



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

November 30, 1984
(NMP2L 0266)

Mr. R. W. Starostecki, Director
U. S. Nuclear Regulatory Commission
Region I
Division of Project and Resident Programs
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 wiring deficiencies in unit substation and switchgear. This problem was reported via tel-con to P. Russ of your staff on August 7, 1984. An interim report was submitted via our letter dated September 6, 1984.

Very truly yours,

C. V. Mangan
Vice President
Nuclear Engineering and Licensing

CVM/GG/csb
(0540H)

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

R. A. Gramm, NRC Resident Inspector

Project File (2)

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

Final Report for a Problem Concerning
Wiring Deficiencies in Unit Substation
and Switchgear
(55(e)-84-31)

Description of the Problem

An inspection of the wiring terminals for the unit substation and switchgear identified the following wiring deficiencies:

1. Strand damage, twisted lugs, and bad crimps
2. Insufficient wire projection and stressed connections
3. Excessive wire projection
4. Lugs bent up to 90 degrees

The specific equipment affected are:

1. Supplied by Brown-Boveri Electric Incorporated
 - a. Unit substation, Mark No. 2EJS*US3
 - b. Switchgears, Mark Nos. 2EJS*US3
2. Supplied by General Electric Company
Switchgear, Mark No. 2ENS*SWG103

Analysis of Safety Implications

The wiring deficiencies could have resulted in bad electrical connections. As a result, the subject safety-related unit substation and switchgear could have been prevented from performing their intended function, thus resulting in loss of power and/or control of certain safety-related systems (e.g., residual heat removal, spent fuel pool cooling, service water, etc.). Therefore, if this problem were to have remained uncorrected, it could have adversely affected the safety of operations of the plant.

Corrective Action

The following corrective action will be taken:

1. Strand Damage, Twisted Lugs, and Bad Crimps

The existing lugs shall be removed up to the point of broken strand. The wire shall be reterminated in accordance with Specification E061A.

2. Insufficient Wire Projection and Stress Connections

The old terminations shall be cut off as required and the wire shall be reterminated in accordance with Specification E061A. Cable ties shall be cut, as required, to provide sufficient slack. The wire shall be reconnected and supported as required.

3. Excessive Wire Projection

If projection has the potential for coming in contact with adjacent terminals or edges of equipment, the excessive projection shall be trimmed back to the correct distance and the wire shall be reterminated in accordance with Specification E061A. Cable ties shall be cut as required to provide sufficient slack. Wire shall be reconnected and supported as required.

4. Lugs Bent Up to 90 Degrees

Lugs bent past 45° with no sign of stress cracking at the bend will be accepted-as-is.

Lugs bent past 45° with signs of stress or fatigue shall be removed, and the wire reterminated in accordance with Specification E061A. Cable ties shall be cut as required to provide sufficient slack. Wire shall be reconnected and supported as required.

The corrective action is documented and will be completed in accordance with Nonconformance and Disposition Report No. 9220.