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SUBJECT: Application for amends to Licenses DPR-58 & DPR-74, changing  
 Tech Specs 3/4.8.2.3 & 3/4.8.2.5 to reflect Reg Guide 1.129  
 by removing requirement for differential acceptance test for  
 dc bus, trains during 92-day sureillance.

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AEP:NRC:1142  
10 CFR 50.90

Donald C. Cook Nuclear Plant Units 1 and 2  
License Nos. DPR-58 and DPR-74  
Docket Nos. 50-315 and 50-316  
TECHNICAL SPECIFICATIONS CHANGE REQUEST

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

Attn: T. E. Murley

January 15, 1991

Dear Dr. Murley:

This letter and its attachments constitute an application for amendment to the Technical Specifications (T/Ss) for the Donald C. Cook Nuclear Plant Units 1 and 2. Specifically, we are proposing to modify T/S 3/4.8.2.3 and T/S 3/4.8.2.5 to reflect Regulatory Guide 1.129 by removing the requirement for a differential acceptance test for the DC bus trains (Train AB, Train CD, Train N) during the 92-day surveillance. In addition, we are proposing an editorial change to T/S 3/4.8.1.1 to clarify the intent of the specification.

We have discussed this T/Ss change request with the NRC Project Manager, Mr. Tim Colburn. While we understand that this request does not warrant waiving the 30-day comment period, we respectfully request that subsequent to the comment period this submittal be processed as expeditiously as possible to preclude future unwarranted plant shutdowns.

We believe that the proposed changes will not result in (1) a significant change in the types of effluents or a significant increase in the amounts of any effluent that may be released offsite, or (2) a significant increase in individual or cumulative occupational radiation exposure.

These proposed changes have been reviewed by the Plant Nuclear Safety Review Committee and will be reviewed by the Nuclear Safety and Design Review Committee at their next regularly scheduled meeting.

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Dr. Murley

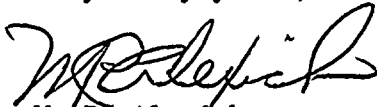
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AEP:NRC:1142

In compliance with the requirements of 10 CFR 50.91(b)(1), copies of this letter and its attachments have been transmitted to the Michigan Public Service Commission and the Michigan Department of Public Health.

This document has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,



M. P. Alexich  
Vice President

Attachments

cc: D. H. Williams, Jr.  
A. A. Blind - Bridgman  
J. R. Padgett  
G. Charnoff  
NFEM Section Chief  
NRC Resident Inspector - Bridgman  
A. B. Davis - NRC Region III

ATTACHMENT 1 TO AEP:NRC:1142  
REASONS AND 10 CFR 50.92 ANALYSES FOR  
CHANGES TO THE  
DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2  
TECHNICAL SPECIFICATIONS

HISTORY OF PREVIOUS SUBMITTALS

We have previously requested numerous changes to Section 3/4 8 of the T/Ss. In an attempt to put this submittal in perspective with respect to our previous submittals, we are providing, as requested by our Project Manager, an overview of previously requested Section 3/4 8 T/Ss change submittals. The following is a reference listing of our previous submittals with their dates and subjects. Following this list is a brief summary of events. It should be noted that the changes we are proposing in this submittal have not been requested in any previous submittal.

AEP:NRC:0896	September 28, 1984	Diesel generator
AEP:NRC:0896A	April 24, 1985	reliability and Generic Letter 84-15
AEP:NRC:0896B	January 16, 1987	Proposed T/Ss to reflect Standard T/Ss contained in Generic Letter 84-15
AEP:NRC:0896F	June 25, 1987	Additional information and revised T/Ss
AEP:NRC:0896G	September 28, 1987	
AEP:NRC:0896H	November 25, 1987	Revises AEP:NRC:0896 and 0896A with respect to diesel generator fuel oil surveillance testing and ten-year diesel generator fuel oil storage tank cleaning
AEP:NRC:0896I	January 24, 1989	Clarified AEP:NRC:0896H
AEP:NRC:0896J	April 29, 1988	Requested simulated load testing of the station batteries and the N-train batteries
AEP:NRC:0896K	November 28, 1989	Proposed a change in the required minimum volume of the diesel generator fuel storage tanks
AEP:NRC:0896L	October 31, 1988	Request to eliminate the overload test
AEP:NRC:0896M	March 23, 1989	Revised AEP:NRC:0896H with respect to ten-year diesel generator fuel oil storage tank cleaning and inspection
AEP:NRC:0896N	April 6, 1989	Revised AEP:NRC:0896B and H with respect to diesel generator fuel oil surveillance testing

We initially submitted two letters to the NRC addressing concerns we had regarding diesel generator reliability and Generic Letter 84-15. These letters are AEP:NRC:0896 dated September 28, 1984 and AEP:NRC:0896A dated April 24, 1985. Subsequently, we submitted AEP:NRC:0896B dated January 16, 1987 to request changes to the T/Ss in an attempt to make them more closely reflect the Standard T/Ss enclosed in Generic Letter 84-15. Additional information and revised T/Ss were later provided in letters AEP:NRC:0896F dated June 25, 1987 and AEP:NRC:0896G dated September 28, 1987.

On November 25, 1987 we submitted AEP:NRC:0896H to request changes to two specific portions of the original submittals concerning diesel generator fuel oil surveillance testing and the ten-year diesel generator fuel oil storage tank cleaning. Additional information on the ten-year diesel generator fuel oil storage tank cleaning request was later provided in AEP:NRC:0896I, dated January 24, 1989. In AEP:NRC:0896L dated October 31, 1988, we requested to eliminate the diesel generator overload test. In AEP:NRC:0896M we submitted clarification and new proposed T/S pages for the ten-year tank cleaning and inspection. Revised T/S pages addressing diesel generator surveillance testing were sent to the NRC in AEP:NRC:0896N, dated April 6, 1989. The NRC issued Amendment Nos. 125 and 112 on May 31, 1989 to the Unit 1 and 2 T/Ss, respectively, which addressed diesel generator fuel oil surveillance requirements, diesel generator fuel oil storage tank surveillance requirements, and diesel generator surveillance testing.

We proposed to change the surveillance requirements for the station batteries to allow the use of simulated loads for testing battery capacity in letter AEP:NRC:0896J dated April 29, 1988. The NRC issued these proposed changes as Amendment Nos. 123 and 110 to the Unit 1 and 2 T/Ss, respectively, on April 11, 1989.

We submitted AEP:NRC:0896K on November 28, 1989 to change the required minimum volume of the diesel generator fuel storage tanks. Amendment Nos. 145 and 132 to the Unit 1 and 2 T/Ss addressing diesel generator fuel storage tank capacity were issued on August 13, 1990.

#### DESCRIPTION OF CHANGES PROPOSED IN THIS SUBMITTAL

In this submittal we are proposing changes to three sections of the Cook Nuclear Plant Technical Specifications (T/Ss):

- |           |  |
|-----------|--|
| 3/4.8.1   | A.C. Sources   |
| 3/4.8.2.3 | D.C. Distribution - Operating                          |
| 3/4.8.2.5 | D.C. Distribution - Operating - Train N Battery System |

The following is a description of the changes proposed to each section.

a. 3/4.8.1 A.C. Sources

Currently T/S 4.8.1.1.2(e)2 states:

Verifying the generator capability to reject a load greater than or equal to 600 kw while maintaining voltage at  $4160 \pm 420$  volts and frequency at  $60 \pm 1.2$  Hz,

We are proposing to add the words "steady state" as follows:

Verifying the generator capability to reject a load greater than or equal to 600 kw while maintaining steady state voltage at  $4160 \pm 420$  volts and frequency at  $60 \pm 1.2$  Hz,

b. 3/4.8.2.3 D.C. Distribution Operating  
3/4.8.2.5 D.C. Distribution - Operating - Train N Battery System

Currently the T/S 4.8.2.3.2(b)(1) surveillance requirements for the AB and CD D.C. bus trains state, in part, the following:

4.8.2.3.2 Each 250-volt battery bank and charger shall be demonstrated OPERABLE

b. At least once per 92 days by verifying that:

1. The voltage of each connected cell is greater than or equal to 2.10 volts under float charge and has not decreased more than 0.05 volts from the value observed during the original acceptance test, and

In the event that a 250-volt D. C. battery and/or its charger fails this surveillance, the battery would be considered inoperable and the action statement would be entered. The T/S 3/4 8.2.3 action requires that the battery be restored to operable status within 2 hours or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

The identical surveillance requirements are stated in T/S 4.8.2.5.2(b)(1) for the N D.C. bus train. However, the T/S 3/4 8.2.5 action statement requires that, when the Train N battery system is inoperable, the turbine driven auxiliary feedwater pump be declared inoperable and that the T/S 3.7.1.2 action statement be followed. This action statement requires that with one auxiliary feedwater pump inoperable, the required auxiliary feedwater pumps be restored to operable status within 72 hours or be in at least hot standby within the next 6 hours and in hot shutdown within the following 6 hours.



We are proposing to delete the phrase, "and has not decreased more than 0.05 volts from the value observed during the original acceptance test," from these two T/Ss so that they read as follows:

Each 250-volt battery bank and charger shall be demonstrated OPERABLE:

b. At least once per 92 days by verifying that:

1. The voltage of each connected cell is greater than or equal to 2.13 volts under float charge, and

In addition, we are proposing to increase the voltage requirement given in T/Ss 4.8.2.3.2(a)3 and 4.8.2.5.2(a)3. The current T/S states:

3. The pilot cell voltage is greater than or equal to 2.10 volts, and

We are proposing to revise the T/S to state the following:

3. The pilot cell voltage is greater than or equal to 2.13 volts, and

Thus, we are proposing to raise the required voltage of each connected cell from greater than or equal to 2.10 volt to 2.13 volts, and to delete the requirement that the voltage has not decreased more than 0.05 volts from the value observed during the original acceptance test.

#### JUSTIFICATIONS FOR CHANGES

##### a. 3/4.8.1 A. C. Sources

The intent of this change is to make the specification clearer. By adding the words "steady state" we are not changing the meaning of the specification.

##### b. 3/4.8.2.3 D.C. Distribution - Operating 3/4.8.2.5 D.C. Distribution - Operating - Train N Battery System

The requirement that the voltage must not decrease more than 0.05 volts from the value observed during the original acceptance test has resulted in plant shutdowns over the years. Deletion of this requirement is justified from several perspectives.

First, Regulatory Guide 1.129, "Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Nuclear Power

Plants," describes a method acceptable to the NRC staff for maintaining, testing, and replacing large lead storage batteries for all types of nuclear power plants. This Regulatory Guide states that conformance with the requirements and recommendations that are specified in IEEE Std. 450-1975, "IEEE Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations," provides an adequate basis for compliance with the Commission's regulations in this area. This IEEE standard makes no mention of a 0.05-volt acceptance test as specified in our T/Ss. However, the 1980 and 1987 revisions do specify a float voltage of 2.13 volts as we are proposing.

Second, the Westinghouse Standardized Technical Specifications do not require the 0.05 volt acceptance criteria, but do require a voltage of 2.13 volts as we are proposing. The Bases of Revision 4 of the Westinghouse Standardized T/Ss state that the surveillance requirement for demonstrating the operability of the station batteries is based on the recommendations of Regulatory Guide 1.129, "Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Nuclear Grade Power Plants," February 1978, and IEEE Std 450-1980, "IEEE Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations."

These first two justifications are further supported by the manufacturer's Installation and Operating Instructions Manual (C&D Power Systems, #12-800) and IEEE Standards 450-1975, 1980 and 1987, which revealed no information disputing this proposed change to the T/Ss.

In addition, the current Technical Specifications are contradictory. The second surveillance requirement of both of the subject T/Ss states:

Each 250-volt battery bank and charger shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that:

3. The pilot cell voltage is greater than or equal to 2.10 volts, and

Consequently, a battery that may pass the weekly surveillance might conceivably fail the 92-day surveillance if it does not meet the 0.05-volt acceptance criteria.

Finally, as previously stated, the current T/Ss have resulted in unwarranted plant shutdowns and thermal cycling. As such, they do not enhance plant safety.

Significant Hazards Analysis

Per 10 CFR 50.92, a proposed amendment will not involve a significant hazards consideration if the proposed amendment does not:

- (1) 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 accident previously analyzed or evaluated, or
- (3) involve a significant reduction in a margin of safety.

Criterion 1

The proposed changes do not increase the probability or consequences of a previously evaluated accident. Their intent is to provide clarification and to make our T/Ss reflect NRC and industry guidance. They do not affect the accident analysis. Consequently, we believe that these changes do not increase the probability or consequences of a previously analyzed accident.

Criterion 2

The proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated. They do not require physical alteration of the plant or changes in parameters governing normal plant operation. We therefore believe that these changes do not create the possibility of a new or different kind of accident from any accident previously analyzed or evaluated.

Criterion 3

The proposed changes make the T/Ss clearer and eliminate the need for thermal cycling of the units due to failure of an overly conservative surveillance. Unwarranted plant shutdowns not only induce thermal stresses on the reactor vessel, but challenge safety systems. Consequently, the proposed changes actually enhance plant safety. As such, we believe the proposed changes do not significantly reduce a margin of safety.

Lastly, we note that the Commission has provided guidance concerning the determination of significant hazards by providing certain examples (48 FR 14780) of amendments considered not likely to involve significant hazards considerations. The first of these examples refers to changes which are purely administrative. Since the proposed changes are consistent with NRC and industry guidance we believe these changes fall within the scope of this example.

Therefore, we believe that these changes do not involve a significant hazards consideration as defined in 10 CFR 50.92.