

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 50-244/86-01

Docket No. 50-244

Licensee 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: January 1, 1986 through February 8, 1986

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

Reviewed by: L. T. Doerflein
L. T. Doerflein, Project Engineer,
Reactor Project Sect. No. 2C, DRP

2/25/86
Date

Approved by: J. C. Linville, Jr.
J. C. Linville, Chief
Reactor Project Section No. 2C, DRP

2/25/86
Date

Inspection Summary:

Inspection on January 1, 1986 through February 8, 1986 (Report No. 50-244/86-01)

Areas Inspected: Routine, onsite, regular, and backshift inspection by the resident inspector (129 hours). Areas inspected included: plant activities during routine power operations; licensee action on previous findings; surveillance testing; maintenance; IE Bulletin follow-up; Anker-Holth snubber concerns; and inspection of accessible portions of the facility during plant tours.

Results: In the seven areas inspected, no violations were identified. A trailer fire is discussed in paragraph 3b. Framatome split pin replacement is discussed in paragraph 3e. Licensee response to IE Bulletin 85-01 is discussed in paragraph 6. Licensee actions regarding potential Anker-Holth snubber problems are discussed in paragraph 7.

8603070174 860227
PDR ADDCK 05000244
Q PDR



10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

DETAILS

1. Persons Contacted

During this inspection period, the inspector interviewed and talked with operators, technicians, engineering and supervisory level personnel.

2. Licensee Action on Previous Inspection Findings

(Open) Inspector Follow-up Item (81-15-02) The licensee conducted an analysis to attempt to reduce the current Technical Specification requirements for maintaining 20,000 ppm boron concentration in the Boric Acid Storage Tanks (BAST's). The analysis was prompted by the licensee concerns for stress corrosion cracking on heat traced lines carrying highly borated fluids. The BAST's are kept filled with approximately 12 percent by weight boric acid solution for steam line break accident mitigation. The licensee's analysis concluded that the high boron concentration could not be reduced due to containment integrity considerations during the design basis steam line break accident. To address the stress corrosion cracking concern, the licensee has replaced portions and will continue to replace existing Schedule 10 heat traced piping with Schedule 40 piping. In addition, new heat tracing systems are being installed using a different adhesive material. The cement originally used is suspect of chloride contamination. Major piping replacements are tentatively scheduled to commence during the 1987 Refueling Outage. In the interim, nondestructive examination is being conducted on the susceptible piping. (Reference: Engineering Work Request No. 3092)

(Closed) Violation (82-23-01) During an earlier inspection period, the inspector determined that the licensee had not conducted Special Nuclear Material (SNM) physical inventories at twelve month intervals as specified in 10 CFR 70.51(d). In response to this violation, the licensee has revised Refueling Procedure (RF)-46, "Special Nuclear Material Physical Inventory", to include a more restrictive six month interval for SNM physical inventories. The inspector reviewed all completed RF-46 procedures back to February 14, 1983 and verified the licensee has satisfied station administrative and regulatory inventory requirements.

(Open) Violation (83-19-01) During an earlier inspection period, the inspector determined that the licensee had not taken prompt corrective action to address a Quality Assurance Audit finding. The inspector had identified that the failure to maintain a current status of Inservice Inspection (ISI) leakage examinations resulted in two systems exceeding the inspection frequency in 1983. A similar finding was identified in the licensee's QA Audit Report No. 80-36, conducted in September 1980, and had not been properly resolved. It was concluded that the leakage exams were missed due to the lack of an adequate tracking system and, in part, to a recent change to the ISI program to align Quality Group B and C



inspection intervals with Quality Group A component inspections.

The inspector reviewed the licensee's corrective actions as outlined in Maier to Murley letter, dated 1/31/83, and Kober to Murley letter, dated 7/24/84. These actions include: administrative revisions to the ISI plan and Technical Specifications to clarify program requirements; the development of a computer based ISI tracking system; verification of isometric drawings by system walkdowns; and the development of new isometric drawings for improved leakage examination scheduling and inspection.

The inspector reviewed and discussed use of the ISI computer tracking system with representatives of the Material Engineering group. The 1970-2009 Inservice Examination Plan (including Quality Group A, B and C components, High Energy System Components and System Pressure Tests) was reviewed for correlation with the 1985 and 1986 ISI schedules and the 1985 ISI Summary Report. Evidence of proper component identification and isometric drawing walkdown verifications were reflected in the current revision of the 40 year Inservice Examination Plan. No discrepancies were noted. The inspector determined that the licensee has still not completed all system isometric drawings used for ISI leakage examinations conducted by the station Quality Control group. Approximately ten isometric drawings remain to be completed.

3. Review of Plant Operations

- a. Throughout the reporting period, the inspector reviewed routine plant operations prior to the start of the 1986 Refueling Outage. The reactor operated at full power until the commencement of a coastdown on January 12, 1986. The coastdown continued until February 7, 1986 when a deliberate shutdown was commenced from approximately 75 percent reactor power. The unit was taken off-line at 12:07 A.M. February 8 and the reactor taken subcritical at 12:35 A.M..
- b. During the inspection, accessible plant areas were toured. Items reviewed include radiation protection controls, plant housekeeping, fire protection, equipment tagging and security.

On January 20, 1986, at 12:22 P.M., a station employee notified the control room of a fire in one of the temporary trailers staged to the east of the Turbine Building. The fire alarm was sounded and the station Fire Brigade responded. Upon initial assessment of the trailer fire, station personnel called the local Ontario Volunteer Fire Department for assistance. By 12:35 P.M., the Fire Brigade had the fire under control. The Ontario Fire Department arrived onsite at 12:38 P.M. and assisted in putting the fire out. There were no personnel injuries and damage was limited to the trailer. Subsequent investigation by the licensee determined the cause of the fire was an improperly installed propane heating unit. All remaining temporary trailers were inspected by the licensee and discrepancies were corrected.



The licensee made a courtesy call to the NRC Headquarters Duty Officer via the Emergency Notification System (ENS).

- c. Inspector tours of the control room this inspection period included reviews of shift manning, operating logs and records, and equipment and monitoring instrumentation status.

On January 16, 1986, the licensee deenergized the plant computer and commenced a system disassembly and removal. The plant computer is being replaced and upgraded to be compatible with the new Safety Assessment System (SAS) being installed during the 1986 Refueling Outage. The SAS installation is intended to satisfy the NUREG 0737, Item I.D.2, "Plant Safety Parameter Display System" requirements.

The inspector verified the licensee took appropriate compensatory actions with the plant computer out-of-service. No discrepancies were noted.

- d. Safety system valves and electrical breakers were verified to be in the position or condition required for the applicable plant mode as specified by Technical Specifications and plant lineup procedures. This verification included routine control board indication review and conduct of a partial systems lineup check of the Safety Injection System and Containment Spray System on January 14, 1986 and the 1A and 1B Emergency Diesel Generator Systems on January 9, 1986.
- e. On February 4, 1986, the inspector met with the site representatives of Framatome. Framatome has been contracted by the licensee to conduct control rod guide tube split pin replacements during the 1986 Refueling Outage. The split pins are being replaced due to their susceptibility to failure and potential entrainment of loose parts in reactor coolant flow resulting in mechanical fouling. This is the first major contract for Framatome with a U.S. commercial nuclear facility. Framatome has conducted multiple split pin replacements at French nuclear power plants. The inspector discussed Framatome site organization and licensee interface relationships including engineering and quality assurance/control support. The inspector determined that, via contractual agreements with Westinghouse, Framatome is cognizant of problems encountered with split pin replacements performed at the Trojan and Salem facilities. Compensatory measures and contingency plans have been developed to ensure proper reassembly alignments and loose parts retrieval, if necessary.

In addition on February 4, Framatome conducted a demonstration of a split pin removal and replacement via their automated "hot cell". The resident inspectors witnessed the evolution and took the opportunity to review and discuss the process with both Framatome representatives and the licensee.



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; test instrumentation required by the procedure was calibrated and in use; the test was performed by qualified personnel; and the test results satisfied Technical Specifications and procedural acceptance criteria, or were properly resolved.
- b. The inspector witnessed the performance of a portion of the following tests:

Periodic Test (PT)-2.7, "Service Water System", Revision 29, dated 7/31/85, performed on January 6, 1986.

PT-2.2, "Residual Heat Removal System", Revision 37, dated 11/16/85, performed on January 7, 1986.

Reactor Plant Systems Operation Procedure, S-5, "Nuclear Sample Room Sampling System", Revision 10, dated 6/19/84, performed on January 7, 1986 for a B Loop liquid sample.

PT-5.40, "Process Instrumentation Reactor Protection Channel Trip Test (Channel 4 Yellow)", Revision 26, dated 7/31/85, performed on January 16, 1986.

Refueling Procedure, RF-48.2, "Testing of Reactor Cavity Seal Ring", Revision 3, dated 7/2/84, performed on February 3, 1986.

5. 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 reportability as required by Technical Specifications.
- b. The inspector witnessed portions of the following maintenance activities:

Minor maintenance on the 1B RHR pump performed on February 5, 1986 in accordance with Maintenance Procedure (M)-11.15, "RHR pumps Inspection/Maintenance", Revision 9, dated 3/3/84.

Diving operations and removal of seismic restraints on the 1D service water pump shaft conducted in accordance with M-93, "Removal and Re-installation of Seismic Pipe Supports", Revision 1, dated 6/18/84, and M-11.10, "Major Inspection of Service Water Pump", Revision 14, dated 10/25/85, performed on January 9, 1986.

1A RHR pump breaker maintenance, inspection and testing conducted on February 3, 1986 in accordance with M-32.1, "DB-25, DB-50, and DB-75 Circuit Breaker Test Unit Model CB-8160 and/or Model 7150", Revision 21, dated 10/1/85.

6. IE Bulletin Follow-up

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

IE Bulletin 85-01: "Steam Binding of Auxiliary Feedwater Pumps", dated October 29, 1985. The purpose of this bulletin was to inform licensees of a potentially serious safety problem that has occurred at certain operating facilities involving the inoperability of Auxiliary Feedwater (AFW) pumps. The problem results from the backleakage of hot feedwater through the auxiliary feedwater pump discharge piping. The feedwater subsequently flashes to steam in the lower pressure piping and pump casings resulting in steam binding of the pumps. Licensees were required to develop procedures for monitoring AFW system fluid conditions on a regular basis and to develop procedures to restore AFW systems to an operable status should steam binding occur. In addition, procedural controls developed were to remain in effect until completion of hardware modifications to substantially reduce the likelihood of steam binding or until superseded by action implemented as a result of resolution of Generic Issue No. 93. The licensee's response to IE Bulletin 85-01 is the subject of Kober to Murley letter, dated January 22, 1986. The inspector verified implementation of the required procedural controls established by the licensee as stated in the above letter. These controls include: the monitoring of AFW system temperatures once per eight hour shift; procedures for venting pump casings if back leakage is evident; and AFW post surveillance testing requirements for ensuring system piping returns to ambient temperatures. In addition, the inspector determined an Engineering Work Request (EWR No. 4091) has been initiated which will install a remote temperature monitoring system on the AFW pumps' discharge piping. This modification is tentatively scheduled for 1987. Licensee actions required by this bulletin are complete. This bulletin is closed.

7. Potential Problems with Anker-Holth Snubbers

By letter dated August 29, 1985, a representative of Paul-Munroe Energy Products notified the NRC of a potential maintenance problem with Anker-Holth hydraulic snubbers. Maintenance items of concern include revised recommendations for seal replacement, reservoir fluid level checks and fluid quality. Paul-Munroe contacted all licensee's who purchased Anker-Holth snubbers to alert them of the potential problems. The



licensee uses eight Anker-Holth snubbers on each steam generator located symmetrically around the generator mid-plane.

The inspector verified the licensee received notification from Paul-Munroe and determined that subsequent to the issuance of the letter the licensee joined a Snubber Utility Group which is reviewing the Paul-Munroe concerns. Licensee Corporate Engineering is also reviewing the Paul-Munroe snubber concerns and is giving consideration to a replacement snubber of different design or modification of the installed units. The inspector determined that the licensee has not experienced any of the problems identified by Paul-Munroe. The snubber seals are typically replaced after seven to eight years of service. Reservoir fluid levels are checked monthly, in excess of the vendor recommended refueling outage frequency. Fluid cleanliness, viscosity and water content problems have not been experienced with the Monsanto HB 40 synthetic fluid used by the licensee.

The inspector will review final Engineering resolution of this item in a subsequent report. (86-01-01)

8. 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 this scope, the following report was reviewed by the inspector:

-- Monthly Operating Report for December 1985.

9. Exit Interview

At periodic intervals and at the conclusion of the inspection period, 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, it was determined that this report does not contain information subject to 10 CFR 2.790 restrictions.

