mechanisms. Therefore, the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) <u>Involve a significant reduction in the margin of</u> <u>Safety</u>

The proposed change does not adversely affect any plant safety limits, setpoints, or design parameters. The changes will not adversely affect the fuel, fuel cladding RCS, or containment integrity. The proposed change to the frequency for SR 3.3.7.1 will not impact the operation of the ESPS Digital Automatic Actuation Logic Channels nor the actuation of ESPS equipment. Additionally, the channel functional testing of the ESPS Digital Channels will continue to be performed within an acceptable timeframe following implementation of the proposed change. As such, the proposed change does not involve a significant reduction in a margin of safety.

Duke has concluded, based on the above, that there are no significant hazards considerations involved in this amendment.

ATTACHMENT 5 ENVIRONMENTAL IMPACT ANALYSIS

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ATTACHMENT 5 Environmental Assessment

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Pursuant to 10 CFR 51.22(b), an evaluation of the 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.

 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 any physical changes to the plant, nor does it necessitate a change in parameters governing plant operation. Therefore, this LAR will not change the types or amounts of any effluent that may be released offsite.

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

This LAR does not involve significant changes in parameters governing plant operation, or methods of operation. 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 environment impact statement.