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REGION I

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Licensee: Rochester Gas & Electric Corporation

Facility: Robert E. Ginna Nuclear Station

Dates: November 16 - 18, 1999

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EXECUTIVE SUMMARY

Robert E. Ginna Nuclear Station
Full-Participation Emergency Preparedness Exercise Evaluation
November 17, 1999
Inspection Report Number 50-244/99-10

Based on the results of this inspection, it was determined that the overall performance of the emergency response organization demonstrated, with reasonable assurance, that onsite emergency plans are adequate and that the licensee is capable of implementing them. Simulated events were diagnosed accurately, emergency declarations were timely and accurate, offsite agencies were notified in a timely manner, protective action recommendations were appropriate, and dose assessment activities were performed properly.

At the formal critique, your staff identified issues, in addition to those identified by the NRC. The most significant issues identified are under consideration for inclusion in the corrective action program. Overall, the critique was balanced with positive and negative findings and was appropriately self-critical.

Report Details

P4 Staff Knowledge and Performance

a. Exercise Evaluation Scope (IP 82301)

During this inspection, the inspectors observed and evaluated the licensee's biennial full-participation exercise in the simulator control room (SCR), the technical support center (TSC), the operations support center (OSC), and the emergency operations facility (EOF). The inspectors assessed the emergency response organization's (ERO) recognition of abnormal plant conditions, classification of emergency conditions, notification of offsite agencies, development of protective action recommendations (PARs), command and control, communications, utilization of repair and field monitoring teams (FMTs), performance of dose assessment and projections, and the overall implementation of the emergency plan. In addition, the inspectors observed the post-exercise critique to evaluate the licensee's self-assessment of the exercise.

b. Observations and Findings

b.1 SCR

Operators promptly classified the unusual event (UE) and alert conditions correctly. The SCR communicator notified state and local officials within the required 15 minutes and the NRC within the required one hour. The shift supervisor (SS) announced he had assumed the position of emergency coordinator (EC) upon declaration of the UE. He maintained this responsibility until the TSC EC relieved him shortly after the alert declaration.

The SS maintained adequate command and control during the exercise. The crew correctly diagnosed plant events and, where appropriate, implemented applicable procedures such as annunciator response, abnormal, and emergency operating procedures.

b.2 TSC

The minimum TSC staffing requirements were promptly met following announcement of the alert declaration. Coordination for the transfer of the EC function from the SCR to the TSC and subsequently from the TSC to the EOF was good and both evolutions were accomplished in a timely manner. Command and control in the TSC was adequate. Habitability of the TSC was promptly established and periodically verified throughout the exercise. Control points for personnel frisking to detect the presence of contamination prior to entry into the TSC were established. Accountability of station personnel, in conjunction with the site evacuation, was executed in a timely manner. Communications within the TSC were good and good team work was demonstrated. The TSC manager (TSCM) was kept well informed by the various area managers and good discussions were noted between the members of the various groups. The dose assessment manager (DAM) immediately notified the TSCM of the increasing containment radiation levels when the loss of coolant accident occurred and of the subsequent increasing plant ventilation readings when the release from containment began. Recommendations to

escalate to a site area emergency and general emergency (GE) were made promptly as the emergency action levels (EALs) were continuously reviewed by the TSC staff. The TSCM kept the EC informed throughout the exercise and provided periodic updates to the TSC staff however, some talking among staff members was noted during the briefings. A few instances of mis-communication were observed but were promptly corrected.

One area of concern was noted in regard to the manning of the TSC. The alert was declared as a result of a simulated security event in which a delivery truck driver had wrestled a gun away from a security guard on the east side of the plant and had hidden in an adjacent building. A general announcement was made that an alert had been declared and all personnel should report to their emergency duty locations. Almost immediately following this announcement, another announcement was made which stated that a security event was in progress and all personnel are to stand clear of the east side of the plant. This second announcement did not conform to a station security procedure which requires the following announcement to be made: "Attention All Plant Personnel, A Security Event is in Progress. Clear all Hallways and Stop All Movement Until Advised Otherwise. Trespassers Must Halt Immediately or Deadly Force May Be Used." This series of announcements resulted in a number of personnel traveling to the TSC through the effected zone just moments after the security response was initiated. Had this been a real event, this sequence could have placed personnel in jeopardy and unnecessarily challenged the security force. The licensee identified this issue during the formal critique.

b.3 OSC

The maintenance assessment manager (MAM) provided adequate command and control of the OSC and effectively implemented licensee procedure EPIP 1-10, "Operations Support Center Activation," including satellite OSC activation. OSC personnel received plant status briefings from the EC when he updated TSC staff. This information was relayed to the satellite OSC by telephone.

OSC staff implemented repair actions per EPIP 1-12, "Repair and Corrective Action Guidelines During Emergency Situations". Repair teams consisted of operations, maintenance, and health physics personnel. Pre-briefs discussed task scope, radiological conditions, protective clothing, safe travel routes, and communication guidelines. The OSC manager also ensured that when repair teams returned from the field they debriefed OSC personnel per section 6.6 of EPIP 1-12, "Debriefing".

b.4 EOF

The EOF was staffed and activated in a timely manner. The EC demonstrated good command and control by conducting timely and informative briefings and coordinating the EOF staff. The EOF staff supported the EC's efforts by keeping the status boards updated, ensuring the EOF DAM was informed of changing conditions, and interfacing with offsite officials. The EC and his staff closely reviewed the EALs to ensure all parameters were met before escalating the emergency classifications. The PAR was appropriate for the simulated plant and radiological conditions. The notifications (initial and updates) to the offsite agencies were timely.

b.5 Dose Assessment

The dose assessment staff arrived at the EOF within an hour of the alert declaration. The work area was well equipped with phones, radios, computers, status boards, controlled copies of procedures, and had generally low congestion and noise levels. The dose assessment staff focused on defining the magnitude and location of the potential off-site impact. FMTs, equipped with radiological monitoring equipment and communication devices, were immediately dispatched to monitor potential releases. Meteorological monitoring data, including wind speed and direction, was monitored and recorded on status boards every 15 minutes and used to direct FMTs. Computerized dose projections and "what-if" calculations were continually performed and results were reported to the EOF DAM. Appropriate consideration was given to evaluate the need for potential administration of potassium iodide to minimize thyroid dose for emergency response personnel. Appropriate communications were made with county dose assessment personnel to communicate data and ensure proper coordination of FMTs. PARs were prompt and consistent with procedural guidance and existing conditions. Staffing an assistant DAM allowed for continuity of leadership in dose assessment during EOF briefings and shift turnover.

The focus of the dose assessment team was on immediate plume tracking, dose assessment, and PARs; no requests were observed to obtain additional health physics support and the staff did not address plans for ingestion pathway sampling or provide guidance to state and local officials on long term actions after termination of the release. This was identified by the licensee at the formal critique.

b.6 Licensee Exercise Critique

Immediately following the exercise, the licensee began its critique process with controllers and players providing debriefs at each of the facilities. The debriefs were initiated by controllers who generally provided positive comments. Players comments, if provided, focused on equipment and procedural issues instead of personnel performance. Overall, the post-exercise debriefs emphasized positive items instead of areas for improvement. Licensee controllers then compiled their observations and findings and presented them at the formal critique on November 18, 1999. The licensee identified issues, in addition to the ones identified by the inspectors. Negative comments, in addition to positive comments, were presented. Overall, the critique was thorough and self-critical.

The licensee implemented a new method to score ERO performance. Points were based upon the degree of success in meeting major and minor objectives. The new method was a good initiative in attempting to objectively assess ERO performance. The licensee expects to refine this method during subsequent drills and exercises.

c. Overall Exercise Conclusions

Based on the results of this inspection, it was determined that the overall performance of the ERO demonstrated, with reasonable assurance, that onsite emergency plans are adequate and that the licensee is capable of implementing them. Simulated events were diagnosed accurately, emergency declarations were timely and accurate, offsite agencies were notified in a timely manner, PARs were appropriate, and dose assessment activities were performed properly.

At the formal critique, the licensee identified issues, in addition to those identified by the NRC. The most significant issues identified are under consideration for inclusion in the corrective action program. Overall, the critique was balanced with positive and negative findings and was appropriately self-critical.

P8 Miscellaneous EP Issues

P8.1 Scenario Preparation and Exercise Control (IP 82302)

An in-office review of the exercise objectives and scenario was conducted by the inspectors prior to the exercise. It was determined that the scenario was adequate to support the demonstration of the stated objectives and satisfactorily exercised a significant portion of the emergency response capabilities.

P8.2 (Closed): Failure to perform debriefing of repair teams (IFI 50-244/97-04-01)

Upon completion of tasks during the 1997 exercise, post job debriefs were not conducted, nor documented, for repair teams returning from the plant. The MAM, and radiation protection/chemistry manager (RP/CM) missed this opportunity to learn and document important information available from team members. For example the simulated general area dose rate around the "A" RHR breaker was estimated to be 40 R/hr. The health physics technician determined the dose rate to be 25 R/hr in the area. This information was not reported to, or logged by, the RP/CM. This information would have been valuable in planning and preparation for other possible entries in to this area.

During this exercise, it was observed that thorough debriefs were conducted with repair teams after completing tasks. Also the inspectors reviewed training conducted by the licensee and modifications to checklists to ensure that repair teams are debriefed after completing tasks. The corrective actions were appropriate. This item is closed.

V. Management Meetings

X1 Exit Meeting

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on November 18, 1999. The licensee acknowledged the inspectors' findings.

INSPECTION PROCEDURES USED

82301: Evaluation of Exercises for Power Reactors

82302: Review of Exercise Objectives and Scenarios for Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

IFI 50-244/97-04-01

Failure to perform debriefs of repair teams

Discussed

None

LIST OF ACRONYMS USED

DAM	Dose Assessment Manager
EAL	Emergency Action Level
EC	Emergency Coordinator
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
FMT	Field Monitoring Team
MAM	Maintenance Assessment Manager
OSC	Operations Support Center
PAR	Protective Action Recommendation
RP/CM	Radiation Protection/Chemistry Manager
SCR	Simulator Control Room
SS	Shift Supervisor
TSC	Technical Support Center
TSCM	Technical Support Center Manager
UE	Unusual Event