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

ROGER W. KOBER
VICE PRESIDENT
ELECTRIC PRODUCTION

TELEPHONE
AREA CODE 716 546-2700

October 21, 1987

Mr. William T. Russell, Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: DC Fuse Review Program
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Russell:

During NRC Inspection 87-23, RG&E developed and initiated several programs related to the DC electrical system. In response to a request from a member of your staff, this letter documents the elements of our program and provides the current status and projected completion dates of each element.

As was previously discussed in our letter of August 26, 1987, RG&E began a program to recover the configuration of DC fusing when discrepancies were discovered during the review of the DC system under the Systematic Evaluation Program (SEP) and Appendix R review program. As described in that letter, all Engineering reviews to resolve discrepancies and to upgrade the DC system coordination were scheduled to be completed by December 1987 and all replacements and upgrades were planned to be completed by the end of the 1989 refueling outage. As a result of Inspection 87-23, the following details have been added to our program:

1. DC fuse discrepancies have been reevaluated, and the documentation of the safety impact has been expanded in the form of a Design Analysis. Priorities were established based on potential impact on 1E functions. The format, evaluation methodology, and priority system were reviewed with your inspector. The Design Analysis was completed on October 7 for all fuse discrepancies identified at that time.

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2. The Design Analysis was provided to members of plant staff and Plant Operations Review Committee (PORC) for detailed review and the PORC met on October 9 to perform a review of the discrepancy evaluations pursuant to 10CFR50.59. PORC reached the conclusion that the discrepancies identified in the Design Analysis did not involve an unreviewed safety question or require a change in the plant Technical Specifications.

3. A fuse replacement program for all Priority 1 and 2 DC fuse discrepancies was initiated. All discrepancies which could be resolved at power without subjecting the plant or personnel to safety or operational challenges either as a result of the replacement or as a result of required post-maintenance testing were completed by October 9. Several of these discrepancies were resolved through further inspection, for example by rotating the fuse in the fuse clip such that the size could be observed and documented as being the correct size. As identified in item 13 below, all remaining priority 1 and 2 discrepancies will be resolved no later than the end of the 1988 refueling outage.

4. At the completion of Inspection 87-23, several cabinets containing DC fuses remained to be inspected. Those cabinets which can be inspected during plant operation without subjecting the plant or personnel to safety or operational challenges were inspected by October 12. Those cabinets remaining to be inspected will be inspected no later than the end of 1988 refueling outage. Any discrepancies which may be identified will be addressed as described in item 8 below.

5. Personnel currently involved with DC fuse replacements have been familiarized with plant procedure requirements for fuse replacement (A-60) as well as with the requirement that fuse size and type be observable and verifiable following installation. Personnel installing DC fuses in the future will be familiarized prior to performing these activities.

6. Other concerns raised by the NRC inspection during Inspection 87-23 have been reviewed, priorities have been established, and schedules for resolution have been set. These are as follows:

   a. Engineering documents providing direction for installation of fuse clip reducers will be issued by October 30.

   b. Personnel involved in installation of fuse clip reducers will be familiarized with the requirements of item 6.a. prior to performing the activity.

c. Walkdowns of wiring for size and type will be performed for the main DC system major distribution panels prior to October 30. Schedules for walkdowns for the balance of the DC system are currently being developed and will be finalized by October 30.

d. The seismic supports for the B battery have been reexamined and found to be sound with no indication of degradation. An action plan to address this concern will be developed prior to the end of the 1988 refueling outage.

e. A voltage regulation study will be performed on the existing DC system by November 30. A voltage regulation study for the reconfigured DC system resulting from EWR 3341 will be completed prior to issuance of EWR 3341 construction documents (see item 11 below).

f. The Design Criteria for EWR 3341 will be revised by October 30 to reflect suggestions made by the NRC inspector.

g. The need for fire barriers in conduit for the purpose of electrical separation will be reviewed and a schedule for any additional actions will be prepared by the end of the 1988 refueling outage.

7. Testing of all DC fuses at the test facility as of October 2 has been completed. Additional DC fuses are being tested as they are provided to the test facility.

8. Nonconformance Reports (NCRs) are being utilized to document and disposition all DC fuse anomalies not addressed in the Design Analysis described in item 1 above.

9. All Priority 3 DC fuse discrepancies (the lowest priority) which can be resolved at power without subjecting the plant or personnel to safety or operational challenges either as a result of the replacement or as a result of required post-maintanance testing will be resolved as quickly as is reasonable while maintaining proper control of all activites and consistent with other plant priorities. All that can be accomplished at power will be resolved by November 30, with the majority of these to be resolved by October 30. Any fuse discrepancies which cannot be resolved at power will be resolved by the end of the 1988 refueling outage as described in item 13 below.

10. AC motor control center non-motor loads were selected on October 9 for a review of the current as-built configuation. We expect this review to be completed by November 16 to the extent possible while at power without exposing the plant or personnel to safety or operational challenges.

11. The DC fuse upgrade program, EWR 3341, will be continued. All engineering documents will be issued by December 1987, although we expect the majority of the engineering to be completed by November 30. Higher priority replacements and upgrades will be completed by the end of the 1988 refueling outage and we expect the program to be completed by the end of the 1989 refueling outage.

12. All DC fuses are now part of our configuration control program. Following replacements in accordance with EWR 3341, all future changes in DC fuses will controlled through our configuration control program.

13. All DC fuse discrepancies not resolved as described in items 3 and 9 above will be resolved by the end of the 1988 refueling outage.

We believe the program presented above represents responsive approach to the discrepancies previously identified by our internal reviews and by your Inspection 87-23. Please contact us if you desire any clarification or if further information is desired for your review.

Very truly yours,

Bruce A Snow for

Roger W. Kober

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KOBER, R. W. Rochester Gas & Electric Corp.
RECIP. NAME RECIPIENT AFFILIATION
RUSSELL, W. T. Region 1, Ofc of the Director

SUBJECT: Responds to violations noted in Insp 50-244/87-23. Corrective actions: dc fuse discrepancies reevaluated & documentation of safety impact expanded in form of design analysis.

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