



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

November 15, 1984  
(NMP2L 0241)

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 General Electric SAM relays. This problem was reported via tel-con to S. Collins of your staff on July 23, 1984. An interim report was submitted via our letter dated August 23, 1984.

Very truly yours,

C. V. Mangano  
Vice President  
Nuclear Engineering and Licensing

CVM/GG/dd

Enclosure

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 the  
Misoperation of GE SAM Relays  
(55(e)-84-27)

Description of the Problem

General Electric has advised Niagara Mohawk Power Corporation that it is possible for certain SAM relays (Model Nos. SAM 11, 13, 15, and certain SAM 99 special relays) to operate in less than the set time delay if the initiating contact experiences a very specific mode of contact bounce. In Nine Mile Point - Unit 2 design, these relays are used in various Category I switchgear lineup applications (for example, load sequencing of emergency buses). These timing relays are used primarily to facilitate coordination of relays with other downstream protection. In such applications, the time delay is critical.

Analysis of Safety Implications

Under certain conditions, the misoperation of these relays could result in shorter time delays than required. As a result of shorter time delays, protective relay selectivity and load sequencing of emergency buses could be adversely affected. Therefore, if this problem were to have remained uncorrected, it could have adversely affected the safety of operation of the plant.

Corrective Action

General Electric has informed Stone and Webster that the problem could be corrected by replacing the existing printed circuit cards with the current design cards for the subject relays. This recommended change will be made and the relays will then be recalibrated for the required time delay. The corrective action will be accomplished in accordance with the Engineering and Design Coordination Report (E&DCR) No. F-01889 and will be complete by July 31, 1985.