

DUKE POWER COMPANY

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VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
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May 24, 1988

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

Subject: Catawba Nuclear Station, Unit 2  
Docket Nos. 50-414  
Proposed Amendment to Operating License NPF-52  
Diesel Generator Main Bearing Number 7 Special Inspection

Dear Sir:

Please find attached a proposed license amendment to Facility Operating License No. NPF-52 for Catawba Nuclear Station, Unit 2. The proposed change seeks that Item 6 of Attachment 1 to NPF-52 be deleted based on operating experience and special inspection results. Item 6 of Attachment 1 requires special inspections of the Diesel Generator (D/G) 2B number 7 main bearing only. Such inspections were mandated by the NRC as a result of two failures of this bearing during preoperational testing in order to insure that measures taken to prevent further recurrences were effective. However, acceptable operation was demonstrated from January 17, 1986 to the present time. D/G 2B number 7 main bearing has successfully sustained more than 360 starts and accumulated over 350 hours of operation. Inspection of the number 7 bearing during the End-of-Cycle 1 refueling outage following 333 starts and 316 hours of operation revealed no defects, abnormal appearance, or unusual readings. Duke Power has determined that discontinuing future special inspection of D/G 2B main bearing number 7 would not involve any adverse safety considerations. Therefore based on operating experience and special inspection results, it is requested that Item 6 of Attachment 1 to NPF-52 be deleted. This proposed amendment would also make Attachment 1 to NPF-52 identical to Attachment 1 to Catawba Nuclear Station Unit 1 Facility Operating License NPF-35 and would provide for uniformity between essentially identical units.

Attachment I contains the proposed revision to Facility Operating License NPF-52. Attachment II contains the Justification and Safety Analysis in support of the proposed amendment. Attachment III provides a determination that the proposed amendment would not involve any significant hazards consideration as defined by 10 CFR 50.92.

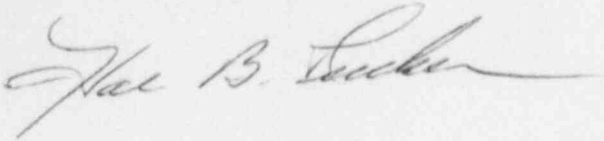
This proposed amendment involves one amendment request to Catawba Nuclear Station Unit 2 Operating License NPF-52. Accordingly, pursuant to 10 CFR 170.21 a check for \$150.00 is enclosed.

*Aool w/check  
\$150  
#18010647*

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Pursuant to 10 CFR 50.91 (b) (1) the appropriate South Carolina State Official is being provided a copy of this request.

Very truly yours



Hal B. Tucker

JGT/24/sbn

Attachments

xc: Dr. J. Nelson Grace, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

Mr. Heyward Shealy, Chief  
Bureau of Radiological Health  
South Carolina Department of Health &  
Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

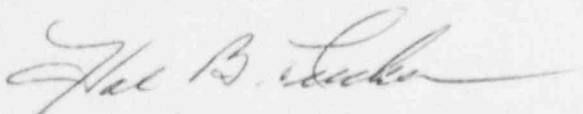
American Nuclear Insurers  
c/o Dottie Sherman, ANI Library  
The Exchange, Suite 245  
270 Farmington Avenue  
Farmington, CT 06032

M&M Nuclear Consultants  
1221 Avenue of the Americas  
New York, New York 10020

INPO Records Center  
Suite 1500  
1100 Circle 75 Parkway  
Atlanta, Georgia 30339

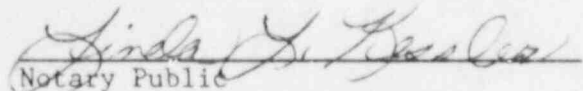
Mr. P. K. Van Doorn  
NRC Resident Inspector  
Catawba Nuclear Station

HAL B. TUCKER, being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this revision to the Catawba Nuclear Station Unit 2 Operating License No. NPF-52; and that all statements and matters set forth therein are true and correct to the best of his knowledge.



Hal B. Tucker, Vice President

Subscribed and sworn to before me this 24th day of May, 1988.



Notary Public

My Commission Expires:

May 1, 1989



Attachment I

Proposed Amendment To Facility Operating License NPF-52

Requested Amendment

Amend Facility Operating License NPF-52 to eliminate Item 6 of Attachment 1.

Attachment II

Technical Justification And Safety Analysis

## TECHNICAL JUSTIFICATION AND SAFETY ANALYSIS

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On October 21, 1986 and on May 26, 1987, the Nuclear Regulatory Commission (NRC) issued Amendment 16 to Facility Operating License (FOL) NPF-35 and Amendment 18 to FOL NPF-52, respectively. These amendments were needed to incorporate the recommendations and conclusions contained in the NRC Staff's Safety Evaluation Report on Operability/Reliability of Emergency Diesel Generators (D/G) manufactured by Transamerica Delaval, Inc. (TDI) which was later published as NUREG-1216. The Unit 2 D/G 2B number 7 main bearing was noted as an exception to the sample license conditions of NUREG-1216. Item 6 of Attachment 1 to NPF-52 requires special inspections of the D/G 2B number 7 main bearing. These special inspections were mandated by the NRC Staff as a result of two failures of this bearing during preoperational testing in order to insure that measures taken to prevent further recurrences were effective. Both bearing failures were attributed to improper alignment upon installation of the lower bearing sheets, which led to some binding and disrupted oil film.

In accordance with NPF-52, Attachment 1 Item 6, D/G 2B number 7 bearing was inspected during the End-of-Cycle 1 refueling outage after it had sustained 333 starts and 316 hours of operation from January 17, 1986 to December 30, 1987. The bearing was subjected to visual inspection, mechanical measurements, and liquid penetrant inspection. The visual inspection revealed that the bearing was in excellent (new appearing) condition. Mechanical measurements indicated that the number 7 bearing maintained the same tolerance as when new. The penetrant inspection revealed no reportable/rejectable indication. Therefore, based on operating experience and special inspection results, it is requested that Item 6 of Attachment 1 to NPF-52 be deleted and future special inspections of number 7 bearing be discontinued. This proposed amendment would also make Attachment 1 to NPF-52 identical to Attachment 1 to NPF-35 and would provide for uniformity between essentially identical units.

NUREG-1216 states that implementation of the recommendations and conclusions contained in the NRC Staff's Safety Evaluation Report on Operability/Reliability of Emergency D/Gs manufactured by TDI establishes the adequacy of the TDI D/Gs for nuclear standby service as required by General Design Criterion 17 of Appendix A to 10 CFR 50. The Staff also concluded that such actions would ensure the design and manufacturing quality of the D/Gs meet the requirements for D/Gs designed and manufactured in accordance with 10 CFR 50, Appendix B. Furthermore, successful operating experience (over 360 starts and 350 hours of operation from January 17, 1986 to the present) and inspection results demonstrate the adequacy of D/G 2B main bearing number 7 and of measures taken to insure proper bearing alignment upon installation.

It is Duke Power Company's conclusion that discontinuing future special inspections of main bearing number 7 would not involve any adverse safety considerations. The proposed amendment does not change any of the recommendations and conclusions in the NRC Staff's Safety Evaluation Report on Operability/Reliability of Emergency D/Gs Manufactured by TDI and which are already included in NPF-35 and NPF-52. The reliability and operability of the Catawba TDI D/Gs are therefore unaffected by the proposed amendment.

Attachment III

Analysis of No Significant Hazards



## ANALYSIS OF NO SIGNIFICANT HAZARDS

Pursuant to 10 CFR 50.92, this analysis provides a determination that the proposed amendment to the Technical Specifications involves no significant hazards considerations if operation in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

The proposed amendment does not involve an increase in the probability or consequences of an accident previously evaluated. Implementation of the proposed License amendment would have no effect on any previously analyzed accident because no changes to any of the assumptions used in the analysis is involved. Operating experience has demonstrated the adequacy of D/G 2B and of measures taken to ensure proper alignment of main bearings. Therefore, this amendment does not affect D/G 2B's capability to perform its intended safety function and can not increase the probability or consequences of an accident.

The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. Implementation of the proposed amendment would require no new mode of plant operation or involve any physical modification to the facility. Thus, it is impossible for the proposed amendment to create a new or different kind of accident.

The proposed amendment does not involve any reduction in a margin of safety. The recommendations and conclusion in the NRC Staff's Safety Evaluation Report on Operability/Reliability of Emergency D/Gs manufactured by TDI are intended to maintain the reliability of the D/Gs and are unaffected by the proposed amendment. Operating experience and inspection results have demonstrated that D/G 2B main bearing number 7 is as reliable as any other Catawba D/G bearing. Thus, discontinuing future special inspections of D/G 2B main bearing number 7 does not involve any reduction in a margin of safety.

The NRC has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing examples of amendments that are considered not likely to involve significant hazards considerations (Federal Register, Vol 48, No. 67, pg. 14870). Example (iv) involves "a relief granted upon demonstration of acceptable operation from an operating restriction that was imposed because acceptable operation was not yet demonstrated". The proposed amendment clearly resembles NRC Example (i). Special inspections for number 7 bearing were mandated because acceptable operation was not yet demonstrated. However, acceptable operation was demonstrated from January 17, 1986 to the present time. D/G B number 7 bearing has successfully sustained more than 360 starts and accumulated over 350 hours of operation. Inspection of the number 7 bearing during the End-of-Cycle 1 refueling outage following 333 starts and 316 hours of operation revealed no defects, abnormal appearance, or unusual readings.

Therefore, based upon the preceding analysis, Duke Power has concluded that the proposed amendment does not involve any significant hazards considerations.