ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

TELEPHONE
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Ginna Station
May 30, 1973

Mr. James P. O'Reilly, Director
Region I, Division of Compliance
U.S.A.E.C.
970 Broad St.
Newark, New Jersey 07102

Dear Mr. O'Reilly:

During performance of the monthly surveillance procedure PT-5.2, "Undervoltage and Underfrequency Protection" on 5/29/73, upon opening the knife switches for the solenoid coil of primary undervoltage device 273/11A, it was discovered that the device armature did not drop down to assume its' de-energized condition. As a result of this failure to operate the Reactor Trip Undervoltage Protection Signal was not generated from this unit.

This undervoltage device, 273/11A, is one of two for the 11A, 4160 volt bus. At the time of inoperability of device, 273/11A, the redundant relay, 274/11A, did operate satisfactorily, additionally both Reactor Trip Undervoltage Devices for 11B, 4160 volt bus functioned correctly.

Undervoltage Reactor Trip Logic is 1/2 + 1/2 from both 4160 volt busses and this capability was not impaired as a result of the one malfunctioning device on 4160 volt bus 11A.

The Plant Operating Review Committee reviewed the occurrence on 5/30/73 and approved a procedure for removing the undervoltage devices from service to evaluate the cause of inoperability.

Upon inspection of the concerned device (273/11A) a scale accumulation was noted on the armature plunger opposite the area of the upper guide bearing. The scale accumulation was removed and the plunger polished, subsequent bench testing of complete mechanism (plunger mounted in solenoid coil), indicated freedom of movement of the plunger through the guide bearing, without noticable drag.

Upon returning the device to service, the applicable section of PT-5.2 procedure was performed to verify device operability. As a precautionary measure, the remaining Reactor Trip Undervoltage devices were also removed and dismantled for cleanup maintenance.

Prior to reinstalling the protective devices, a calibration was applied to insure that the devices would trip when the applied voltage was reduced to the device trip point setting.

The RG&E Corporation Relay Department is investigating the problem with this type of relay and they will be reporting back to the Plant Operating Review Committee with their recommendation for preventing a recurrence of this problem.

Charles E. Platt

Charles E. Platt
Superintendent

CEP:jmb