



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER N.Y. 14649-0001

ROBERT C. MECREDY
Vice President
Ginna Nuclear Production

TELEPHONE
AREA CODE 716 546-2700



January 10, 1994

U.S. Nuclear Regulatory Commission
Attn: Allen R. Johnson
Project Directorate I-3
Document Control Desk
Washington, DC 20555

Subject: Reply to a Notice of Violation
NRC Inspection Report No. 50-244/93-21, dated
December 10, 1993
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Johnson:

During an NRC inspection conducted on October 4, 1993 to October 13, 1993, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violation is listed below:

"Plant technical specification 4.6.1.e.3.a requires that at least once per 18 months during shutdown, each emergency diesel generator shall be demonstrated to be operable by simulating a loss of offsite power in conjunction with a safety injection test signal and verifying de-energization of the emergency buses and load shedding from the emergency buses."

Contrary to the above, on October 11, 1993, it was determined that testing to verify load shedding from the emergency buses was not performed during the 18 month surveillance testing.

- (1) the reason for the violation, or, if contested, the basis for disputing the violation:

Rochester Gas & Electric Corporation (RG&E) accepts the violation. We acknowledge that plant procedures did not adequately test the bus undervoltage logic, as required by Technical Specification (TS) 4.6.1.e.3.(a).

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The reason for the violation, as stated in LER 93-005 (Docket Number 50-244, LER 93-005, dated November 10, 1993) was a misinterpretation of TS surveillance requirements. The load shedding requirement of TS 4.6.1.e.3.(a) was interpreted as the shedding of non-essential loads powered from the emergency buses. The shedding of non-essential loads had been tested by simulating a safety injection (SI) signal during performance of procedures RSSP-2.1 (Safety Injection Functional Test) and RSSP-2.1A (Safety Injection Functional Test Alignment / Realignment), which are performed each refueling outage. The need to verify load shedding capabilities of safeguards loads, with undervoltage and SI present, had not been considered.

- (2) the corrective steps that have been taken and the results achieved:

The immediate corrective action was to perform the surveillance tests necessary to verify load shedding capability from the emergency buses. A procedure change notice (PCN) was developed for each associated PT-9.1 procedure (monthly surveillance test procedures for testing undervoltage protection for 480 volt safeguards busses 14, 16, 17, and 18). Testing was started on October 11, 1993, and was completed on October 12, 1993, within twenty-four hours of discovery. Details of this testing and test methodology are discussed in Attachment 1. (To perform this testing, individual components were declared inoperable, one at a time, for brief periods. No more than one component was inoperable at a given time, and the diesel generators (DGs) were maintained operable during the entire testing period.)

The guidance of NRC Generic Letter (GL) 87-09, entitled "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements", was followed. Both the "A" and "B" DGs were available to perform all intended functions throughout the discovery and surveillance testing period.

This testing demonstrated end-to-end operability of the undervoltage protection system. It verified undervoltage signals to safeguards components, and undervoltage in conjunction with SI signal to the Component Cooling Water (CCW) pumps. Initial testing of the "B" CCW pump undervoltage / SI trip logic was indeterminate. At that time, the "B" CCW pump was declared inoperable, until further testing was conducted. The pump was subsequently verified to be fully operable, and was returned to service approximately twelve hours later.

The testing conducted on October 11-12, in combination with the surveillance tests conducted during the 1993 outage, met the requirements of TS 4.6.1.e.3.(a), and verified that the safeguards functions would have performed as required.

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RG&E personnel subsequently reviewed the requirements of TS 4.6.1, and compared these requirements with surveillance procedures. No other noncompliances were identified.

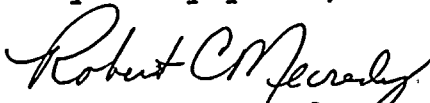
(3) the corrective steps that will be taken to avoid further violations:

- o A review of Section 4 of the Ginna TS will be performed to ensure that there are implementing procedures for every surveillance required by TS. This review will be completed prior to completion of the next scheduled refueling outage. Results of a preliminary review of Section 4 have determined that there are sufficient procedural controls for implementing Section 4 requirements.
- o A review of the identified implementing procedures will be performed to ensure that these procedures do, in fact, implement the TS requirements. This review will be completed prior to completion of the next scheduled refueling outage.
- o Procedures that verify load shedding capability will be upgraded to include safeguards loads, for conditions of undervoltage and SI, prior to completion of the next scheduled refueling outage.

(4) the date when full compliance will be achieved:

Full compliance with TS 4.6.1.e.3.(a) was achieved on October 12, 1993, at the completion of surveillance testing.

Very truly yours,


Robert C. Mecredy

xc: Mr. Allen R. Johnson (Mail Stop 14D1)
PWR Project Directorate I-3
Washington, DC 20555

U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Ginna USNRC Senior Resident Inspector

Attachment 1

PT-9.1 Series Test Details

The purpose of this test was to verify undervoltage safeguards load shedding capability.

Monthly TS surveillance testing currently ensures each safeguards breaker can be stripped from the bus using the trip coil. To verify the undervoltage stripping capability, all that was necessary was to verify the integrity of the undervoltage logic contacts and associated circuitry, to the trip coils. Jumpers were used to simulate SI for the CCW pumps because their breakers trip on undervoltage coincident with SI signal.

Testing Sequence:

1. Manipulate test switches and develop an undervoltage condition using test equipment.
2. Verify auxiliary output relays energize to cause the trip function, initiated by appropriate operation of the intermediate digital control logic circuitry.
3. Return test switches to normal and remove test equipment.
4. Verify component being tested is not in service.
5. Measure the continuity of wiring between the undervoltage auxiliary relays and the breaker switchgear, using DC voltage measurements to ground.
6. Verify normally open output relay contacts using resistance measurements.
7. Locally trip the associated auxiliary relay and verify proper indicator lamp response and relay contacts indicate closed by resistance measurement.
8. Reset the auxiliary relay and verify relay contacts indicate open by resistance measurement.
9. Repeat steps 1 - 8 for all four channels (27/X, 27/BX, 27D/X, and 27D/BX).

One test anomaly was identified, as noted in the violation response. Relay 86-16B, associated with the "B" CCW pump breaker, failed to meet the specified resistance acceptance criteria. Emergency Maintenance procedure EM-778 was performed to verify the contact did in fact trip the breaker. After being verified, the contact was reworked by simple burnishing of exposed contact surfaces.



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 MECREDY, R.C. Rochester Gas & Electric Corp.
 RECIP. NAME: RECIPIENT AFFILIATION
 JOHNSON, A.R. Project Directorate I-3

SUBJECT: Responds to violations noted in insp rept 50-244/93-21.
 Corrective actions: surveillance tests necessary to verify
 load shedding capability from emergency buses performed &
 procedure revised.

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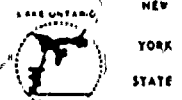
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