

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-244/84-24  
Docket No. 50-244  
License No. DPR-18 Priority -- Category C  
Licensee: Rochester Gas and Electric Corporation  
49 East Avenue  
Rochester, New York 14649

Facility Name: R. E. Ginna Nuclear Power Plant

Inspection At: Ontario, New York

Inspection Conducted: November 1, 1984 through December 31, 1984

Inspector: W. A. Cook, Resident Inspector, Ginna

11/11/85  
Date

Approved By: W. J. Lazarus, Acting Chief, Reactor  
Project Section No. 2C, DPRP

1/11/85  
Date

Inspection Summary: Inspection on November 1, 1984 through December 31, 1984  
(Report No. 50-244/84-24)

Areas Inspected: Routine, onsite, regular, and backshift inspection by the resident inspector (218 hours) and one region based inspector (60 hours). Areas inspected included: plant activities during routine operations; licensee action on previous findings; surveillance testing; review of potential steam binding of AFW pumps; plant maintenance; bulletin followup; review of Spent Fuel Pool storage rack modifications; review of 10 CFR Part 21 report; Licensee Event Report review; and inspection of accessible portions of the facility during plant tours.

Results: Of the nine areas inspected, no violations were identified.

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## DETAILS

### 1. Persons Contacted

The below listed technical and supervisory level personnel were among those contacted:

- L. Boutwell, Mechanical Maintenance Supervisor
- C. Edgar, Instrumentation and Control Supervisor
- N. Goodenough, Project Quality Control Engineer
- G. Larizza, Operations Manager
- T. Meyer, Technical Manager
- F. Mis, Health Physicist
- R. Morrill, Training Manager
- K. Nassauer, Quality Control Supervisor
- J. Neis, Liaison Engineer
- C. Peck, Nuclear Assurance Manager
- B. Snow, Plant Superintendent
- S. Spector, Assistant Plant Superintendent
- J. Supina, ALARA Coordinator
- J. Widay, Reactor Engineer
- T. Wieand, Project Engineer

The inspectors also interviewed and talked with other licensee personnel during the course of the inspection.

### 2. Licensee Action on Previous Inspection Findings

(Closed) Inspector Follow-up Item (83-05-01): Hole in plant ventilation discharge ductwork. On March 27, 1983 a large hole was found in a section of the plant vent discharge ductwork in the clean side of the Intermediate Building. The licensee determined that the damage was caused by the failure of improperly installed backdraft dampers. The function of the backdraft dampers is to prevent the communication of steam from a high energy line break between the Intermediate Building and Auxiliary Building which could effect the operability of safeguards equipment. The licensee determined that the backdraft dampers were installed backwards. Both sets of dampers, FD-013 and FD-014, experienced partial structural damage because of their inability to withstand the impingement of continuous high velocity air in the normal flow direction. This damage extended to the ventilation ductwork and provided the licensee with indication of the problem. In addition, the licensee determined that control systems for the backdraft dampers were never connected or terminated.

The inspector reviewed Engineering Work Request No. 3751, "Auxiliary Building Exhaust Duct Repair", and the associated completed station modification procedures and determined that adequate work control measures and system testing were conducted for permanent repair of the plant vent ductwork and associated backdraft dampers.

In addition, the inspector discussed modification controls with the licensee with respect to the original improper installation of the backdraft dampers. As documented in Inspection Report No. 50-244/83-23, station modification control practices is the subject of a separate NRC review. The licensee's revised modification program will be reviewed in a subsequent report. The inspector had no further questions.

(Closed) Violation (83-13-01): Failure to follow procedures. Contrary to the prerequisites of "Safety Injection Functional Test", (RSSP 2.1), on June 9, 1983 charging flow was not secured prior to the initiation of the test safeguards signal. This resulted in the inadvertent actuation of the Overpressure Protection System. In addition, during plant heatup in accordance with Operating Procedure O-1.1D, the containment spray pumps were left in the pull-to-stop condition for a period of 15 minutes while plant temperature was above 200 degrees F. The inspector reviewed the licensee's corrective actions as indicated in a letter to NRC Region I dated July 27, 1983. Corrective measures include the revision of applicable procedures to highlight special precautions and prerequisites, and additional personnel training. The inspector had no further questions.

(Closed) Violation (83-13-02): Failure to identify that acceptance criteria was exceeded during testing. The licensee's corrective actions as stated in a letter to NRC Region I dated July 27, 1983 were reviewed and determined to be adequate. Corrective actions include the revision of test procedures to amplify the acceptance criteria and supervisory test results reviews, and personnel training to emphasize proper procedural review responsibilities. The inspector had no further questions.

(Closed) Violation (83-16-01): Failure to perform maintenance testing on containment personnel hatch. The inspector reviewed Ginna Station Corrective Action Report (CAR) No. 1434 addressing this violation and verified the corrective actions indicated in a letter submitted in response to Inspection Report No. 50-244/83-16, dated July 20, 1983. The inspector discussed these corrective measures with the licensee and through observation has determined that there exists an increased awareness and improved communications between station maintenance and test personnel. In addition, the inspector determined that additional training was provided to maintenance and test personnel on containment integrity requirements. The inspector had no further questions.

(Closed) Violation (84-23-01): Failure to adhere to Technical Specifications for the handling of irradiated fuel in the Auxiliary Building. The inspector reviewed the licensee's December 21, 1984 response to the Notice of Violation. The corrective actions and preventative measures established were determined to be satisfactory. Significant corrective actions taken or planned include: a major revision to the fuel handling procedure, additional ventilation testing requirements prior to fuel handling, development of procedures for ventilation damper maintenance, proposed Technical Specification changes, and increased formality of the Morning Priority Action Required (MOPAR) Meetings. The inspector had no further questions.

### 3. Review of Plant Operations

- a. Throughout the reporting period, the inspector reviewed plant operations. Activities in progress included routine full power operations, with the exception of the event discussed below.
  - During this reporting period the licensee has observed an increase in leakage from the safety injection accumulators. Calculated leak rate is between 25 and 30 gallons per hour to the pressurizer relief tank. This leakage results in the accumulators having to be charged, via a safety injection pump from the refueling water storage tank, approximately once per shift. Preliminary investigation by the licensee indicates that the leakage flow is through the normally closed fill valves into the system testing lines, and then via the test line safety relief valve to the pressurizer relief tank. No operational restrictions are imposed as a result of the increased leakage. Further investigation and possible repair of the fill valves, 835A and B, is scheduled for the upcoming 1985 refueling outage. This item is being tracked for resolution under the licensee's event tracking system. The licensee's corrective actions will be followed during subsequent inspections.
- b. During the course of the inspection, tours of the following plant areas were conducted:
  - Control Room
  - Auxiliary Building
  - Intermediate Building (including control point)
  - Service Building
  - Battery Rooms
  - Turbine Building
  - Diesel Generator Rooms
  - Screenhouse
  - Yard Area and Perimeter
  - Containment

c. The following areas were observed during the tours:

1. Operating Logs and Records

Records were reviewed against Technical Specifications and administrative procedure requirements.

2. Monitoring Instrumentation

Process instruments were observed for correlation between channels and for conformance with Technical Specification requirements.

3. Annunciator Alarms

Various alarm conditions which had been received and acknowledged were observed. These were discussed with shift personnel to verify that the reasons for the alarms were understood and corrective action, if required, was being taken.

4. Shift Manning.

Control Room and shift manning were observed for conformance with 10 CFR 50.54, Technical Specifications, and administrative procedures.

5. Radiation Protection Controls

Areas observed included control point operation, posting of radiation and high radiation areas, compliance with Radiation Work Permits (RWP) and Special Work Permits (SWP), personnel monitoring devices being properly worn, and personnel frisking practices.

The inspector reviewed the documentation for Radioactive Waste Shipment No. 84-39 transferred on December 20, 1984. No discrepancies were noted.

6. Fire Protection

Fire detection and fire-fighting equipment and controls were observed for conformance with Technical Specifications (TS) and administrative procedures requirements.

7. Security

Areas were observed for conformance with regulatory requirements and implementation of the site security plan, inclusive of administrative procedures for vehicle and personnel access, and verification of protected and vital area integrity.

8. Plant Housekeeping

Plant conditions were observed for conformance with administrative procedures. Storage of material and components was observed with respect to prevention of fire and safety hazards. Housekeeping was evaluated with respect to controlling the spread of surface and airborne contamination.

9. Equipment Lineups

Valve and electrical breakers were verified to be in the position or condition required by Technical Specifications and plant lineup procedures for the applicable plant mode. This verification included routine control board indication review and conduct of a partial systems lineup check of the Residual Heat Removal System on November 20, and Emergency Diesel Generators on December 31.

10. Equipment Tagging

Selected equipment, for which tagging requests had been initiated, was observed to verify that tags were in place and the equipment in the condition specified.

The inspector had no further questions.

4. Surveillance Testing

- a. The inspector witnessed the performance of surveillance testing of selected components to verify that the test procedure was properly approved and adequately detailed to assure performance of a satisfactory surveillance; test instrumentation required by the procedure was calibrated and in use; the test was performed by qualified personnel; the test results satisfied Technical Specifications and procedural acceptance criteria, or were properly dispositioned.

- b. The inspector witnessed the performance of portions of the following tests:

PT-2.5 "Air Operated Valves, Quarterly Surveillance", performed on December 18, 1984.

PT-2.7, "Service Water System", performed on November 6, 1984.

PT-5.10, "Process Instrumentation Reactor Protection Channel Trip Test (Channel 1)", performed on November 15, 1984.

PT-13.22, "Fire System Two Month Flow Alarm Check Systems S-24 and S-27", performed on December 7, 1984.

5. Potential Steam Binding of Auxiliary Feedwater Pumps

The inspector reviewed the potential for steam binding of Auxiliary Feedwater (AFW) pumps due to backleakage from the main feedwater system as described in IE Information Notice No. 84-06. The inspector determined that Ginna has not experienced backleakage into the AFW system anytime in its operating history. A licensee review of IE Notice 84-06 in March 1984 concluded that due to the Ginna system design there exists little potential for system failure due to backleakage. In addition, the licensee concluded that installed pump suction reliefs would most probably lift in the event of system backleakage. This positive indication of backleakage would be detected by operators making routine inspection tours through AFW pump spaces.

A subsequent review by the licensee, in response to INPO Significant Operating Experience Report No. 84-03, concluded that additional precautions should be taken to detect potential backleakage into the AFW systems. Engineering Work Request No. 4091 was initiated to install temperature monitoring devices on the discharge piping of the AFW and standby AFW pumps. These devices will detect backleakage through downstream check valves and provide an alarm output for plant computer monitoring. It should be noted that Ginna does have a standby AFW system comprised of two motor-driven pumps and an independent water source. Should the normal AFW system become disabled due to backleakage, standby AFW pump flow could be manually initiated to provide cooling to the steam generators.

The inspector had no further questions.

6. Review of Spent Fuel Pool Storage Rack Modifications

The inspectors conducted a review of the current modification activities involving the spent fuel pool (SFP) storage racks. Amendment No. 65, to the licensee's Provisional Operating License No. DPR-18, authorized an increase in the storage capacity of the spent fuel pool from 595 to 1016 fuel assemblies by the modification of six of the nine SFP storage racks. Modification work is being performed in a large containment tent, erected on the operating floor of the auxiliary building, to minimize the potential spread of contamination from modification processes. Radiation protection procedures and practices appear to be adequate as observed by the inspectors. Station modification procedure series SM-3666 was reviewed by the inspectors and determined to be adequately detailed and comprehensive to properly administratively control the major modification activities. In addition, the inspectors reviewed quality control surveillance reports, nonconformance reports, receipt inspections, procurement records and discussed quality control coverage with quality assurance personnel. No discrepancies were identified. Continued close observation of modification activities will be conducted by the resident inspector and reported in subsequent reports. On December 5, 1984 the first modified SFP storage rack, rack No. 5, was completed and reinstalled in the SFP.

## 7. Plant Maintenance

- a. During the inspection period, the inspector observed maintenance and problem investigation activities to verify compliance with regulatory requirements, including those stated in the Technical Specifications; compliance with administrative and maintenance procedures; required QA/QC involvement; proper use of safety tags; proper equipment alignment and use of jumpers; personnel qualifications; radiological controls for workers protection; and ascertain reportability as required by Technical Specifications.
- b. The inspector witnessed the following maintenance activity:
  - Major maintenance of the 1B service water pump in accordance with Maintenance Procedure (M)-11.10, "Major Inspection of Service Water Pump", Revision 13, May 8, 1984.
  - Emergency maintenance to repair a body to bonnet leak on the pressurizer spray valve 431A. Repairs were affected December 17 in accordance with Emergency Procedure (EM)-422, "Leak Repair Inc. Repair - Pressurizer Spray Valve 431A and B", Revision 0, December 13, 1984. The inspector observed a portion of the repair work in containment while operating at power. Radiological protection practices were considered to be comprehensive and effective, and ALARA considerations satisfactory. The completed station ALARA Review package was reviewed by the inspector and determined to be adequate. The inspector had no further questions.

## 8. IE Bulletin Followup

The inspector reviewed licensee actions on the following IE Bulletin(s) to determine that the written response was submitted within the required time period, that the response included the information required including adequate corrective action commitments, and that licensee management provided adequate dissemination of the bulletin and the response. The review included discussions with licensee personnel and observations of the items discussed below.

IE Bulletin 80-05: "Vacuum Condition Resulting in Damage to Chemical Volume Control System (CVCS) Holdup Tanks". The licensee concluded a comprehensive review of the CVCS holdup system design and determined that existing plant procedures provide adequate assurance against the creation of a vacuum condition in the CVCS holdup tanks. The inspector determined that no system modifications are planned by the licensee. Previous review of this bulletin is documented in Inspection Report 50-244/83-10, paragraph 11. This bulletin is closed.

IE Bulletin 82-02: "Degradation of Threaded Fasteners in the Reactor Coolant Pressure Boundary (RCPB) of PWR Plants". This bulletin addressed the potential for severe degradation of threaded bolts and studs attributed to boric acid attack from the leakage of primary coolant from the RCPB. The inspector reviewed the licensee's responses to this bulletin and determined that no significant examples of corrosive attack on the RCPB had been identified. In addition, the inspector discussed this bulletin with cognizant plant personnel and determined that no subsequent problems have been identified and that adequate surveillance and inspection procedures are in place to identify potential problems in a timely manner. This bulletin is closed.

IE Bulletin 82-04: "Deficiencies in Primary Containment Electrical Penetration Assemblies". This bulletin addressed potential generic safety problems with electrical penetrations supplied by the Bunker Ramo Company. The licensee conducted a review of the electrical containment penetrations at Ginna and determined that none were supplied by Bunker Ramo. The licensee's review is documented in a letter to NRC Region I, dated January 25, 1983. This bulletin is closed.

IE Bulletin 83-06: "Nonconforming Materials Supplied by the Tube-Line Corporation Facilities at Long Island City, New York; Houston, Texas; and Carol Stream, Illinois". This bulletin alerted licensees of nonconforming ASME Code materials furnished by Tube-Line Corp. and required licensees to review their procurement records. Tube-Line Corp. materials purchased and utilized in safety-related applications, must be identified and either demonstrated to comply with ASME Code, Section III or replaced with materials which do comply with ASME Code specifications. In a letter, dated November 18, 1983, the licensee reported to the NRC that no Tube-Line products were utilized in safety-related systems. However, Tube-Line materials had been identified onsite and were utilized in nonsafety-related applications. The inspector determined that all Tube-Line materials carried in stock were returned to the suppliers. The two flanges installed in the nonsafety-related portion of the Post Accident Sampling System were subsequently removed, destroyed and scrapped by the site backfit project contractor. This bulletin is closed.

IE Bulletin 84-03: "Refueling Cavity Water Seal". This bulletin addressed an incident in which the failure of a refueling cavity water seal resulted in the rapid draining of the refueling cavity. Licensees were requested to conduct a review of their facilities to evaluate the potential for and consequences of a refueling cavity water seal failure. The inspector reviewed the licensee's response and verified it satisfactorily addressed the concerns of the bulletin. (reference: Kober to Murley letter dated November 28, 1984.) The Ginna cavity water seal is a Presray, Inc. Model No. PRS 585, molded reinforced inflatable seal. This is a different model and utilized in a significantly different configuration than the faulted Haddam Neck seal. The licensee concludes that the potential for seal failure at Ginna is minimal because of the application and design differences. The inspector had no further questions. This bulletin is closed.

9. Review of 10 CFR 21 Report

A Part 21 report was submitted to the NRC on December 3, 1984 providing notification of a design error in the selection of post accident filter duct butterfly valve solenoids for a system upgrade. The contractor specifications called for a "normally open" solenoid valve vice the required "normally closed" type. The error in solenoid valve selection was detected during functional testing after installation was completed. A field change request was initiated by the licensee and the proper solenoid valves were procured, installed and tested satisfactorily. This system upgrade was performed during the 1982 refueling outage and did not compromise the operability of a required safety system.

The inspector reviewed the timeliness of the Part 21 report with the licensee and determined that corrective actions have been initiated to address the delayed reporting of this event. The inspector determined that personnel oversight was the root cause for the failure to promptly review and identify the reportability of this event. In addition, some procedural deficiencies did exist which could have contributed to the delayed report. Station administrative procedures encompassing the review of Part 21 reportable items are currently under revision due to a recent Quality Assurance Manual change. Inspector concerns over the apparent weaknesses in the licensee's Part 21 reporting guidance were presented and acknowledged by the licensee. The inspector will review implementation of the licensee's corrective actions in a subsequent report. (84-24-01)

10. Licensee Event Report (LER's)

The inspector reviewed the following LER to verify that the details of the event were clearly reported, the description of the cause was accurate, and adequate corrective action was taken. The inspector also determined whether further information was required, and whether generic implications were involved. The inspector further verified that the reporting requirements of Technical Specifications and station administrative and operating procedures had been met; that the event was reviewed by the Plant Operations Review Committee and that continued operation of the facility was conducted within the Technical Specification limits.

84-03: Failure to Exercise Control Rods in Bank D During Monthly Surveillance Test. Review of this event was documented in paragraph 3.a. of Inspection Report 50-244/84-22. A subsequent region-based inspector review of the licensee's completed corrective actions and discussions with representatives of the operations and training staff concluded that the licensee's response and corrective measures were satisfactory. The inspector had no further questions.

11. Review of Periodic and Special Reports

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specification 6.9.1 and 6.9.3 were reviewed by the inspector. This review included the following considerations: the reports contained the information required to be reported by NRC requirements; test results and/or supporting information were consistent with design predictions and performance specifications; and the validity of the reported information. Within the scope of the above, the following reports were reviewed by the inspector:

-- Monthly Operating Reports for October and November of 1984.

12. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior facility management to discuss the inspection, scope and findings.

Based on the NRC Region I review of this report and discussion held with licensee representatives on December 28, 1984, it was determined that this report does not contain information subject to 10 CFR 2.790 restrictions.