

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-244/83-25

Docket No. 50-244

License No. DPR-18 Priority -- Category C

Licensee: Rochester Gas and Electric Company

49 East Avenue

Rochester, New York 14649

Facility Name: R. E. Ginna Nuclear Power Plant

Inspection At: Rochester and Ontario, New York

Inspection Conducted: November 15-18, 1983

Inspectors: Ira Cohen  
Ira Cohen  
Emergency Preparedness Specialist

January 9, 1984  
date

Approved by: H. W. Crocker  
H. W. Crocker, Chief  
Emergency Preparedness Section

1/9/84  
date

Inspection Summary:

Inspection on November 15-18, 1983 (Inspection Report No. 50-244/83-25)

Areas Inspected: Special announced follow-up inspection of emergency preparedness items from a prior appraisal performed on November 2-13, 1981 (Report No. 50-244/81-22), and items from a Public Notification System inspection performed on June 7-9, 1983. The inspection involved 26 inspector hours on site by one regionally based NRC inspector.

Results: Of the 32 Appendix A items, 4 remain open; of the 28 Appendix B items, 0 remain open; and of the 2 Public Notification System items, 0 remain open. No violations were identified.

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## DETAILS

### 1. Persons Contacted

- \*E. DeMeritt, Corporate Emergency Planning Coordinator
- D. Fillion, Radiochemist
- C. Fink, Environmental Analyst
- \*D. Filkins, Health Physics and Chemistry Manager
- R. Morrill, Training Manager
- \*S. Spector, Assistant Plant Superintendent

\*Denotes attendance at the exit interview.

### 2. General

During the period November 2-13, 1981, an NRC team conducted an appraisal of the State of Emergency Preparedness at the R. E. Ginna Nuclear Power Plant. As a result, the NRC report identified 32 items (Appendix A) requiring resolution in order for the licensee to achieve an adequate state of emergency preparedness and 28 improvement items (Appendix B). During the period April 18-22, 1983, a follow-up inspection indicated that 23 Appendix A and 11 Appendix B items remained open. As a result of the present inspection, 4 Appendix A items remained open.

### 3. Licensee Action on Previous Inspection Findings

3.01 (Open) 50-244/81-22-04. Establish an emergency organization which provides for all emergency functions needed during initial, intermediate, and final phases of augmentation. Revise the Emergency Plan to include a description of the organization and update implementing procedures to be consistent with the organization. The description shall include sufficient detail to define the command hierarchy; specify its structure, reporting chains, and interrelationships at any phase of augmentation; and include supervisory as well as nonsupervisory elements (Appendix A, Item 2).

The inspector held discussions with licensee personnel and noted that Procedure No. S-200, Rev. No. 2, "Emergency Response Organization/Responsibilities," will be completed, including training of emergency response personnel, by January 30, 1984.

3.02 (Closed) 50-244/81-22-14. Provide sampling equipment at penetrations 124 and 203; maintain sampling apparatus ready for prompt connection to the penetration isolation valves; and evaluate the need for additional area monitoring equipment at the sample stations (Appendix A, item 8).

The inspector held discussions with licensee personnel and noted that the newly installed post-accident sampling system to sample and analyze coolant liquid and containment atmosphere had been operational including

the training of employees. This item is closed but the NRC will continue to examine the licensee's progress in implementation of NUREG-0737 items.

3.03 (Open) 50-244/81-22-16. Evaluate the need for: retention, transfer, storage, sampling, and analysis of highly radioactive liquid wastes that could be generated as a result of severe accidents (Appendix A, item 9).

The inspector held discussions with licensee personnel and noted that the above evaluation is scheduled for completion by December 31, 1983.

3.04 (Closed) 50-244/81-22-18. Evaluate the types of portable instrumentation needed to rapidly and accurately measure radiation and radioactive contamination levels based on the needs of the various functional areas of response during emergencies, and implement their use (Appendix A, item 10).

The inspector held discussions with licensee personnel and concluded that an evaluation of portable instrumentation and criteria for their use in performing in-plant and on site surveys had been completed.

3.05 (Open) 50-244/81-22-30. Review general emergency implementing instructions to assure adequate guidance and necessary detail is provided for the emergency coordinator (Appendix A, item 13).

The inspector held discussions with licensee personnel and noted that revised emergency implementing instructions will be included in revised Procedure No. SC-200 and that training with regard to the revised procedure will be completed by January 30, 1984.

3.06 (Closed) 50-244/81-22-39. Develop a technique for making protective action recommendations based on a method which considers: source, elevation, and buildings in the vicinity of the release; the real time characteristics of the release and actual meteorological information (Appendix A, item 14).

The inspector held discussions with licensee personnel, reviewed Procedure Nos. SC-420, Rev. No. 3, "Estimating Off Site Doses," SC-240, Rev. No. 2, "Protective Action Recommendations," and noted that a technique had been established for making protective action recommendations based upon appropriate available data.

3.07 (Open) 50-244/81-22-40. Identify techniques to compensate for potential uncertainties associated with plume trajectories and include the technical basis as an appendix to the emergency plan (Appendix A, item 15).

The inspector held discussions with licensee personnel and noted that the licensee was in the process of having a study performed by the State University of New York, Oswego, to identify a technique to compensate for plume uncertainties. The licensee could not supply a completion date at this time.

3.08 (Closed) 50-244/81-22-49. Provide means for obtaining gas concentration readings from R-12; provide criteria for selecting containment air sampling location; and incorporate data sheets in the procedure (Appendix A, item 17).

The inspector held discussions with licensee personnel, reviewed Procedure No. PC 23.2, Rev. 8, "Containment Atmosphere Sampling and Analysis During Containment Isolation," and noted that a means was provided to obtain gas concentration readings from R-12, criteria was provided for selecting air sample location and data sheets were incorporated in the procedure. This item is closed but the NRC will continue to examine the licensee's progress in implementation of NUREG-0737 items.

3.09 (Closed) 50-244/81-22-28, 32, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 58, 59, 60. Undertake and complete a review of all emergency plan implementing procedures and make appropriate revisions or write new procedures, as necessary, to:

- a. Clarify required actions and eliminate existing ambiguities, inconsistencies, and errors.
- b. Clarify duties and responsibilities of personnel involved in the various actions.
- c. Provide specific cross-references to other procedures in the action steps as needed to detail and clarify further actions.

For the procedures listed below, specific matters which need to be addressed in the revision are described in the referenced section of the report.

SC-1.4 (See Section 5.4.1)  
 SC-1.7E (See Section 5.4.2.2)  
 SC-1.7G (See Section 5.4.2.2)  
 SC-1.9 (See Section 5.4.2.3)  
 SC-1.13 (See Section 5.4.2)  
 PC-23.1 (See Section 5.4.2.4 and 5.4.2.5)  
 SC-1.14B (See Section 5.4.3.5)  
 SC-1.15 (See Section 5.5.1)  
 SC-1.11 (See Section 5.4.6)  
 General (See Section 5.1)  
 General (See Section 5.4.2.8)  
 General (See Section 5.4.2.9)  
 New Procedure (See Section 5.4.2.10)  
 New Procedure (See Section 5.4.3.11)  
 New Procedure (See Section 5.4.3.1)  
 New Procedure (See Section 5.4.3.1)  
 New Procedure (See Section 5.4.3.4)  
 (See Section 5.4.5)

(Appendix A, item 18)

The inspector held discussions with licensee personnel, reviewed an internal licensee report (TRN 83-08, dated September 12, 1983) and noted that a complete review of emergency plan implementation procedures was undertaken and that appropriate changes were included.

3.10 (Closed) 50-244/81-22-17. Provide means for reassembling personnel in alternate assembly areas (Appendix A, item 20).

The inspector held discussions with licensee personnel, reviewed Procedure No. SC-212, Rev. 1, "Site Evacuation," and noted that a means had been provided for reassembling personnel in alternate assembly areas.

3.11 (Closed) 50-244/81-22-08. Preposition sampling and monitoring equipment to detect and measure airborne and particulate radioactivity in the control room (Appendix B, item 3).

The inspector toured the control room and noted that continuous air monitoring equipment had been installed.

3.12 (Closed) 50-244/81-22-10. Provide radiation monitoring and radiation protective equipment and supplies in the OSC (Appendix B, item 4).

The inspector held discussions with licensee personnel, toured the OSC, reviewed Procedure No. SC-410, Rev. No. 11, "Inspection of Emergency Equipment," and noted that dedicated radiation monitoring equipment was located in the Health Physics Office for use by OSC personnel and that radiation protective equipment and supplies were stored in the OSC.

3.13 (Closed) 50-244/81-22-12. Evaluate the need for additional permanent shielding in the counting room and Nuclear Sample Room.

The inspector held discussions with licensee representatives and noted that an evaluation was performed concerning the need for additional permanent shielding. This item is closed but the NRC will continue to examine the licensee's progress in implementation of NUREG-0737 items.

3.14 (Closed) 50-244/81-22-13. Develop improved remote sample handling equipment (Appendix B, item 6).

The inspector noted that sample handling equipment had been modified with the completion of the installation of the new post-accident sampling system. This item is closed but the NRC will continue to examine the licensee's progress in implementation of NUREG-0737 items.

3.15 (Closed) 50-244/81-22-21. Establish a mechanism to assure that a continuous record of meteorological information is available in the CR, the TSC and EOF. Include, as a minimum, a hard copy listing of 15 minute averaged values or a continuous trace of wind direction and speed and an estimate of atmosphere stability (Appendix B, item 8).

The inspector held discussions with licensee personnel, toured the CR, TSC and EOF, and noted that a mechanism was installed to retrieve a continuous record of meteorological information within each of these facilities.

3.16 (Closed) 50-244/81-22-29. Review EOPs to incorporate clear and concise instructions for the user to link emergency action levels and emergency classifications (Appendix B, item 13).

The inspector held discussions with licensee representatives and noted that clear and concise instructions were incorporated in the EOPs to link emergency action levels and emergency classifications.

3.17 (Closed) 50-244/81-22-34. Provide off site dose projections for abnormal releases and link them to EPA recommended protective action guides (Appendix B, item 15).

The inspector reviewed Procedure No. SC-240, Rev. No. 2, "Protective Action Recommendations," and noted that protective action recommendations had been linked to EPA recommended off site dose projections.

3.18 (Closed) 50-244/81-22-50. Review (the sample analysis areas) of PC-23.2 to upgrade radiation protection guidance consistent with activity levels and source terms specified in NUREG-0737 (Appendix B, item 20).

The inspector reviewed Procedure No. PC-23.2 "Containment Atmosphere Sampling and Analysis During Containment Isolation," and noted that radiation protection guidance was provided. This item is closed but the NRC will continue to examine the licensee's progress in implementation of NUREG-0737 items.

3.19 (Closed) 50-244/83-22-31. Reevaluate EALs to assure that initiating conditions are defined as far as practicable in terms of specific, observable parameters (e.g., measured effluent release rates) which are readily available in the control room (Appendix B, item 26).

The inspector held discussions with licensee representatives and noted that EALs had been evaluated and revised. Training in regard to use of the revised EALs is scheduled for completion by May 1, 1984.

3.20 (Closed) 50-244/81-22-19. Perform a study to determine the number of detectors (ARMs) with sufficient high range to provide in-plant post-accident radiation measurements useful to accurately detect and classify emergency conditions (Appendix B, item 7).

The inspector held discussions with licensee representatives, reviewed Engineering Work Request No. 3866 and noted that a study was performed to determine the number of detectors (ARMs) needed to help assess plant radiological conditions in a post-accident environment. Four additional ARMs are scheduled for installation by June, 1985.

3.21 (Closed) 83-14-01. Provide a more specific description of the public prompt notification system within the emergency plan.

The inspector reviewed pending revisions to the licensee's emergency plan and noted that a specific description of the public prompt notification system (paragraph 6.3.12) will be provided.

3.22 (Closed) 83-14-02. Provide the specific location of each siren within the emergency plan.

The inspector reviewed pending revisions to the licensee's emergency plan and noted that the specific location of each siren will be provided.

3.23 The inspector held discussions with licensee representatives concerning deficiencies noted in the Ginna Station Emergency Plan (Emergency Preparedness Appraisal Report, Appendix C). Corrective changes to the plan which the licensee has agreed to complete by March 1, 1984, appear in Enclosure 1 of this report.

#### 4. Exit Interview

On November 17, 1983, the inspector met with those individuals identified in Paragraph 1, and discussed the inspection findings.

At not time during the inspection was written material provided to the licensee by the inspector.

Enclosure 1

Report No. 50-244/83-25

Based upon discussions between Mr. I. Cohen (NRC, Region I) and Mr. E. DeMeritt (EPC, RGE) during the period November 15 through 18, 1983, the following modifications will be made to the Ginna Station Emergency Plan:

- 1.(A.1)<sup>1</sup> The County Sheriff will be added to figure 4.3 which shows inter-relationships of the Ginna Station and Response Organization.
- 2.(A.2) Include signature formats from Wayne and Monroe Counties in Appendix A, Letters of Agreement.
- 3.(B.3) Revise Table 4.2 to show:
  - a) one additional plant operator
  - b) additional personnel for each functional area after 30 minutes (after 60 minutes is not necessary if other personnel are not needed)
  - c) totals for on shift and augmentation
- 4.(B.4) Revise Figure 4.3 to show TSC, EOF and control room.
- 5.(B.5) Revise paragraph 4.3.11 to show consistency between letters of agreement and support facilities.
- 6.(E.5) Provide copies of written messages for release to the public in the event of a serious emergency as outlined in NUREG-0654, E.7.
- 7.(F.2) Revise paragraph 6.2.3 to show communications via radio with Wayne and Monroe County EOCs.
- 8.(G.2) Discuss means for ensuring that the transient population within the plume exposure EPZ will have access to appropriate information in advance that would be helpful in the event of a serious emergency.
- 9.(H.1) Provide location of TSC, time needed to become operational and provisions for protective clothing.
- 10.(H.8) Provide a map showing the location of preselected sampling points and monitoring points as shown in Procedure No. SC-442.
- 11.(H.9) Specify in Section 6.3.9 that meteorological data will be retrieved at 15 minute intervals.

<sup>1</sup> Refers to NUREG-0654 Planning Standard.

- 12.(H.10, 11) Section 6.1.6 should indicate that communication equipment for use by field teams are available at the Survey Center and indicate that radiation monitoring equipment is maintained and readily available at the Health Physics Checkpoint.
- 13.(I.3) Reference Procedure No. S-14.3 in Section 6.3.3.
- 14.(I.6) Reference Procedure No. SC-420 in Section 6.3.2.
- 15.(J.7) Address the expected protection afforded by local residential units or other shelters for direct and inhalation exposure.
- 16.(K.3) Revise Section 5.4.4.1 to show that radiation exposures in an emergency shall be evaluated on an ALARA basis.
- 17.(N) Include Goals for Exercise Observation and Evaluation as outlined in FEMA's letter of October, 1981.