U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-244/89-01

Licensee No. DPR-18 Priority -- Category C

Licensee: Rochester Gas and Electric Corporation
49 East Avenue
Rochester, New York

Facility: R. E. Ginna Nuclear Power Plant

Location: Ontario, New York

Inspection Conducted: January 1 through February 5, 1989

Inspectors: C. S. Marschall, Senior Resident Inspector, Ginna
N. S. Perry, Resident Inspector, Ginna

Approved by: _____ 3/1/89
C. J. Cowgill, Chief, Reactor Projects Section 1A Date

Summary:

Areas Inspected: Routine inspection by the resident inspectors of station activities including plant operations, Engineered Safety Feature System walkdown, surveillance, maintenance, radiological controls, security, engineering/technical support, safety assessment/quality verification, periodic and special reports, and the site visit by the regional administrator.

Results: Overall, the plant operated safely during this inspection period. A one day unscheduled outage occurred due to a manual turbine trip (section 3.a). Operators tripped the turbine when it was noted turbine load was lost. Appropriate procedures were complied with and management involvement was noteworthy. Two incidents were identified where health physics procedures and plant postings were not complied with, indicating more management attention is needed for activities in radiologically controlled areas (section 3.c). However, the inspectors noted examples of strict procedure compliance by maintenance and operations personnel. An improvement was noted in the license's 10 CFR 50.59 review process (section 3.9). A problem was identified with the licensee's review of procedures prior to distribution (section 3.h).

DETAILS

1. Persons Contacted

During this inspection period, inspectors held discussions with and interviewed operators, technicians, engineers, and supervisory level personnel. The following people were among those contacted:

*S. Adams, Technical Manager
D. Filkins, Manager of HP & Chemistry
*A. Jones, Corrective Action Coordinator
R. Marchionda, Director of Outage Planning
T. Marlow, Superintendent, Support Services
*R. Mecredy, General Manager, Nuclear Production
*F. Mis, Health Physicist
A. Morris, Maintenance Manager
J. St. Martin, Corrective Action Coordinator
*T. Schuler, Operations Manager
L. Smith, Operations Supervisor
*S. Spector, Superintendent, Ginna Station
*J. Widay, Superintendent, Ginna Production
*R. Wood, Supervisor, Nuclear Security

*Denotes persons present at exit meeting on February 27, 1988.

2. Summary of Plant Operations

The plant remained at full power during the inspection period except for a one day unplanned outage. On January 21, 1989, plant power was reduced to approximately 48 percent to identify and plug leaking main condenser tubes. A turbine trip occurred while at 48 percent power forcing operators to shut down the reactor. The reactor was returned to critical late that night and the turbine was synchronized to the grid early the following morning. Full power was achieved on January 23, 1989 and the plant remained at approximately full power for the remainder of the inspection period.

3. Functional or Program Areas Inspected

a. Plant Operations (71707, 93702)

The inspectors ensured R. E. Ginna Nuclear Power Plant operated safely and in conformance with license and regulatory requirements. Portions of Rochester Gas and Electric Corporation management control system were evaluated to ensure effective discharging of its responsibilities for continued safe operation. Inspection activities were conducted in accordance with NRC Inspection Procedure 71707 including 158 total hours of inspection, 51 hours of backshift inspection, and 25 hours of deep backshift inspection. Weekend inspection was conducted on January 14, 21 and 22, and holiday inspection was conducted on January 2.

On January 21, 1989, plant power was reduced to approximately 48 percent in a planned and controlled manner to identify and plug main condenser tubes as necessary. At 8:46 a.m., while performing intercept and reheat stop valve testing, a short circuit apparently caused all the valves to close when only one should have closed momentarily. Turbine load was lost; therefore, operators manually tripped the turbine. No reactor trip results directly from a turbine trip when power is less than 50 percent, so reactor power was reduced by manually inserting control rods. The reactor was taken subcritical until repairs were completed. The B diesel generator was out of service due to a faulty breaker racking mechanism. The racking mechanism was lubricated, tested and the breaker was racked in. The B diesel generator was declared operable at 9:17 p.m. after surveillance testing. The turbine control problem was determined to be a short in the green light indication for one of the valves being tested. A lead in the indication circuitry was lifted and final troubleshooting and repairs will be effected during the March 1989 refueling outage. The reactor was taken critical at 10:25 p.m. on January 21, 1989 and the turbine was synchronized to the grid at 5:51 a.m. on January 22, 1989. Full power was achieved approximately noon on January 23, 1989. Eight condenser tubes were plugged prior to returning to full power.

The inspector observed a portion of control room activities after the turbine trip and during the subsequent startup. Operator actions were appropriate and were consistent with plant procedures. Management involvement in plant activities on January 21, 1989 was noteworthy. Upper and middle plant management was on site at the time of the turbine trip and responded to the control room.

b. Engineered Safety Feature System Walkdown (71710)

A complete walkdown of the accessible portions of the Residual Heat Removal system was performed to verify its operability. The inspector verified the licensee's lineup matched plant drawings and the as-built configuration. No equipment conditions or items that might degrade plant performance were identified.

c. Radiological Controls (71707)

During this inspection period, the resident inspectors periodically verified RWPs were implemented properly, dosimetry was correctly worn in controlled areas and dosimeter readings were accurately recorded, access control at entrances to high radiation areas was adequate, personnel used contamination monitors as required when exiting controlled areas, and postings and labeling were in compliance with regulations and procedures.

On January 11, 1989, a painter foreman obtained keys from the control room to work in two locked high radiation areas. Entries were subsequently made without health physics support. Technical Specification 6.13.1 requires, in part, those entering a high radiation area shall be provided with one or more of the following:

(1) A radiation monitoring device which continuously indicates the radiation dose rate in the area.

(2) A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received.

(3) A qualified health physicist with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and who will perform periodic radiation surveillance at the frequency specified in the HPWP.

Additionally, Health Physics Procedure (HP)-4.1, Controlled Area Entry, requires, in part, special monitoring for entry to high radiation areas as delineated on the applicable work permit. The applicable work permit required health physics be notified to enter into any high radiation areas.

A health physics technician discovered the entry was made when he noted the areas had been painted. The licensee verified no overexposures occurred and determined the event was not reportable. The foreman was instructed on proper procedure for entering locked high radiation areas and control room personnel were instructed to no longer issue keys to the painters. The licensee is presently evaluating their system for issuing keys to locked high radiation areas.

A Notice of Violation is not issued for this event since it was licensee identified; it was of minor safety significance; it was properly reported; immediate corrective measures were appropriate and actions are being taken to prevent recurrence and no previous violations were identified in this area for which licensee actions would have prevented its occurrence (NO VIOLATION, 50-244/89-01-01).

On January 19, 1989, during a routine tour of the auxiliary building, the resident inspector observed a contract employee reach beyond a roped barrier into a posted contaminated area to manipulate a service air valve. The area was adequately posted as a contaminated area requiring full anticontamination clothing and requiring the health physics department be notified prior to entry. The worker indicated he did not see the posting; however, it was clearly visible. A health physics technician reviewed the area posting with the worker. The licensee indicated the area where the worker reached was not contaminated and the actual contaminated area was above where he reached. Health Physics Procedure

(HP)-4.1, Controlled Area Entry, requires, in part, all warning signs and barricades requirements shall be followed while working in the controlled areas of the plant.

The inspectors have not previously observed any violations of radiation protection postings and concluded, based on this knowledge, that this was an isolated instance. Initial corrective actions were to inform the particular worker of his error and of the posting requirements.

A Notice of Violation is not issued for this event since it is an isolated instance with minor safety or environmental significance and appropriate corrective action was initiated before the inspection ended (NO VIOLATION, 50-244/89-01-02).

The two incidents identified during this inspection period indicate more management attention is needed for activities in radiologically controlled areas. Additionally, the new closed circuit TV communication system is being used to communicate these problems and the proper requirements to plant personnel.

d. Maintenance (62703)

The inspectors observed portions of various safety-related maintenance activities to determine redundant components were operable, required administrative approvals and tagouts were obtained prior to initiating work, approved procedures were used or the activity was within the "skills of the trade", appropriate radiological controls were implemented, ignition/fire prevention controls were properly implemented, and equipment was properly tested prior to returning it to service. Portions of the following maintenance activities were observed by the inspectors:

-- Emergency Maintenance (EM)-15.1, "Testing and Recharging of the 1A Emergency Diesel Generator Fuel Oil Accumulator", revision 0, effective date January 20, 1989 observed January 20, 1989.

-- EM-692, "Troubleshoot and Repair Breaker Racking Mechanism For 1A Diesel Breaker on Bus 14", revision 0, effective date January 21, 1989, observed January 21, 1989.

Adequate management oversight and coordination with quality control personnel was exhibited during performance of both maintenance activities. Additionally, workers strictly adhered to procedures and properly initiated any procedure changes necessary to complete the work required.

e. Surveillance (61726)

Inspectors observed portions of surveillance test procedures to verify test instrumentation was properly calibrated, approved procedures were used, work was performed by qualified personnel, Limiting Conditions for

Operation were met, and the system was correctly restored following testing. Portions of the following surveillance activity were observed by the inspectors:

-- Periodic Test (PT)-2.1, revision 49, "Safety Injection System Pumps", effective date January 17, 1989, observed February 2, 1989.

Licensee control of this surveillance activity was adequate to insure operability.

f. Security (71707)

During this inspection period, the resident inspectors verified x-ray machines and metal and explosive detectors were operational, Protected Area (PA) and Vital Area (VA) barriers were well maintained, access control during security turnover was adequate, personnel were properly badged for unescorted or escorted access and compensatory measures were implemented when necessary. On January 20, 1989 at approximately 6:00 p.m., 4 of the 8 site high mast lights went out. The required compensatory measures were immediately taken and remained in effect until the lighting was returned to service. Security activities inspected were adequate to meet license and regulatory requirements.

g. Engineering/Technical Support (71707)

Previously it was reported (refer to Inspection Report 50-244/88-22) the licensee had difficulties performing adequate evaluations as required by 10 CFR 50.59. During this inspection period the licensee formalized guidance for reviewing procedure changes. This guidance will become effective after personnel have received training on its use. Additionally, the inspectors reviewed a few evaluations performed for plant modifications and noted a substantial improvement. Licensee actions to improve their review process will be evaluated in future inspection reports.

During this inspection period, plant management provided control room personnel with additional administrative requirements when the turbine-driven auxiliary feedwater pump is inoperable. The pump must be restored to an operable status within 7 days, or the plant must be in hot shutdown within the next 6 hours and at a reactor coolant system temperature less than 350 degrees Fahrenheit within the following 6 hours. These requirements will remain effective until a new technical specification is issued.

h. Safety Assessment/Quality Verification (71707)

On January 21, 1989, a new procedure, EM-692, was drafted to repair the racking mechanism for the 1A diesel breaker on Bus 14 (refer to section 3.c). PORC met, reviewed the procedure and approved it with minor changes. The procedure was corrected, reprinted, and signed as approved.

Several copies of this procedure were made and one sent out for the workers to perform. Quality Control (QC) personnel noticed the copy signed as approved was not exactly what PORC had approved; the step requiring QC notification had been deleted due to a typing error. All copies of the procedures were recalled and the corrected copy was sent out; this occurred prior to workers beginning the procedure. This was an isolated case and the licensee is insuring procedures are carefully proofread in the future.

i. Review of Periodic and Special Reports (90713)

Upon receipt, periodic and special reports submitted by the licensee pursuant to Technical Specifications 6.9.1 and 6.9.3 were reviewed by the inspectors. This review included the following considerations: reports contained information required by the NRC; test results and/or supporting information were consistent with design predictions and performance specifications and reported information was valid. Within this scope, the following report was reviewed by the inspectors:

-- Monthly Operating Report for December 1988.

The report was adequate to meet regulatory requirements.

4. Site Visit by Regional Administrator

William T. Russell, Administrator, NRC Region I, visited Ginna on January 25, 1989. An extensive tour of the Auxiliary Building showed substantial improvement in housekeeping, as compared with a tour by the Director, Division of Reactor Projects, Region I, earlier in 1988. A tour of other areas of the plant indicated a need for continued licensee attention to improving the material condition in the Intermediate Building.

During an afternoon meeting, the licensee presented an update on items of NRC interest resulting from the September, 1988 Integrated Performance Assessment Team (IPAT) inspection. Topics discussed included the prioritization of RG&E nuclear concerns, procedure adherence, procedure upgrades, Q-list classification and licensee efforts to improve evaluations required by 10 CFR 50.59. A meeting to discuss Ginna outage activities was set for February 21, 1989 in the NRC Region I office.

5. Exit Interview (30703)

The inspectors met with senior plant management periodically and at the end of the inspection period to discuss inspection scope and findings.

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