

# DUKE POWER COMPANY

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

W. H. OWEN  
EXECUTIVE VICE PRESIDENT  
ENGINEERING & CONSTRUCTION

July 13, 1984

17041 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 and GDC 54

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 Criteria (GDC) 4 and 54, as such relates to fuel load and pre-critical testing activities.

In Section 6.2.4 of the Catawba SER it was noted that "The staff has reviewed the containment Air Release and Addition System and concludes that it satisfies the provisions of BTP-CSB 6-4, contingent on the isolation valves being found operable by the staff . . . ."

On March 13-16, 1984 the NRC staff conducted a site review in the area of seismic and dynamic qualification of electrical and mechanical equipment at Catawba. Based on this review and subsequent submittals made by Duke, the staff concluded in Section 3.10.2 of Supplement 2 to the Catawba SER that ". . . the Catawba pump and valve operability assurance program is acceptable. The Applicant should confirm, before initial criticality, that all outstanding qualification programs for safety-related components and accessories have been completed . . . ."

At this time, the staff has not yet determined that the containment Air Release and Addition System (VQ) valves meet the necessary dynamic requirements as specified in SER Section 3.10. Duke has verified that VQ System valves will close properly against the buildup of containment pressure in the event of a LOCA.

Pressure drop across any of the valves during a LOCA will not exceed 15 psig. All four valves have electric motor operators that were sized to provide sufficient output torque to close the valves against 150 psig pressure drop. Therefore, considerable margin exists.

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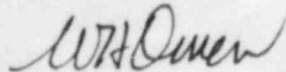
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Combined seismic, LOCA and piping loads have also been considered and were confirmed to be less than allowed by the valve qualification documents.

These valves serve to isolate the containment from outside atmosphere. As discussed in previous exemption requests, there will be no fission product inventory in the core during this time period. Therefore, there would be no airborne activity in the containment that would require the isolation valves to be operable. Based on this analysis, it is Applicants' position that the proposed mode of operation would be as safe as that if the Applicant were to be in full compliance with the regulations at the time of license issuance.

By letters dated June 20 and June 18, 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 if the staff needs information in addition to that provided above in order to close this item, then the Commission issue an exemption to GDC 4 and GDC 54 that would allow the above referenced items to be completed prior to initial criticality.

Very truly yours,



W. H. Owen

NAR:scs

cc: Mr. J. P. O'Reilly, Regional Administrator  
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NRC Resident Inspector  
Catawba Nuclear Station

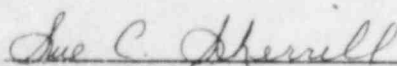
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W. H. OWEN, being duly sworn, states that he is Executive Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this application; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

  
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W. H. Owen, Executive Vice President

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

  
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Notary Public

My Commission Expires:

September 20, 1984