



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



TELEPHONE  
AREA CODE 716 546-2700

April 28, 1988

Mr. William T. Russell  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406

Subject: Inspection Report 50-244/88-03  
Notice of Violation  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Dear Mr. Russell:

Inspection Report 50-244/88-03 Appendix A, stated in part:

As a result of the inspection conducted on February 15-19, 1988, and in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions", 10 CFR Part 2, Appendix C (Enforcement Policy) (1986), the following violations were identified:

- A. Technical Specifications Section 6.13, "High Radiation Area" requires, in part, that any individual or group of individuals permitted to enter a High Radiation Area shall be provided with one or more of the following:
- a device that continuously indicates the radiation dose rate in the area (i.e. a survey meter),
  - a device that integrates the radiation dose rate in the area and alarms when a preset integrated dose is received (i.e. an alarming dosimeter),
  - a qualified health physicist with a radiation dose rate monitoring device who is responsible for providing positive control over activities in the area and who will perform periodic radiation surveillance at the frequency specified in the Health Physics Work Permit.



DATE April 28, 1988

TO Mr. William T. Russell

Contrary to the above, on February 15, 1988, at approximately 1830, a group of four individuals was noted working on the Pressurizer intermediate platform, a posted High Radiation Area in the containment. The group did not have a radiation survey meter or alarming dosimeter in its possession; also no qualified health physicist, responsible for providing positive control and performing required radiological surveys, was in the area. Additionally, no health physics periodic surveillance frequency was specified on the controlling work permit.

We agree with this violation as stated.

On the afternoon of February 15, 1988, the work in progress on the pressurizer intermediate level was the erection of an isolation tent for the removal of asbestos insulation from the pressurizer shell.

Prior to the start of this job, RG&E pipefitters had completed repacking RV-203 on the pressurizer intermediate level. Air samples were taken during the valve work and upon completion of the job, a smear survey was performed. The results of the survey indicated that the contamination levels were generally high (40-80,000 dpm/100 cm<sup>2</sup>), with two smears directly under the valve indicating > 100,000 dpm/100 cm<sup>2</sup>. Since the administrative limits for contamination apply when the "general area" contamination levels are > 100,000 dpm/100 cm<sup>2</sup>, the technician did not change the posting from "Contaminated Area". This was further supported by the air sample results from the relief valve work which were well below maximum permissible concentrations for airborne contamination.

The documented survey results were passed out of the containment area sometime during the late morning or early afternoon and placed on the Health Physics (HP) Technician Foreman's desk. The foreman, noting the two smear results > 100,000 dpm/100 cm<sup>2</sup>, decided to have the area posting upgraded. This was accomplished by phoning one of the RG&E lead techs assigned to the steam generator inspection and repair job. At approximately 1600 hours, the contaminated area posting was changed to "Airborne Radioactive Material" and "Respiratory Equipment Required".

At 1615 hours, the Insulator Foreman reported to the HP Technician office to perform a preliminary inspection of the pressurizer intermediate level. The Contract Technician Foreman assigned a technician (Tech A) to provide continuous monitoring in lieu of an alarming dosimeter since the Insulator Foreman would only be in the area a limited time. (This is allowed by plant procedure.)



DATE April 28, 1988

TO Mr. William T. Russell

The Contract Technician Foreman also informed him of the results of the air samples and smears taken during and after the previous work in the area.

Tech A and the Insulator Foreman entered the area and completed the inspection. Smears taken during this entry also indicated general area contamination levels in the 40-60,000 dpm/100 cm<sup>2</sup> range further supporting that masks were not required.

At approximately 1730 hours, a carpenter crew of four entered containment to start erecting the asbestos control tent. They contacted Tech A and the Insulator Foreman prior to entering the work area.

Tech A outlined general dose rates and contamination levels to the incoming crew. Two members of the carpenter work crew requested masks even though the work permit and survey results indicated they were unnecessary. The technician decided to allow the two workers to use the masks. (This was in violation of plant policy.)

Tech A, at approximately 1740 hours, turned the carpenter crew coverage over to a second Contractor Technician (Tech B). Tech A verbally passed on the information on doses, contamination levels and indicated that two workers would be wearing masks by preference. Tech B did not obtain and read the copy of the controlling SWP utilizing just the verbal turnover for guidance. (This was in violation of plant policy.)

At approximately 1815 hours, Tech B, assuming that intermittent coverage had been required by the work permit, provided an initial survey, mask fit to the two workers requesting masks, and placed an air sampler on the carpenter helper. Tech B then exited the area and reported to the contract tech foreman at 1830 hours.

The Contract Technician Foreman contacted Tech A to have him return to the job site to provide continuous coverage in lieu of the alarming dosimeter as allowed by plant policy.

#### Corrective Action

The immediate corrective action that was taken was to provide a technician for continuous monitoring. The workers in masks were removed from the area and the area posting changed to be consistent with the work conditions. Additional air samplers were also provided along with an alarming dosimeter to replace continuous monitoring.



DATE April 28, 1988

TO Mr. William T. Russell

To determine the cause, all involved personnel were interviewed and the following contributing factors discovered:

- confusion existed on how the three high radiation area monitoring requirements were implemented.
- the second technician did not obtain and read the work permit copy as part of his turnover from the first technician.
- workers were allowed to wear respiratory equipment when none was required.
- there was no procedural guidance for posting changes.
- the air sample placement may not have provided a representative sample of the workers breathing zone. (The air sampler had been placed on the worker who was moving material into the work area and therefore traversing the more highly contaminated work area.)

#### Further Corrective Action to Avoid Future Occurrences

The causes described above were discussed with the technicians involved to verbally clarify plant procedures.

Incident Report 88-013 and A-25.1 (Ginna Station Event Report), #88-20 were initiated to track reportability and corrective actions.

The inspection report and the incident report were discussed in a post outage review session with the HP and Chem Section. Copies of these reports were forwarded to all section personnel via the training section information system.

The following long term corrective actions are being initiated:

A posting control procedure will be developed to document the status of long term posting and define actions to be taken when conditions require posting changes. Review of the Status Log will be added to the HP Tour requirements. This will be completed by July 1, 1988.

The procedure governing work permit development and use and the permit format will be changed to more clearly direct and document high radiation area monitoring. This will be completed as part of the Radiation Dose Monitoring System (RDMS) upgrade currently in progress. This upgrade is expected to be completed in the Fall of 1988.





DATE April 28, 1988

TO Mr. William T. Russell

The utilization of a "lead technician" will be implemented to increase supervisory control during outage periods. A minimum of one lead tech for containment and one for the Auxiliary Building will be utilized for augmenting supervisory control. The lead technician will be responsible to ensure proper job coverage is provided for work in his area of responsibility. This will be implemented during the next scheduled refueling outage.

The radiological incident report 88-013, and the corrective actions taken are being included in the Contract Technician training program. This will be implemented for the next refueling outage.

B. Technical Specifications Section 6.8, "Procedures", requires in part that written procedures shall be established and implemented in accordance with activities recommended in Appendix "A" of Regulatory Guide 1.33, November, 1972. Appendix "A" of Regulatory Guide 1.33, recommends procedures for "Radiation Work Permit Procedure" and "surveys and monitoring".

B.1 Procedure HP-4.3, "Health Physics Work Permit Use", section 6.1.2 requires, in part, that each Health Physics Work Permit shall contain "...a description of the radiation hazards which may be encountered."

Contrary to the above, no description of the radiation hazards which may be encountered (i.e. radiation or contamination levels) was included on Special Work Permit (SWP) Nos. 20290, 20475, and 20947. These permits were verified to have been used by workers.

B.2 Procedure HP-4.3, "Health Physics Work Permit Use", section 6.4.20.3 requires, in part, that when Health Physics (HP) surveillance is the option used to control access to a High Radiation Area, then "...documentation of this coverage (surveillance) must be either indicated on Attachment V indicating the time of the surveillance and the technician's initials or by signing in with the workers on the permit".

Contrary to the above, no documentation of HP coverage was made, either by use of Attachment V or by HP sign-in on the work SWP, for SWP Nos. 20342, 20387, or 20337. Each of these SWPs required HP survey every 60 minutes.

We agree with the violation as stated.



DATE April 28, 1988

TO Mr. William T. Russell

The documentation requirements of procedure HP-4.3 are frequently completed by the technicians after the work has been completed. The information obtained at the job site is normally communicated verbally prior to and during the job performance. The technician then enters the information on the work permit located at the control point when he exits. During an outage, one technician will be required to cover several jobs each day and may not remember to complete the information on the permit upon exit or at the end of the day.

In reviewing this violation, it becomes apparent that the root cause is the method currently in use for documentation. This system tends to promote information loss plus it may not provide current information for workers at the job site.

The immediate corrective action was to direct the staff reviewing the completed work permits to ensure all information required was documented on the permits. Also, direction was given to the staff to ensure that, at a minimum, dose ranges general area contamination levels were provided on the permits even if the range was extremely broad.

Although these actions treated the documentation problem the work information is still needed at the job site.

The long term corrective actions planned are as follows:

For each special work permit, the work permit copy and a survey record attachment form will be required at the job site. Information on pertinent radiological conditions can then be documented at the site. This will allow for more accurate documentation as well as provide more current information to workers and technicians returning to the work site. This change will be implemented when the new RDMS is activated. This is currently scheduled for the Fall of 1988.

B.3 Procedure HP-2.2.1, "Whole Body Counter Source Check", requires, in part, that when daily source check results fall outside of the  $\pm 3$  sigma control limits, the Whole Body Counter is not to be used for counting personnel until repaired.

Contrary to the above, on January 19, January 25, and February 15, 1988, the daily source check result fell above the +3 sigma control limit and the Whole Body Counter was continued to be utilized to count personnel without the performance of any repairs.

We agree with the violation as stated.



DATE April 28, 1988

TO Mr. William T. Russell

The results of the quality control checks were not documented at the time of their completion. This defeated the purpose of the checks.

The immediate corrective action was to remove the whole body counter from service, make required adjustments, obtain an acceptable QC check and return the unit to service.

The source checks had been performed by both RG&E and contract techs during the times indicated in the violation report. During this period of time, there were no obvious supervisory reviews completed.

To preclude further violations, all supervisors were directed to perform periodic reviews of the QC data in their areas of responsibility. Procedure A-54.6, "Health Physics Tour" was also changed to include quality control data verification for the following areas:

1. Primary Chemistry Analysis
2. Secondary Chemistry Analysis
3. Whole Body Counter
4. Panasonic TLD System
5. Primary Counting Equipment
6. Environmental Counting Equipment

During a HP & Chem section meeting, the specific problems described in this violation report along with many generic issues on laboratory quality control were discussed. The seriousness of repeat concerns was also emphasized.

Additional manpower is being evaluated to help implement statistical quality control for the various areas of both the counting and chemical analysis programs.

Inspection Report 50-244/88-01 requested that two more concerns be addressed in response to Inspection Report 50-244/88-02 (3).

Inconsistent requirements for taping of protective clothing.

Just prior to the 1988 refueling outage, the policy to normally require taping for work in controlled areas was initiated. During the outage, it became apparent that supervisory control was difficult if this policy was not applied consistently.



DATE April 28, 1988

TO Mr. William T. Russell

Starting April 1, 1988, a policy letter was issued which required taping anytime work was being performed utilizing coveralls, unless otherwise stipulated. All Radiation Work Permits (standing work permits for routine work) were changed to reflect this policy.

The General Employee Training has been changed to include this requirement. The policy has also been covered in a general plant meeting since its implementation.

Also identified in Inspection 88-01 was the concern that some area postings were "confusing", tape was being used to modify signs, and that grease pencil was used to add information to signs.

The posting control procedure discussed in the response along with more supervisor attention to the appearance of the area posting will be used to address this concern.

In addition to further address the concern for lack of supervisory control, changes in the Health Physics and Chemistry organization are being considered. The object of these changes will be to remove some of the paperwork burden from supervisors to allow more time for their supervisory functions.

Yours truly,



Bruce A. Snow  
Superintendent of Nuclear  
Production

BAS/lvh

Subscribed and sworn to me  
on this 28th day of April 1988



**SAMUEL H. BROWNE**  
NOTARY PUBLIC, State of New York  
Registration No. 4817041  
Qualified in Monroe City / Wayne City  
My Commission Expires Dec. 28, 1989

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

C. Marschall  
Ginna Resident Inspector

