



Richard B. Abbott  
Vice President  
Nuclear Engineering

Phone: 315.349.1812  
Fax: 315.349.4417

August 8, 2001  
NMP1L 1605

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE:                   Nine Mile Point Unit 1  
                          Docket No. 50-220  
                          DPR-63

***Subject:       10CFR21 Report – Loose Mounting Screw on Terminal Block***

Gentlemen:

Pursuant to 10CFR21, Reporting of Defects and Noncompliance, Niagara Mohawk is submitting the attached report. On July 19, 2001, as required by 10CFR21.21(d)(3)(i), Niagara Mohawk notified the Commission of the issue described in this report, by telephone and facsimile. This report is being provided in accordance with the requirements of 10CFR21.21(d)(3)(ii) and 10CFR21.21(d)(4).

Very truly yours,

A handwritten signature in black ink, appearing to read "Richard B. Abbott".

Richard B. Abbott  
Vice President Nuclear Engineering

RBA/IAA/mlg  
Attachment

cc:    Mr. H. J. Miller, NRC Regional Administrator, Region I  
      Mr. R. P. Correia, Acting Section Chief PD-I, Section 1, NRR  
      Mr. G. K. Hunegs, NRC Senior Resident Inspector  
      Mr. P. S. Tam, Senior Project Manager, NRR  
      Records Management

IE19

## ATTACHMENT

1. *Name and address of the individual or individuals informing the Commission.*

Mr. Richard B. Abbott  
Vice President Nuclear Engineering  
Nine Mile Point Nuclear Station  
P. O. Box 63, Lake Road  
Lycoming, NY 13093

2. *Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.*

This defect involves a safety-related terminal block (catalog number EB25A12W, symbol number 95-10-077) that was being installed in the emergency diesel generator panels at Nine Mile Point Unit 1. The terminal block contained a screw that was not fully threaded during manufacture. This was determined to be a single isolated occurrence (see below).

3. *Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.*

The defective terminal block was supplied to Nine Mile Point Nuclear Station in the 1980s by "Systems Control" of Iron Mountain, Michigan, under Niagara Mohawk's Specification E-83.

4. *Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.*

While a new terminal block was being installed in the Nine Mile Point Unit 1 emergency diesel generator panels during refueling outage number 16, a mounting screw for terminal points was found to be loose. An investigation showed that that this screw had not been fully threaded during manufacture. As a result, if installed, the screw could have easily backed out and potentially fallen into safety-related equipment located in the panel: relays, field flashing equipment, voltage regulation and governor control components, and 125 Volts DC supply. The potential consequences of this occurrence could have included the loss of one diesel generator due to failure of the supporting electrical equipment. Assuming a single failure of the redundant diesel generator, a major degradation of essential safety-related equipment, i.e., a substantial safety hazard, could have occurred.

## ATTACHMENT (Cont'd)

4. *Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply. (Cont'd)*

Specification E-83 imposed quality and good workmanship requirements on the supplier. A loose, partially threaded screw in the terminal block assembly is not consistent with these requirements and therefore represents a deviation. As explained above, if the deviation had gone undetected during installation, the deviation could have resulted in a potential substantial safety hazard and, therefore, is reportable as a defect.

5. *The date on which the information of such defect or failure to comply was obtained.*

Niagara Mohawk identified the potential defect on May 14, 2001. The 10CFR21 evaluation was completed and the Vice President Nuclear Generation then informed on July 17, 2001.

6. *In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations in this part.*

Initially, about 400 terminal blocks procured under Specification E-83 were issued for use at Nine Mile Point Units 1 and 2. About 169 of these terminal blocks remain in stock while the rest have been installed at Nine Mile Point Units 1 and 2 in various applications. Based on the results of the corrective actions described below, Niagara Mohawk has concluded that the defective terminal block was an isolated occurrence.

7. *The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.*

The following corrective actions have been completed by Niagara Mohawk:

1. The defective terminal block was discarded and a replacement block installed.
  2. All other terminal blocks that were being installed under the same Work Order as was used for the defective block were inspected for loose terminal assemblies with no deviations identified.
  3. A walkdown and inspection of 35 of the 169 boards remaining in stock ( 20 percent sample size) was performed with no deviations identified.
  4. Pertinent plant documentation was reviewed to identify reports of any past operational problems due to a loose screw in a terminal block. No such incident was identified.
8. *Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.*

None