

**DUKE POWER COMPANY**

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October 2, 1984

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

Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

Re: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414

Dear Mr. Denton:

Section 3.10 of Supplement 3 to the Catawba SER and Proposed License Condition 13 which was attached to Facility Operating License NPF-24 specified outstanding requirements for seismic qualification of equipment for Catawba Unit 1.

Proposed License Condition 13(a) specified actions to be completed for the solid-state protection system prior to exceeding 5% power and at each refueling outage. As an alternative, the following actions are proposed:

1. Prior to exceeding 5% power-
  - a) The bolt through the existing electrical isolation one-piece fiberglass bushing will be tightened to "snug tight" (as defined in the AISC Manual) and then tightened an additional  $\frac{1}{4}$  turn.
  - b) The field mounting will be revised to ensure a "snug fit", i.e. suitable shims will be placed between the bottom of the cabinet and the electrical isolation glastic pad to eliminate gaps and provide a uniform bearing condition.
2. A seismic test will be performed utilizing a generic mounting scheme with a glastic pad and fiberglass bushing for electrical isolation to verify the acceptability of the existing mounting. This test would be completed by July, 1985.

Proposed License Condition 13(b) required that written confirmation of the results of the revised analysis of the residual heat removal pump and motor be submitted. Ingersoll-Rand, the pump manufacturer, has performed a finer mesh finite element analysis on the pump casing in the area of the seal gland than had previously been performed. Their report, TR-8418, Rev. 1, dated July 5, 1984, provides the results of this re-analysis which uses the ANSYS model and shows all stresses to be below allowable limits including that portion of the pump casing that was previously identified as element 92 in the earlier model. This report was presented to the Staff at a July 18, 1984 meeting in Bethesda, Maryland, and was found to be acceptable. The report will be retained in the Westinghouse engineering files.

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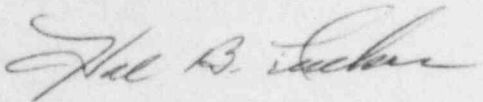
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On July 11, 1984, Duke requested a partial exemption from the requirements of 10 CFR 50, Appendix A, General Design Criteria (GDC) 4 for the fuel load and precritical phase of the Catawba Unit 1 startup because all seismic qualification issues had not been resolved for the above noted equipment. The Staff reviewed this request, determined that exemptions to GDC-2 and GDC-4 were required, and, in Supplement 3 to the Catawba SER, recommended granting of the exemptions.

As a result of the revised report and the meeting on July 18, 1984, we consider the seismic qualification of the residual heat removal pump and motor closed. However, because final resolution of the solid-state protection system issue involves a confirmatory seismic test, an exemption to GDC-2 and GDC-4 may be needed until the test is complete.

Based on the proposed cabinet mounting scheme discussed above, it is our conclusion that there is reasonable assurance that the solid-state protection system will be capable of performing its intended safety function in the event of a seismic occurrence. It is therefore requested that the partial exemption to GDC-2 and GDC-4 currently granted in Facility Operating License NPF-24 be extended to the end of the first cycle of operation of Catawba Unit 1.

Very truly yours,



Hal B. Tucker

ROS:slb

cc: Mr. James P. O'Reilly, Regional Administrator  
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