Duke Energy

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August 14, 2001

U. S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Oconee Nuclear Station
Docket Nos. 50-269, 270, and 287
License Amendment Request for Engineered Safeguards Protective System (ESPS) Surveillance Requirement 3.3.5.2
Technical Specification Change Number 2001-03

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. Technical Specification (TS) 3.3.5 Engineered Safeguards Protective System (ESPS) Analog Instrumentation, Surveillance Requirement (SR) 3.3.5.2 currently requires a channel functional test on a 31 day frequency. The proposed license amendment request (LAR) revises TS 3.3.5 SR 3.3.5.2 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.

The revised Technical Specification pages are included in Attachment 1. Attachment 2 contains the markup of the current Technical Specification 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.

A001

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

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

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' Gambrell at (864) 885-3364.

Very Truly Yours,

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

Attachments

xc: Mr. D. E. LaBarge, Project Manager
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Washington, D. C. 20555

Mr. L. A. Reyes, Regional Administrator
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Atlanta Federal Center
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Atlanta, Georgia 30303

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

Mr. V. R. Autry, Director
Division of Radioactive Waste Management
Bureau of Land and Waste Management
Department of Health and Environmental Control
2600 Bull Street
Columbia, S. C. 29201

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 Corporation 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 statements and matters set forth therein 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 14 day of August, 2001.

Connie M. Dreazale
Notary Public

My Commission Expires:
2/12/2003

ATTACHMENT 1
REVISED TECHNICAL SPECIFICATIONS

Remove Pages	Replace Pages
3.3.5-2	3.3.5-2
B 3.3.5-11	B 3.3.5-11

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2.2 ----------NOTE---------- Only required for RCS Pressure – Low Low. ----------	
	Reduce RCS pressure < 900 psig.	36 hours
	AND	
	B.2.3 ----------NOTE---------- Only required for Reactor Building Pressure – High and High High. ----------	
	Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.5.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.5.2	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.5.3	Perform CHANNEL CALIBRATION.	18 months

BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.5.1 (continued)

analog instrument channels monitoring the same parameter should read approximately the same value. Significant deviations between the two analog instrument channels could be an indication of excessive instrument drift in one of the channels or of something even more serious. CHANNEL CHECK will detect gross channel failure; therefore, it is key in verifying that the instrumentation continues to operate properly between each CHANNEL CALIBRATION.

Agreement criteria are determined, based on a combination of the channel instrument uncertainties, including isolation, indication, and readability. If a channel is outside the criteria, it may be an indication that the transmitter or the signal processing equipment has drifted outside its limit.

The Frequency, equivalent to every shift, is based on operating experience that demonstrates channel failure is rare. Since the probability of two random failures in redundant channels in any 12 hour period is extremely low, the CHANNEL CHECK minimizes the chance of loss of protective function due to failure of redundant channels. The CHANNEL CHECK supplements less formal, but potentially more frequent, checks of channel operability during normal operational use of the displays associated with the LCO's required channels.

SR 3.3.5.2

A CHANNEL FUNCTIONAL TEST is performed on each required ESPS analog channel to ensure the entire channel, including the bypass function, will perform the intended functions. Any setpoint adjustment shall be consistent with the assumptions of the current unit specific setpoint analysis.

The Frequency of 92 days is based on operating experience, with regard to channel OPERABILITY and drift, which demonstrates that failure of more than one channel of a given function in any 92 day interval is a rare event.

ATTACHMENT 2

MARKUP OF TECHNICAL SPECIFICATION

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2.2 ----------NOTE---------- Only required for RCS Pressure – Low Low. ----------	
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	AND	
	B.2.3 ----------NOTE---------- Only required for Reactor Building Pressure – High and High High. ----------	
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SURVEILLANCE		FREQUENCY
SR 3.3.5.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.5.2	Perform CHANNEL FUNCTIONAL TEST.	~~31~~ 92 days
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BASES

SURVEILLANCE REQUIREMENTS

SR 3.3.5.1 (continued)

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ATTACHMENT 3

TECHNICAL JUSTIFICATION

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Background

Technical Specification (TS) 3.3.5 Engineered Safeguards Protective System (ESPS) Analog Instrumentation, Surveillance Requirement (SR) 3.3.5.2 currently requires the channel functional test to be performed on a 31 day frequency.

The purpose of this proposed change to TS 3.3.5 ESPS Analog Instrumentation, SR 3.3.5.2 is to extend the surveillance frequency to a 92 day period. No physical changes are being made to the ESPS because 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).

Description of the Technical Specification Change

The proposed change to TS 3.3.5 ESPS Analog Instrumentation, SR 3.3.5.2 will extend the current 31 day surveillance frequency to a 92 day surveillance frequency.

Technical Justification

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 surveillance interval. Currently, the online surveillance for the Engineered Safeguards system must be performed on a monthly basis in accordance with the Oconee Technical Specifications. BAW-10182A utilized a risk analysis to determine that the extension of the Engineered Safeguards 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, the Topical Report concluded that each plant should confirm that instrument drift would be within the acceptable limits over the period of the new 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 Engineered Safeguards System could be extended to a three month interval. As part of the NRC's review, the NRC indicated that the acceptance was contingent upon each plant confirming that 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 Technical Specifications. The confirmation should include a review of instrument channel drift information and have determined that the drift over the period of the extended surveillance test interval will not cause the safety setpoint to be exceeded beyond the allowable value calculated for that channel by the setpoint methodology. In addition, the NRC indicated that each plant should have onsite records for that channel as-found and as-left values showing actual calculations and supporting data for possible future staff audits. These records should consist of monthly data over a period of at least 2 years with a description of the current plant-specific setpoint methodology that is used to derive the safety margins.

Duke Energy has evaluated the plant specific drift information by reviewing instrument channel drift information over a two-year period. In order to perform this evaluation, the completed test procedures for the monthly online Engineered Safeguards surveillance for a two-year period were obtained. The as-found and as-left data from the Engineered Safeguards system online monthly testing was compiled into spreadsheets. The data in the spreadsheets were reviewed to determine the impact of instrument drift on the extension of the surveillance test interval to three months. This data review consisted of a comparison of the as-found and as-left data to determine if any components that impact the Technical Specification related setpoints have drift related problems which could result in the setpoints exceeding the allowable value between the extended surveillances. The review confirmed that instrument drift for the Engineered Safeguards System during the extended surveillance test interval is not significant and would have resulted in substantial margin to allowable values given a quarterly testing schedule. The maximum monthly drift observed (in the worst channel) was less than 2% of the margin between the Technical Specification limits and the procedure limits.

Based on this review, the extension of the surveillance test interval to 92 days from 31 days will not cause the Engineered Safeguards system allowable values in the Technical Specifications to be exceeded due to routine

instrument drift. Thus, the proposed surveillance test interval extension is deemed to be acceptable.

The NRC Safety Evaluation Report for BAW-10182A indicates that the NRC wanted onsite records to be maintained for the data that was reviewed for future audits. In order to satisfy this requirement, the test data that was reviewed was compiled into spreadsheets that are included in the instrument drift review in calculation OSC-7688 "Drift Study for ES System to Support Technical Specification Change". In addition, copies of the completed test procedures are maintained on microfilm for the life of the plant. The NRC requirement to include the setpoint methodology is satisfied by the fact that the setpoint methodology is described in the Bases Section of TS 3.3.5.

ATTACHMENT 4

NO SIGNIFICANT HAZARDS CONSIDERATION

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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. This is a proposed change to the Technical Specification (TS) 3.3.5 Engineered Safeguards Protective System (ESPS) Analog Instrumentation, Surveillance Requirement (SR) 3.3.5.2 for the channel functional test. The proposed change to TS 3.3.5 ESPS Analog Instrumentation, SR 3.3.5.2 will extend the current 31 day surveillance frequency to a 92 day surveillance frequency. The proposed change does not alter the method of operating or configuration for any Structure, System, or Component.

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

No. The ESPS Analog Instrumentation provides the necessary actuation of the Engineered Safety Features based on the Reactor Coolant and/or Reactor Building pressure. The proposed revision to the frequency for SR 3.3.5.2 will not alter the actuation of the Engineered Safety Features. The channel functional testing of the ESPS Analog Instrumentation will continue to be performed in an acceptable timeframe following the implementation of the proposed change.

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

No. The proposed revision to the frequency for SR 3.3.5.2 will not impact the operation of the ESPS Analog Instrumentation. In addition, the channel functional testing of the ESPS Analog Instrumentation will continue to be performed in an acceptable timeframe following the implementation of the proposed change.

ATTACHMENT 5

ENVIRONMENTAL IMPACT ANALYSIS

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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 4.

(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.