

# DUKE POWER COMPANY

POWER BUILDING, BOX 33189, CHARLOTTE, N. C. 28242

W. H. OWEN  
EXECUTIVE VICE PRESIDENT  
ENGINEERING & CONSTRUCTION

July 13, 1984

(704) 373-4120

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Re: Catawba Nuclear Station, Unit 1  
Docket No. 50-413

Subject: Applicants' Application for Partial  
Exemption from GDC 4

Dear Mr. Denton:

Pursuant to 10 CFR §50.12, Duke Power Company, et al. (Applicants) hereby request an exemption from the requirement of 10 CFR Part 50, Appendix A, General Design Criterion (GDC) 4, as such relates to fuel load and pre-critical testing activities.

On March 19, 1984 representatives from Duke Power, Westinghouse, and the NRC met to discuss Confirmatory Item 12, Main Steamline Break (MSLB) Using a Revised Heat Transfer Model, which is discussed in Section 6.2.1.1 of the Catawba FSAR. Duke subsequently provided the staff with additional information concerning this subject in a letter dated March 28, 1984, and Westinghouse submitted for NRC review WCAP 8354, that documents Ice Condenser Containment analysis techniques.

On July 9, 1984, pursuant to 10 CFR §50.55e, Applicants submitted Significant Deficiency Report No. SD 413-414/84-16, detailing the effects of superheated steam generated by a steam generator for the Main Steamline Break analysis, which could result in increased doghouse temperatures outside containment. In this report Applicants committed to determine final actions required to resolve this issue by August 31, 1984.

Duke Power has reviewed this situation with respect to the pending request to load fuel and perform pre-critical testing for Catawba Unit 1. It was concluded that there would be no significant consequences as a result of the design basis accident analyzed in FSAR Section 15.1.5 for the following reasons:

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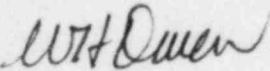
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- 1) Prior to initial criticality, there would be no fission product inventory in the core.
- 2) The moderator temperature coefficient at beginning-of-life (BOL) is slightly positive. Therefore, the core would not go critical as a result of a MSLB accident.

Based on this analysis, it is Applicant's position that the proposed mode of operation would be as safe as that were the Applicant to fully comply with the regulations at the time of license issuance.

By letters dated June 20 and June 28, 1984 Applicants requested a partial exemption from GDC 17 in order to permit the diesel generators for Unit 1 to be inoperable until initial criticality. It is considered that the information regarding exigent circumstances supporting that request also encompass the situation presented in this application. Therefore, Applicants hereby request that the Commission issue an exemption to GDC 4 that would allow the above referenced items to be completed prior to initial criticality.

Very truly yours,



W. H. Owen

RWO:scs

cc: Mr. J. P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30323

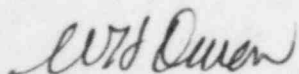
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NRC Resident Inspector  
Catawba Nuclear Station

W. H. OWEN, being duly sworn, states that he is Executive 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 application; and that all statements and matters set forth therein are true and correct to the best of his knowledge.



W. H. Owen, Executive Vice President

Subscribed and sworn to before me this 13th day of July, 1984.



Notary Public

My Commission Expires:

September 20, 1984