



NIAGARA MOHAWK POWER CORPORATION / 300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202 / TELEPHONE (315) 474-1511

January 13, 1986
(NMP2L 0581)

Mr. R. W. Starostecki, Director
U.S. Nuclear Regulatory Commission
Region I
Division of Reactor Projects
631 Park Avenue
King of Prussia, PA 19406

Re: Nine Mile Point - Unit 2
Docket No. 50-410

Dear Mr. Starostecki:

Enclosed is a final report in accordance with 10CFR50.55(e) for the problem concerning incorrect ohmic and wattage rating of excitation circuit matching resistor for the High Pressure Core Spray System diesel generator.

Very truly yours,

C. V. Mangan
C. V. Mangan
Senior Vice President

CVM/GG/cia
(1377H)

xc: Director of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

R. A. Gramm, NRC Senior Resident Inspector

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NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT - UNIT 2
DOCKET NO. 50-410

Final Report for a Problem
Concerning Incorrect Ohmic and
Wattage Rating of Excitation Circuit
Matching Resistor for High Pressure Core Spray System
Diesel Generator
(55(e)-85-29)

Description of the Problem

It was discovered during testing of the High Pressure Core Spray System diesel generator that the matching resistor of its exciter field circuit was incorrectly sized for both resistance and wattage. The incorrect rating would result in degraded generator output and failure of the resistor itself.

Analysis of Safety Implications

1. Incorrect impedance rating of resistor:

A resistor rating of 50 ohms is not adequate to produce enough exciter field current to meet the rated power output of the diesel generator, thereby degrading the High Pressure Core Spray system during generator and main pump motor starting. However, this incorrect resistance would have been discovered during testing because it is required that generator output rating be verified as part of preoperational testing and prior to commercial operation.

2. Incorrect wattage rating of resistor:

The resistor wattage rating of 225 watts is not adequate for the resistor to sustain the normal exciter field current during normal operation. The failure mechanism of this resistor would probably be an open circuit. This failure of the resistor would render the High Pressure Core System diesel generator inoperative.

Had the above conditions remained uncorrected, it could have adversely affected the safety of operations of the plant.

Corrective Actions

The incorrectly sized resistor will be replaced with a 25 ohm/5.1 amp resistor in accordance with Engineering and Design Coordination Report No. C46,134 and associated Field Deviation Disposition Request No. KG1-4636, Revision 0.