

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

March 16, 1982

Office of Inspection and Enforcement Region I Attention: Mr. R.W. Starostecki, Director Division of Resident and Project Inspection U.S. Nuclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406



JE 2'S

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 deficiency regarding Series 20K switches manufactured by Electroswitch Corporation. This condition was reported by telephone to Mr. H. Kister of your staff on February 16, 1982.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

Gerald K. Rhode

Vice President System Project Management

PEF:bd

cc: 1. Director, Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D.C. 20555

2. Mr. R.D. Schulz, Resident Inspector

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

# FINAL REPORT FOR REPORTABLE DEFICIENCY REGARDING ELECTROSWITCH - SERIES 20K SWITCHES

#### Description of the Deficiency

The Series 20K switches incorporate slip contacts along with standard normally open/closed contacts. The area of concern is the slip contact configuration. The slip contacts are closed in one position and remain closed when the operator handle is returned to center normal. During manual operation of the switch handle, there is a possibility of slip contacts failing to perform as designed. This improper operation results in slip contacts remaining closed when they are expected to have opened or vice versa.

The deficient switches have been determined to be in the following safety related systems:

Standby Gas Treatment Drywell Cooling Reactor Building Ventilation Control Building Chilled Water Control Building Ventilation Yard Structure Ventilation Diesel Generator Building Ventilation

## Analysis of Safety Implications

The improper operation of the switch, depending on slip contact usage within the circuits, could affect operation of safety related systems which contain these switches. Therefore, if the problem were to have remained uncorrected, it could have adversely affected the operation of these systems.

## Corrective Action

Electroswitch Corporation, the vendor for the Series 20K switches, has modified the design of these switches. The redesign eliminates the possibility of slip contacts failing to perform as designed.

Electroswitch Corporation will no longer furnish more than four slip contacts per switch unit. In the new design, the contacts are made in only one select position, at the front of the switch (closest to the handle). The vendor has added a mechanical shaft slip coupling, then a positive detent mechanism, and finally the slip contacts. With this arrangement, the slip contacts are held in position by the detent mechanism.

The subject switches already mounted on the control panels, will be modified to the acceptable switch configuration. Measures are also being taken to ensure that Series 20K switches supplied by Electroswitch Corporation in the future will have the acceptable switch configuration.