

DUKE POWER COMPANY

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HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

January 26, 1983

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93 FEB 1 AM 11:25

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: Catawba Nuclear Station
Units 1 and 2
Docket Nos. 50-413 and 50-414

Dear Mr. O'Reilly:

Pursuant to 10 CFR 50.55e, please find attached Significant Deficiency Report
SD 413-414/82-27.

Very truly yours,

Hal B. Tucker
Hal B. Tucker *by [signature]*

RWO/php
Attachment

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

Mr. P. K. Van Doorn
NRC Resident Inspector
Catawba Nuclear Station

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Duke Power Company
Catawba Nuclear Station

Report Number: SD 413-414/82-27

Report Date: January 26, 1983

Facility: Catawba Nuclear Station, Units 1 and 2

Identification of Deficiency:

The nickel cadmium batteries which are used for starting the diesel generators have developed cracks in the cell containers which could allow electrolyte leakage. The deficiency was identified December 23, 1982.

Initial Report:

On December 30, 1982, Mr. John Rogge of the NRC, Region II, Atlanta, Georgia office was notified of this deficiency by Mr. W. O. Henry, Mr. J. D. Heffner, Mr. J. L. Crenshaw and Mr. T. J. Al-Hussaini of Duke Power Company, Charlotte, North Carolina 28242.

Supplier and/or Component:

Transamerica Delaval, Inc. of Oakland, California, supplied the batteries as part of the diesel generator package. The batteries were manufactured by Nife, Inc. of Lincoln, Rhode Island.

Description of Deficiency:

The units 1 and 2 diesel generator batteries at the Catawba Nuclear Station contain a total of 368 cells. Out of this total, 153 were found to have cracked cell containers (jars).

The deficiency was discovered while investigating a ground fault indication on the D.C. system.

Cracked cell containers allow electrolyte leakage which will cause a loss of stored capacity. The quantity of cracked cells in three of the battery banks is sufficient to cause battery failure. Battery failure will prevent the diesel from starting.

Analysis of Safety Implication:

The diesel generators are required to start and be ready for load acceptance within 11 seconds upon loss of all offsite power. Battery failure would prevent the starting of the diesel generator.

Corrective Action:

The actual cause of the cracking and corrective action is unresolved at this time. A sample of the damaged cells (5 cells) has been returned to Nife, Inc. for their investigation. Nife will evaluate what caused the problem. Also, Nife will suggest the action to be taken to resolve and prevent the problem from recurring.

Resolution, corrective action and a final report are expected to be complete by June 1, 1983.