

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No. 50-244/90-27

Docket No. 50-244

License No. DPR-18

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

Facility Name: Ginna Nuclear Power Plant

Inspection At: Ontario and Rochester, New York

Inspection Conducted: November 27-29, 1990

Team Members:

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1/4/91  
date

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Approved By:

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1/9/91  
date

Inspection Summary: Inspection on November 27-29, 1990 (Report No. 50-244/90-27).

Areas Inspected: Routine, announced emergency preparedness (EP) inspection and observation of the licensee's partial-participation annual emergency preparedness exercise conducted on November 28, 1990. The inspection was performed by a team of three NRC Region I personnel.

Results: No violations were identified. The licensee's response actions for this exercise were adequate to provide protective measures for the health and safety of the public. One unresolved item was identified (Section 4.0).



## DETAILS

### 1.0 Persons Contacted

The following licensee representatives attended the exit meeting held on November 29, 1990.

Adkins, E. R., Director, Government Relations  
Beldue, R. J., Corporate Emergency Planner  
Dillon, W. K., Director, Security  
Filkins, D. L., Manager, HP and Chemistry  
Gorski, P. J., Manager, Mechanical Maintenance  
Kiedroski, N. A., Training Coordinator  
Maciuska, F., Supervisor, License Training  
Marchionda, R. A., Director, Outage Planning  
Marlow, T. A., Superintendent, Support Services  
Mecredy, R. C., Vice President, Nuclear Production  
Meier, G. D., Manager, Training  
Nacy, G. R., Manager, Joint News Center  
Neis, J., Supervisor, Technical Training  
Polfleit, P., Emergency Planner  
Powell, T. J., Manager, Risk Management  
Schuler, T. R., Manager, Operations  
Smith, R. E., Senior Vice President  
Teed, R. C., Coordinator, Security Training  
Watts, R. J., Director, Corporate Radiation Protection  
Widay, J. A., Superintendent, Nuclear Production  
Wilkens, P. C., Manager, Nuclear Engineering Services  
Wood, R. E., Supervisor, Nuclear Security

During the conduct of the inspection, other licensee personnel were interviewed and observed in performance of emergency response duties.

### 2.0 Emergency Exercise

The Ginna partial-participation exercise was conducted on November 28, 1990, from 8:00 a.m. until 2:30 p.m.

#### 2.1 Pre-exercise Activities

The exercise objectives, submitted to the NRC Region I on August 14, 1990, were reviewed and determined to adequately test the licensee's Emergency Plan. On September 27, 1990 the licensee submitted the scenario package for NRC review and evaluation. Region I representatives had telephone conversations with the licensee's emergency preparedness staff to discuss the scope and content of the scenario.



In general, the NRC review of the scenario revealed the submittal to be complete in most areas. However, several areas were identified which were missing or lacked proper detail. These included anticipated actions expected by Emergency Response Organization (ERO) personnel, descriptions of activities associated with inplant repair and corrective actions, trending analysis of key reactor parameters, and offsite monitoring data. Revisions were made to the scenario and events data. Following the revisions and submittal of additional information, it was determined that the scenario would provide for adequate testing of major portions of the Emergency Plan and Implementing Procedures (EPIP) and also provide 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 November 27, 1990 and participated in the discussion of response actions expected during the scenario. Suggested NRC changes to the scenario were made by the licensee and were also discussed during the briefing.

## 2.2 Exercise Scenario

The exercise scenario included the following events:

1. Retrieval of dropped control rod;
2. Reactor Coolant System leak into containment;
3. Loss of safety injection pumps;
4. Leakage from RCP seal water return filter;
5. Elevated radiation levels in Auxiliary Building;
6. Loss of power to the Emergency Operations Facility (EOF);
7. Core uncover and minor fuel damage;
8. Offsite release of radioactivity to the environment;
9. Declaration of Unusual Event, Alert, and General Emergency classifications;  
and
10. Recommendations of protective measures to offsite authorities.

The above events caused the activation of the licensee's onsite and offsite emergency response facilities. Response actions of personnel from the State of New York were demonstrated in the EOF but not evaluated by FEMA.

### 2.3 Activities Observed

During the conduct of the licensee's exercise, NRC team members made detailed observations of the activation and augmentation of the emergency response organization (ERO), activation of emergency response facilities, and actions of emergency response personnel during the operation of the emergency response facilities.

The following activities were observed:

1. Detection, classification, and assessment of scenario events;
2. Direction and coordination of the emergency response;
3. Notification of licensee personnel and offsite agencies;
4. Communications/information flow, and record keeping;
5. Assessment and projection of radiological dose and consideration of protective actions;
6. Provisions for inplant radiation protection;
7. Performance of offsite and inplant radiological surveys;
8. Maintenance of site security and access control;
9. Performance of technical support, repair and corrective actions;
10. Assembly and accountability of personnel;
11. Provisions for communicating information to the public; and
12. Post-exercise critique.

### 3.0 Classification of Exercise Findings

Emergency preparedness exercise findings are classified as follows:

#### 3.1 Exercise Strengths

Exercise strengths are areas of the licensee's response that provide strong positive indication of their ability to cope with abnormal plant conditions and implement the Emergency Plan.

#### 3.2 Exercise Weakness

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 area observed (in the event of an actual emergency). Existence of an exercise weakness does not of itself indicate that overall response was inadequate to protect the health and safety of the public.

#### 3.3 Areas for Improvement

An area for improvement is a finding which did not have a significant negative impact on overall performance during the exercise, but should be evaluated to determine whether corrective action could improve any programmatic or performance area.

### 4.0 Exercise Observations

The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, and use of the facilities were generally consistent with their emergency response plan and implementing procedures. Exercise observations were identified in each of the emergency response facilities.

#### 4.1 Control Room

The following exercise strengths were identified.

1. Communications among operations staff were effective and transmission of information to other emergency response facilities was timely.



2. Good interface was observed by the shift crew in response to correction of the source range detector failure.
3. Degrading plant conditions were promptly recognized and led to correct classifications of the Unusual Event, Alert, and General Emergency.

No exercise weaknesses were identified.

The following areas for improvement were identified.

1. Following turnover from the control room to the Technical Support Center, formal transfer of the Emergency Coordinator position for overall direction and control of the emergency was not clear.
2. Although the control room portion of the exercise was staged in the simulator, all activities were conducted in a tabletop format using data sheets to provide information rather than functional simulator displays. This detracted from realism and hindered response actions of operations staff with regard to timely recognition of data trends. Consideration should be given to actual use of the simulator for exercises so that operators have the opportunity to carry out their emergency response roles more realistically.

#### 4.2 Technical Support Center (TSC)

The following strengths were identified.

1. Good coordination was demonstrated by TSC management in assessing priority tasks and assigning staff to perform them.
2. Accountability of personnel was quickly determined which included confirmation of two potentially contaminated individuals.

No exercise weaknesses or areas for improvement were identified.

#### 4.3 Operations Support Center (OSC)

The following exercise strengths were identified.

1. Contamination control techniques performed by inplant repair teams were efficiently demonstrated and health physics support was effective.



2. Priorities for each inplant task assignment were carefully evaluated prior to implementation.
3. Implementation of the procedure to take a post-accident sample was thorough and corrected a concern identified during the previous exercise.

No exercise weaknesses or areas for improvement were identified.

#### 4.4 Emergency Operations Facility (EOF)

The following exercise strengths were identified.

1. Layout changes made to the EOF improved information flow and enhanced its capability as an emergency response facility.
2. EOF staff were knowledgeable in their emergency response functions and used implementing procedures efficiently to carry out assignments.
3. Facility activation, staffing, and accountability of personnel was timely.
4. Good recognition of the need to transfer emergency direction and control back to the TSC after the EOF loss of power.

The following exercise weakness was identified.

1. Following the general emergency, concerns were identified with the licensee's ability to make a protective action recommendation (PAR). The TSC declared the general emergency, but did not issue an immediate PAR as described in EPIP 2-1, "Protective Action Recommendations". When the PAR was made from the EOF about 30 minutes later, the basis was not discussed with New York State representatives present in the EOF or with Wayne county officials via the Radiological Emergency Communications System (RECS).

The following areas for improvement were identified.

1. Confusion was observed among security staff in allowing EOF access of controllers and observers since EPIP 3-7, "Security During Emergencies" and EPIP 5-5, "Conduct of Drills and Exercises" are not clear regarding security and registration of all exercise participants.



2. Review of the emergency action levels (EAL) in EPIP 1-0, "Ginna Station Event Evaluation and Classification" identified examples of initiating conditions that either were missing or not quantified. The licensee must ensure that information contained in EAL procedures is complete and reflects finite indications for each initiating condition. This item is unresolved (50-244/90-27-01).

#### 5.0 Licensee Action on Previously Identified Items

Based upon discussions with licensee representatives, examination of procedures and records, and observations made by the NRC team during the exercise, areas for improvement identified during the previous emergency exercise (Inspection Report Nos. 50-244/89-20) were acceptably demonstrated and not repeated.

#### 6.0 Licensee Critique

The NRC team attended the licensee's exercise critique on November 29, 1990 during which the licensee's lead controllers summarized observations from the exercise. The critique was thorough and documented deficient areas in need of corrective action. The licensee indicated that critique items would be tracked in their internal open item tracking system.

#### 7.0 Exit Meeting

Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1 of this report. Team observations made during the exercise were summarized.

The licensee was informed that previously identified items were adequately addressed and that no violations were observed. Although there were areas identified for improvement, the NRC team determined that within the scope and limitations of the scenario, the licensee's performance demonstrated that they could implement their Emergency Plan and Emergency Plan Implementing Procedures in a manner that would provide adequate protective measures for the health and safety of the public.

Following the exit meeting, the inspectors met with the licensee's operations and EP staffs to provide further details about PAR and EAL concerns. Licensee management acknowledged the findings and indicated that they would evaluate and take appropriate action regarding the items identified for corrective action.

