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WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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February 25, 1994

Docket No. 50-213
B14763

Mr. T. T. Martin
Regional Administrator
Region I
U.S. Nuclear Regulatory Commission
King of Prussia, PA 19406

Dear Mr. Martin:

Haddam Neck Plant
Status of Motor Control Center-5

The purpose of this letter is to document an understanding reached between Mr. J. P. Stetz and you regarding design modifications for the motor control center (MCC)-5 automatic bus transfer (ABT) and to inform the Staff of recent developments in determining the root cause of this ABT failure.

Background

During the Cycle 17 refueling outage, on June 27, 1993, while conducting a surveillance to test the Train "B" safety injection actuation system with a partial loss of AC power, the ABT scheme associated with MCC-5 failed to operate properly, leaving MCC-5 de-energized.

This failure has been the subject of extensive review and evaluation by both Connecticut Yankee Atomic Power Company (CYAPCO) and the NRC.[1] In a letter dated July 15, 1993,[2] CYAPCO documented the commitments made regarding resolution of the MCC-5 issue. As is discussed in these documents, the root cause had not been established. However, a design weakness that challenges the ABT scheme had been identified. CYAPCO committed to implement a design modification to correct this design weakness during the Cycle 18 refueling outage. Previously, CYAPCO provided design details regarding this modification to members of the Staff.

Current Status

As stated in our July 15, 1993, letter, CYAPCO committed to conduct a functional test of MCC-5, should the Haddam Neck Plant be taken to Mode 5 at any time during Cycle 18. The current service water system outage at the

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(1) M. W. Hodges letter to J. F. Opeka, "NRC Augmented Inspection Team (AIT) Regarding Two Loss of Offsite Power Events and the Loss of Motor-Control-Center-5, NRC Report No. 50-213/93-80," dated August 16, 1993.

(2) J. F. Opeka letter to the U.S. Nuclear Regulatory Commission, "Commitments to Test Motor-Control-Center-5," dated July 15, 1993.

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Haddam Neck Plant provided CYAPCO an opportunity to functionally test the MCC-5 ABT. During this testing, a failure of one of the circuit breakers supplying MCC-5 occurred. An investigation was initiated to determine the root cause of this event and any necessary corrective action. Mr. Stetz informed you of the results of this test and our plans to implement a design modification which minimizes challenges and improves the reliability of the ABT scheme. CYAPCO hereby commits to implement this modification during the current service water system outage.

While reviewing the details of the proposed design, CYAPCO has identified a simpler method of achieving the design goal of the modification. CYAPCO will implement the appropriate modification to the ABT scheme prior to startup from the present service water system outage.

CYAPCO believes that it has identified the root cause of the recent ABT test failures. Specifically, the problem has been traced to a manual operating mechanism, whereby a snap ring was found out of position on the breaker manual closing shaft. This condition would allow the shaft to slide into the trip mechanism, interfering with the breaker trip bar. A formal root cause evaluation into this recent failure and the June 27, 1993, failure is ongoing. It is premature to conclude that the root causes of the two failures are the same. The root cause evaluations addressing these two events will be complete and appropriate corrective actions taken prior to startup from the present service water system outage.

We will keep the Staff informed of our progress regarding this issue. If you should have any questions, please contact my staff.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY

J. F. Opeka
Executive Vice President

cc: A. B. Wang, NRC Project Manager, Haddam Neck Plant
W. J. Raymond, Senior Resident Inspector, Haddam Neck Plant

U.S. Nuclear Regulatory Commission
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