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May 23, 1985

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

Re: Catawba Nuclear Station, Unit 2
Docket No. 50-414
Significant Deficiency No. 414/85-07

Dear Dr. Grace:

Pursuant to 10 CFR 50.55(e), please find attached Significant Deficiency Report No. 414/85-07.

Very truly yours,

H. B. Tucker /BCS

Hal B. Tucker

LTP:slb

Attachment

cc: Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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Washington, D. C. 20555

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CATAWBA NUCLEAR STATION

Report Number: SD 414/85-07

Report Date: May 23, 1985

Facility: Catawba Nuclear Station, Unit 2

Identification of Deficiency:

On March 15, 1985, Mr. P. K. VanDoorn, NRC Inspector advised Duke Power of concerns related to installation clearances in the Vital Instrumentation and Control Power System batteries. The concerns were raised during a monthly inspection of Unit 1 facilities that are similar in design to Unit 2 facilities. Upon Duke Power's request Mr. R. H. Desai of GNB Batteries, Incorpo..ted, forwarded a telex dated March 18, 1985 advising that the maximum end stringer clearance should be 1/4 inch. A subsequent visual inspection revealed that some end clearances exceeded the new recommended limits set by the manufacturer. On March 26, 1985 Mr. R. H. Desai forwarded a telex of a copy of his January 22, 1985 letter to Mr. E. L. Jordan, NRC Washington, D. C. identifying a deficiency in the manufacturer's installation drawings whereby the maximum clearance was not stated. This letter indicated that failure criteria had not been established during seismic qualification for installations with clearances greater than 1/4 inch between the end cell and the end stringer.

Initial Report:

On April 23, 1985 the deficiency in documentation and installation was identified to Hugh Dance, NRC Region II, by T. L. Utterback and T. J. Al-Hussaini of Duke Power Company as applicable to Catawba Unit 2.

Suppliers and or Components:

Types NCX-750 and NCX-1200 battery banks are manufactured by GNB Batteries, Incorporated for use in the 125 VDC Vital Instrumentation and Control Power System application.

Description of Deficiency:

The manufacturer's drawings detailing installation of the seismic racks indicate that a minimum clearance of 1/8 inch must be maintained between the end cell and the end stringer. This is actually a typical dimension, and according to GNB the drawings should indicate a 0-1/4 inch clearance range. The batteries that were installed in accordance with the drawings had no documented maximum clearance requirement, and upon inspection it was noted that the end clearance exceeded 1/4 inch in several areas.

Safety Implications:

The possibility of battery failure during a seismic event exists in installations with excessive end clearances, due to impact of the end cell against the end stringer and resultant failure of cell jar integrity.

Corrective Action:

The installation drawings and the battery racks are in the process of modification to conform with recommendations of the manufacturer. Drawings will be revised to agree with manufacturer recommendations and issued for implementation. The modifications will be implemented concurrently with another project; specifically, reinstallation of the battery cells that are presently being returned to the manufacturer for rejarring. Both of these projects will be completed for Unit 2 by September 1, 1985.