

**DUKE POWER COMPANY**

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

March 15, 1985

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:

License Condition 7 of Facility Operating License NPF-35 for Catawba Unit 1 requires that, prior to March 31, 1985, Duke Power Company shall environmentally qualify all electrical equipment as required by 10 CFR 50.49. Four outstanding items are discussed in Section 3.11 of Supplements 3 and 4 to the Catawba SER. These include:

- 1) Area termination cabinet 1EATC9A
- 2) D.G. O'Brian Electrical Penetration-Type H Module
- 3) Valcor Solenoid Valve Operators-Models 70900-21-1 and 3
- 4) Main steamline break (MSLB) in the doghouse.

A response to Item 1) was transmitted on September 12, 1984 in Revision 5 to Duke's Response to NUREG-0588 for Catawba.

A response to Items 2 and 3 are attached and will be included in a future revision to Duke's Response to NUREG-0588 for Catawba.

In response to Item 4, attached is a copy of Supplement 2 to Significant Deficiency Report 413-414/84-16 which was submitted to NRC/Region II on March 15, 1985.

In accordance with 10 CFR 170.12(c), attached is a check in the amount of \$150.00.

Very truly yours,

*H. B. Tucker*  
Hal B. Tucker

ROS:slb

Attachment

*A049 w/check \$150.00  
# 797178*

8503200441 850315  
PDR ADOCK 05000413  
E PDR

Mr. Harold R. Denton, Director  
March 15, 1985  
Page Two

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

NRC Resident Inspector  
Catawba Nuclear Station

Robert Guild, Esq.  
P. O. Box 12097  
Charleston, South Carolina 29412

Palmetto Alliance  
2135½ Devine Street  
Columbia, South Carolina 29205

Mr. Jesse L. Riley  
Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

CATAWBA NUCLEAR STATION  
ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT  
ANALYSIS OF EQUIPMENT APPLICATION PENDING COMPLETION OF QUALIFICATION

D.G. O'Brien Electrical Penetration - Type H Module

The D. G. O'Brien electrical penetration Type H modules are used in conjunction with the containment high range radiation monitoring system.

The Type H module has been demonstrated to be qualified to IEEE 317-76 and IEEE 323-74 for both its mechanical integrity and electrical application per D. G. O'Brien qualification report No. ER-327, Rev. A, December 11, 1984, Duke No. CNM-1361.00-0077. It has also been determined that the required accuracy of the High Range Radiation Monitoring System will not be compromised by penetration leakage currents that could occur as a result of the harsh environment.

The D. G. O'Brien Type H modules are environmentally qualified for their application. This issue is resolved.

Valcor Solenoid Valve Operators - Models 70900-21-1 and 3

These Valcor solenoid valves have two basic applications at Catawba - system isolation (de-energize upon receipt of a safety signal) and containment hydrogen sampling (periodically energize to open sample lines). Recent qualification program results (Valcor Report QR 70900-21-1 and 3) demonstrate proper qualification for the system isolation function; however, qualification for longer than 2 days post DBE for the containment hydrogen sampling application has not been demonstrated by the Valcor program. Therefore, this JCO addresses only the hydrogen sampling application for these sample solenoid valve operators.

As originally designed, the sample solenoid valves for the containment hydrogen sampling system were to be normally closed when the solenoid was de-energized. This design required the system operator to open the sample solenoid valves (i.e., energize the solenoids) to take a containment air sample. However, because of the qualification program results regarding long term operability demonstrated (2 days post DBE) versus the system operability requirement (10 days post DBE), a system design change has been implemented. This design change now makes the sample solenoid valves normally open when the solenoid is de-energized, thereby assuring that a containment air sample would be available for at least 10 days post DBE. (It should be noted that the containment isolation function for the hydrogen sample system is performed by other qualified valves.) Since the system has been redesigned, these Valcor sample solenoid valves are no longer required to function to obtain a containment air sample. However, to provide flexibility, they may be used for sampling discrete areas of the containment within the 2 day post DBE operability demonstrated period.

This system design change resolves this JCO. No further qualification efforts are required.