U.S NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-244/89-20

Docket No. 50-244

License No. DPR-18 Priority -- Category C

Licensee: Rochester Gas and Electric Corporation
89 East Avenue
Rochester, New York 14649-0001

Facility Name: Robert E. Ginna Nuclear Power Plant

Inspection At: Ontario and Rochester, New York

Inspection Conducted: August 15-17, 1989

Inspectors: _____ 9/7/89
C. G. Amato, Emergency Preparedness Specialist date
Emergency Preparedness Section, FRSSB, DRSS

E. Fox, Jr., Sr. EPS, EPS, FRSSB, DRSS
N. Perry, Resident Inspector, Ginna Plant
C. Gordon, EPS, EPS, FRSSB, DRSS
D. Vito, EPS, EPS, FRSSB, DRSS

Approved: _____ 9/7/89
W. J. Lazarus, Chief, Emergency Preparedness date
Section, FRSSB, DRSS

Inspection Summary: Inspection on August 15-17, 1989 (Inspection Report 50-244/89-20)

Areas Inspected: Routine, announced, safety inspection of the licensee's emergency preparedness exercise and portions of the emergency preparedness program conducted August 15-17, 1989. The inspection was performed by a team of five Region I personnel.

Results: No emergency preparedness program violations or exercise weaknesses were identified. The licensee's response actions were adequate to provide protective measures for the health and safety of the public.

DETAILS

1.0 Persons Contacted

The following Ginna Nuclear Power Plant and Rochester Gas and Electric personnel attended the exit meeting.

E. Adkins, Manager, Government and Community Affairs
W. Backus, Assistant Operations Manager
D. Burke, Corporate Nuclear Emergency Planner
J. Edmunds, Manager, Public Affairs
M. Fowler, Assistant Manager, Ginna Security
R. Mecredy, General Manager, Nuclear Power
B. Quinn, Corporate Health Physicist
R. Smith, Vice President, Engineering and Electric Production
B. Snow, Chief Engineer, Rochester Gas and Electric Corporation
S. Spector, Superintendent, R. E. Ginna Nuclear Power Plant
R. Watts, Director, Corporate Radiological Protection

The inspectors also observed the actions of, and interviewed other licensee personnel. R. Kober, President, RG&E, observed Emergency Operations Facility activities.

2.0 Emergency Exercise

The Ginna Nuclear Power Plant announced, full-participation exercise was conducted on August 16, 1989, 7:00 a.m. to 2:20 p.m. The New York State Office of Emergency Management, nineteen other State agencies, Wayne and Monroe Counties and other governments in these Counties participated. The Federal Emergency Management Agency (FEMA) observed off-site activities.

Pre-exercise Activities

The exercise objectives and scenario submitted to NRC Region I on May 15, 1989 were reviewed and, following revision, determined to be adequate to test the licensee's Emergency Plan. Region I representatives had telephone conversations with the licensee's emergency preparedness staff to discuss the scope and content of the scenario. As a result, minor revisions were made to the scenario which allowed adequate testing of the major portions of the Ginna Nuclear Power Plant Nuclear Emergency Response Plan (NERP) and also provided the opportunity for licensee personnel to demonstrate those areas previously identified by the NRC as in need of corrective action. NRC observers attended a licensee briefing on August 15, 1989. Suggested NRC changes to the scenario made by the licensee were discussed during the briefing. The licensee stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities to prevent disruption of normal plant operation.

Exercise Scenario

The exercise scenario included the following events:

1. Unidentified leakage from the reactor coolant system greater than Technical Specification limits for more than four hours which resulted in orderly plant shutdown;

2. Auxiliary feedwater pump fire;

3. Activation of the fire brigade, control of the fire and loss of the auxiliary feedwater pumps;

4. Large break loss of coolant accident inside containment;

5. Core uncovery and release of the fission product gap activity;

6. Loss of one safety injection pump;

7. Re-alignment of plant safety systems in the recirculation mode;

8. Failure of one residual heat removal (RHR) pump seal and release of radioactive material off site as a result of containment by pass; and,

9. Isolation of the failed RHR pump seal and termination of the release.

Activities Observed

During the conduct of the licensee's exercise, five NRC team members made detailed observations of the activation and augmentation of the Emergency Response Facilities (ERFs) and the Emergency Response Organization (ERO) staff and actions of ERO staff during operation of the ERFs. The following activities were observed:

Detection, classification, and assessment of scenario events;

Direction and coordination of emergency response;

Notification of licensee personnel and off site agencies of pertinent plant status information;

Communications/information flow, and record keeping;

Projection and assessment of offsite radiological dose, dose commitment and consideration of protective actions;

Provisions for in plant radiation protection;

Performance of offsite and inplant radiological surveys;

Performance of technical support, repair and corrective actions;

Fire fighting practices; and,

Preparation of information for dissemination at the Joint News Center.

3.0 Exercise Observations

The NRC team noted that the licensee's activation of the Emergency Response Organization, Emergency Response Facilities, and use of these facilities were generally consistent with their Nuclear Emergency Response Plans.

Exercise Strengths

The NRC team also noted the following actions that were indicative of the licensee's ability to cope with abnormal plant conditions and implement their Emergency Plan:

1. Correct Emergency Action Level classification and timely notification to off site authorities;

2. Effective command and control within and among ERFs;

3. Accident classification based on plant conditions;

4. Development of Protective Action Recommendations (PARs) with Monroe and Wayne County, and N. Y. State participation.

5. Use of a realistic iodine to noble gas ratio, and default release duration times; and,

6. Well considered plans for de-escalation and recovery.

Exercise Weaknesses

An exercise weakness is a finding that the licensee's demonstrated level of preparedness could have precluded effective implementation of the emergency plan in the event of an actual emergency.

No exercise weaknesses were identified.

Areas for Improvement

Although these findings did not have a significant negative impact on overall performance during the exercise, they should be evaluated and corrected by the licensee.

- There was uncertainty in the simulator control room as to the identity of the Emergency Coordinator in charge of the Technical Support Center (TSC).

- Operation Support Center (OSC) area was inadequate to accommodate staff who reported for assignment to in plant teams. As a result, the OSC was crowded and an over flow of OSC staff into the TSC resulted.

- Collection of a Post Accident Sample (PAS) using the PAS System took an inordinate time due to problems with the syringe used to withdraw the sample.

- Lack of familiarity with Step-Off-Pad procedures delayed the departure of the residual heat removal pump repair team.

4.0 Licensee Action on Previously Identified Inspection Findings

The following findings were identified during the previous exercise. Based upon observations made by the NRC team during this exercise, review of the scenario and information provided by the controllers, the following items were not repeated and are closed.

An error was made in a calculated projected dose value. No projected dose errors were made.

Lax Health Physics practices were observed in the Technical Support Center. Correct Health Physics practices were followed.

Primary and secondary loop pressures were incorrectly reported. Correct pressures were reported.

5.0 Licensee Critique

The NRC team attended the licensee's post exercise critique on August 17, 1989 during which key licensee controllers presented their observations of the exercise. The critique was adequate. Licensee participants highlighted areas for improvement which the licensee indicated would be evaluated and appropriate actions taken.

6.0 Emergency Operations Facility (EOF)

The licensee recently reconfigured the EOF. To determine if the reconfigured EOF meets the requirements of Section 8.4 of NUREG-0737, Supp. 1, its use during the 1989 practice and annual exercises was observed.

The EOF is located in the basement of an office building 16 miles from the site. Therefore, special protection factors are not required. Communications are provided for acquiring plant, meteorological and radiological data as well as displaying this information. Adequate desk space for the EOF staff is provided and a meeting room has been set

aside for NRC site team members. Space is also provided for State, County and US FEMA personnel. Support facilities were functional. Independent and redundant communication systems link the EOF to other Emergency Response Facilities (ERFs) and Emergency Operations Centers (EOC). Data analysis capability is provided. Appropriate procedures, plans, and drawings are available. The dose assessment area has been enlarged and rooms have been provided for communicators. Use during two exercises demonstrated information was received and analyzed and communication effected with other ERFs and EOCs. No indadequacies were identified.

7.0 EOF Security

The RG&E Corporate Security Director was interviewed and EOF security procedures observed during the exercise to determine whether the requirements of Section 8.4.1.j of NUREG-0737, Supp 1 regarding EOF security were met.

Industrial security is provided. Access control was demonstrated at the EOF during the 1989 exercise. Procedures are in place to respond to contingencies and to coordinate activities including NRC notifications with plant nuclear security.

Based on the above review, this area is acceptable.

8.0 Emergency Communication Systems

Emergency Communication system design was reviewed to verify that the standards of 10 CFR 50.47(b)(5) and (b)(6), the requirements of Sections IV D I and IV E of Appendix E to 10 CFR 50, and the intent of NRC IE Information Notice 86-97 are met.

Commercial phones are identified for use as Health Physics Network phones. Telephone land lines link the ERFs with off-site Emergency Operations Centers. Digital microwave and a fiber optics system link the site with RG&E headquarters. Radios connect the site with the N. Y. State Police, the Wayne County Sheriff, local police forces within Wayne and Monroe Counties, and two RG&E hydro stations. Two computer systems provide plant data. Radiological and meteorological data transmission and rapid facsimile capability are provided. Procedures for use of these systems are in place.

Based on the above review, this area is acceptable.

9.0 Off Site Activities

To determine if the standards of 10 CFR 50. 47(b)(5) and (b)(12) were met, results of the siren system test were reviewed and the emergency medical facility was inspected.

Ninety four of the 96 sirens functioned satisfactorily during the siren system test of August 15, 1989. One malfunction was due to vandalism.

FEMA Region II has designated the Monroe County Airport as the Federal Response Center (FRC). The Federal Radiological Monitoring and Assessment Center will presumably be collocated at the FRC.

The Emergency Radiation Area (ERA) at the Monroe General Hospital was inspected. This hospital is the support hospital for the plant and the FEMA designated MS-1 hospital. Direct access and decontamination capability is provided. Plans are in place. Equipment was calibrated and functional. In service training was given by a licensee contractor. Additional training has and will be given for staff at the Radiation Emergency Assistance Center/Training Site of the Oak Ridge Associated Universities. A control room radio can communicate with the ERA and ambulances.

Based on the above, these portions of the licensee's emergency plan are acceptable.

10.0 Exit Meeting and NRC Critique

Following the licensee's self critique of the exercise, the NRC team met and evaluated the licensee's critique. Subsequently, the NRC team met with the licensee's representatives listed in Section 1 of this report at the end of the inspection. The NRC team leader summarized the observations made during the exercise. The licensee was advised no exercise weaknesses were identified and the previously identified findings were adequately addressed. The NRC team determined that within the scope and limitations of the scenario, and with the findings previously discussed, the licensee demonstrated that they could implement their Nuclear Emergency Response Plan in a manner that would adequately provide protective measures for the health and safety of the public.

The licensee was also advised no violations were identified during the inspection of the emergency preparedness program.

At no time during the course of the inspection did the inspectors provide any written information to the licensee.