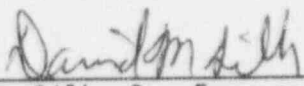



U. S. NUCLEAR REGULATORY COMMISSION
REGION I

DOCKET/REPORT: 50-333/95-19
LICENSEE: New York Power Authority
Lycoming, New York
FACILITY: James A. FitzPatrick Nuclear Power Plant
INSPECTION DATES: October 17-19, 1995
INSPECTORS: D. Silk, Senior Emergency Preparedness Specialist
F. Laughlin, Emergency Preparedness Specialist
R. DePriest, Reactor Engineer
L. Eckert, Radiation Specialist
G. Hunegs, Senior Resident Inspector
R. Fernandes, Resident Inspector



D. Silk, Sr. Emergency Preparedness Spec. Date 11/27/95
Emergency Preparedness and
Safeguards Branch
Division of Reactor Safety

APPROVED BY:



Richard R. Keimig, Chief
Emergency Preparedness and
Safeguards Branch
Division of Reactor Safety

11-28-95
Date

SCOPE: Announced inspection of the biennial, full-participation emergency preparedness exercise.

RESULTS: Overall, the licensee's performance was very good. There were good intra- and inter- emergency response facility (ERF) communications. To ensure the accurate relay of technical information among the ERFs, licensed senior reactor operators (SROs) were used as communicators at each location. The licensee demonstrated good command and control at all of the ERFs, as facility managers generally conducted frequent and informative briefings. The scenario progressed through all four emergency classification levels, and the licensee properly classified and declared the events in a timely manner, using the new NUMARC emergency action levels. Notifications to the off-site agencies were completed within 15 minutes. Operations personnel in the simulator control room were accurate in their assessment of plant conditions and took appropriate mitigating actions to protect the health and safety of the public. The staff performance in the technical support center was strong in formulating mitigation strategies, especially in attaining core spray and long-term core cooling. Control and coordination of the in-plant repair teams was done well in the operations support center. At the emergency operations

facility, dose assessment personnel correctly performed assessment and projection calculations. The protective action recommendation and the update were timely and appropriate for the simulated conditions. The EOF staff kept representatives of off-site agencies well informed of plant status and radiological conditions during the exercise. The licensee's post-exercise critique was appropriately self-critical in that it identified all of the items that the NRC inspection team noted, in addition to several others. Additionally, changes to the emergency plan and implementing procedures in the Region I office were reviewed prior to the on-site inspection. The changes were found to be acceptable.

DETAILS

1.0 PERSONS CONTACTED

- *# N. Avrakotos, Emergency Preparedness Coordinator
- *# W. Berzins, Manager of Communication
- * G. Brownell, Licensing Department
- # S. Chubon, Technical Training Specialist - Emergency Plan
- * M. Colomb, General Manager - Operations
- *# D. Downs, Quality Assurance Auditor
- # F. Edler, Technical Services Manager
- *# D. Lindsey, General Manager - Maintenance
- *# J. Maurer, General Manager - Support Services
- *# M. Mozzor, Senior Emergency Preparedness Engineer
- # C. Patrick, Director - Nuclear Information
- *# M. Praire, Assistant Emergency Preparedness Coordinator
- # H. Salmon, Site Executive Officer
- *# D. Topley, Training Manager
- # D. Vandermark, Quality Assurance Manager
- # A. Zaremba, Licensing Manager

The inspectors also interviewed and observed other licensee personnel.

- * Indicates those who attended the October 17, 1995 entrance meeting
- # Indicates those who attended the October 19, 1995 exit meeting

2.0 SCENARIO PLANNING

The exercise objectives and scenario were submitted to the NRC in a timely manner. The objectives and the scenario were reviewed by the NRC. The final scenario adequately tested the major portions of the emergency plan (E-Plan) and implementing procedures (EIPs).

On October 17, 1995, the NRC inspection team attended a licensee briefing on the scenario. The licensee stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities, at appropriate times, to ensure exercise objectives were met and to prevent adverse impact upon operation of the plant.

3.0 ACTIVITIES OBSERVED

The NRC inspection team observed the activation and augmentation of the emergency response facilities (ERFs) and the actions of the emergency response organization (ERO) staff. The following activities were observed:

- A. Selection and use of control room procedures.
- B. Detection, classification, and assessment of scenario events.
- C. Direction and coordination of emergency response.
- D. Notification of licensee personnel and off-site agencies.
- E. Communications/information flow and record keeping.
- F. Assessment and projection of off-site radiological doses.
- G. Issuance of protective action recommendations (PARs).
- H. Provisions for in-plant radiation protection.
- I. Provisions for communicating information to the public.

3.0 ACTIVITIES OBSERVED (Cont'd.)

- J. Accident analysis and mitigation.
- K. Accountability of personnel.
- L. Post-exercise critique by the licensee.

4.0 EXERCISE-FINDING CLASSIFICATIONS

Inspection findings are classified, where appropriate, as follows:

Exercise Strength: a strong, positive indicator of the licensee's ability to cope with abnormal plant conditions and implement the E-Plan.

Exercise Weakness: less than effective E-Plan implementation that did not, alone, constitute an overall response inadequacy.

5.0 SIMULATOR CONTROL ROOM (SCR)

The SCR operators exhibited the ability to recognize and assess abnormal conditions and determine plant status in a timely manner. The operators were proactive in the pursuit to restore inoperable systems for mitigation of the simulated accident conditions. The operators were able to assess plant conditions and evaluate them with respect to the applicable EALs. The first emergency classification level, an unusual event (UE), was appropriately declared by the shift supervisor (SS). The UE notification to state and local officials was made in 10 minutes, and the NRC was notified immediately thereafter.

Overall, command and control in the SCR was good. The SS maintained a broad overview of plant conditions during the exercise. The SS also exhibited a conservative approach to staffing the other ERFs in that he initiated staffing of the TSC and OSC promptly after the declaration of the UE. In addition, he thoroughly briefed the emergency director (ED) and turned over the responsibility of the emergency functions to him in a timely manner.

Communications among the operators was good. The control board operators and the assistant SS used repeatbacks with verification consistently and appropriately when communicating. The SCR communications with the other ERFs were also good and were facilitated by the use of senior reactor operators (SROs) as communicators at the telephone conference lines in each of the ERFs.

The inspectors determined that the performance of the SCR staff was good.

6.0 TECHNICAL SUPPORT CENTER (TSC)

The TSC was staffed in a timely manner. Licensee procedures require that the TSC be activated at the Alert level. The ED ordered the activation of the facility at the UE (7:14 a.m.), because an earthquake was the simulated initiating event. The TSC was fully staffed at 7:37 a.m. and was declared operational at 8:26 a.m.

The Alert was declared promptly and accurately at 8:07 a.m. The ED and TSC manager (TSCM) demonstrated good command and control. The transfer of responsibility between the two was very formal, comprehensive, and smooth, both when the ED initially arrived at the TSC and assumed control from the TSCM and when the ED temporarily turned over the ED responsibilities to the TSCM for the ED's transition to the EOF. The TSCM provided regular in-depth facility briefings to keep his staff apprised of plant conditions and emergency events. He utilized his staff well to coordinate on-site emergency response efforts to mitigate the results of the simulated accident.

The TSC staff demonstrated excellent communications capability, both internally and externally. Internal communications were very formal, with repeatbacks being used to ensure understanding. The TSCM often communicated with the ED in the EOF to discuss key decisions, as well as with the operations coordinator in the control room to discuss plant operations and conditions. Two SROs were used as full-time technical communicators, one to talk with the NRC and one on a four-party line with the other ERFs. Overall, the inspector assessed communications in the TSC as an exercise strength.

The SRO on the four-party line maintained an event chronology on a flip chart, which kept the TSC staff apprised of key events. The event chronology flip chart sheets were posted on the wall as they were completed. This was done in two rows of four, one above the other (total of eight). After the first eight sheets were posted, subsequent sheets were posted on top of the earlier ones, eliminating them from view. However, by covering some sheets and not others, the event chronology was somewhat confusing, since personnel saw obsolete information at the same time as current information. The licensee should reassess this method of posting information.

The TSC staff provided excellent technical support for mitigation efforts. For example, the staff developed creative methods to provide core spray when all normal methods were lost and formulated a plan to provide long-term core cooling when the normal emergency core cooling systems had been rendered inoperable. The technical support from the TSC staff was assessed as an exercise strength.

All other expected actions in the TSC were done well. No exercise weaknesses were observed.

7.0 OPERATIONS SUPPORT CENTER (OSC)

7.1 OSC Performance

The performance of staff in the OSC was good. The OSC was staffed and operational in a timely manner. Noise levels and congestion were kept to a minimum, and a comfortable work environment was promptly established. Licensed operator support, in the communicator and support staff positions, was also a strength in the OSC. The OSC manager was knowledgeable of his duties and responsibilities and generally demonstrated good command and control. However, the periodicity of OSC staff briefings could have been increased.

Preimplementation briefings were conducted by the OSC management staff to discuss radiation exposure control, work methods, and travel routes with repair teams. Repair teams were dispatched in a timely manner, briefings and debriefings were conducted, communications with the teams in the plant were apparent, and no difficulties were observed by the inspector. Tracking of the teams and use of the task status board was well done. Radiation exposure was effectively monitored, and exposure was controlled well by radiological protection staff and discussed during team briefings. Procedure use was well demonstrated by in-plant teams, and the OSC staff was knowledgeable of the requirements for procedure adherence and any required deviations.

7.2 Post-Accident Sampling System (PASS)

The exercise scenario included obtaining a sample of the reactor coolant system. Such sampling is known as post-accident sampling and is used for performing radiochemical analysis for assessing fuel damage. When the technician attempted to collect the PASS sample, the device that delivers the coolant to the glass vial would not function because the size of the vial was too small to engage a lever switch that satisfies the logic to permit the sample collection to occur. The technician was able to collect the sample after adjusting the height of a vial. It took 3.5 hours from the time the PASS sample was requested to when the analysis was completed. Licensees are expected to complete the process in three hours. Part of the delay was attributable to a simulated medical emergency, which detained the health physics technician assigned to the PASS sample team. The licensee had not previously experienced problems with the PASS sampling process. A licensee controller estimated that with the medical emergency, the PASS sample analysis results should have been obtained in about 2 hours and 40 minutes. The licensee planned to investigate the smaller vial size by checking the size of the vials in storage, reviewing the procurement process, assessing the tolerance of the lever switch, and contacting the vendor. The inspectors considered the licensee's plan of action to be acceptable. The inspectors concluded that this isolated problem did not detract from the licensee's overall exercise performance.

8.0 EMERGENCY OPERATIONS FACILITY (EOF)

8.1 EOF Performance

Staffing and activation of the EOF was good. The EOF was reported to be staffed at 8:51 a.m. The ED arrived at 9:22 a.m. from the TSC and dose assessment and communications began at 9:25 a.m.

Recognition of the EALs and the subsequent declarations and notifications to off-site response organizations were timely and appropriate. The EOF team was very alert to changing plant conditions and compared them to the EALs in order to anticipate the need for future declarations. The EOF team members' frequent review of, and discussions about, the EALs enabled the timely declarations of the site area and general emergency classifications using the appropriate EALs.

Good command and control was observed. The ED held frequent discussions with, and provided directions to, the TSC staff with regard to various options and priorities to mitigate the simulated accident. The ED conducted frequent plant status briefings (about every 30 minutes) and whenever the emergency classification changed. During the briefings, the ED solicited and received input from the EOF staff. Logs and status boards were well maintained with appropriate information. Procedures were available and referred to frequently. The availability of operator aides, such as the Control Room Notification Flowchart from EAP 1.1, enhanced communications and decision making. The atmosphere in the EOF was quiet, calm, and professional. Pursuit of options to mitigate the simulated accident and to ensure that all resources remained available was aggressive. For example, the EOF was physically inspected for earthquake damage, a backup emergency generator was ordered for the EOF in the event that electrical power was lost, and planning for a second shift was undertaken in a timely manner.

Communications with the state and county were good. The ED frequently briefed state and county representatives to ensure that they remained cognizant of the situation.

8.2 Dose Assessment and Projection

The EOF radiological support coordinator (RSC) and his staff were ready to take the lead responsibility for off-site dose assessment by 8:46 a.m. The licensee added a radiological engineer (RE) position to its EOF dose assessment staff. (The REs are licensed operators.) The inspectors found that the information flow on potential release pathways between the EOF engineering staff and EOF dose assessment staff was excellent throughout the exercise.

The RSC and his staff provided dose assessments and protective action recommendations (PARs) to the ED in a timely and accurate manner and correctly updated the PAR when the wind direction changed. The updated PAR was also appropriate and timely.

The RSC's interaction with personnel from off-site agencies was assessed by the inspector as a strength. This assessment was based on the RSC's frequent, timely, and thorough briefings of the county representative. Additionally, field monitoring data from the licensee and county off-site teams were shared, and the teams were controlled in a complimentary manner in order to make the best use of available resources.

9.0 JOINT NEWS CENTER

The joint news center was well staffed and equipped to provide information from the ERFs and relay it to the public in a clearly understandable manner. Press releases were timely and accurate. Effective press briefings were conducted on a regular basis and when conditions changed. Security personnel satisfactorily controlled building access during the exercise. Licensee performance at the news center was good.

10.0 LICENSEE CRITIQUE

On October 19, 1995, the NRC inspection team attended the licensee's exercise critique. The critique covered all of the items observed by the NRC inspection team, as well as additional items. The team assessed the licensee's critique as being very good.

11.0 REVIEW OF NRC PREVIOUSLY-IDENTIFIED ISSUES

11.1 Open (IFI 50-333/95-12-01) Emergency Communications

During Inspection 95-12, the inspector determined that all site telephone lines go through a common area prior to leaving the site. Therefore, despite having several telephone systems (RECS, NYNEX, and the automatic ring-down lines), there was a potential for a single problem, such as fire, sabotage, or an inadvertent sprinkler system actuation, to disable all lines of communications.

During this inspection, the inspector interviewed the licensee's Emergency Preparedness Coordinator (EPC) to determine the status of corrective actions for the emergency communications issue. The licensee has installed four cellular telephone transmitters in four window offices on the perimeter of the TSC ventilation envelope. Currently, three telephone lines in the TSC and one in the plant control room go to each of the transmitters. Each transmitter has a battery backup. As presently configured, three more telephones can go through each transmitter for a total of 16 telephone lines. Additional telephone lines can be connected through each of the four transmitters, with minor equipment additions. The inspector observed the successful testing of one of the TSC telephones by the EPC when the cellular telephone was used to communicate with a regular telephone in the TSC. The inspector was informed by the EPC that the newly-installed cellular telephones can access four different cellular carrier companies. The inspector verified that site personnel were informed of the new telephone system by reviewing an e-mail message sent to those who may have to use the system.

The licensee will determine the minimum number of cellular telephone lines that would be needed in the event of an emergency with all other lines of communications disabled. These telephones/lines will be included in the regular surveillances for emergency equipment, and their usage will be proceduralized. The licensee will then conduct a drill in which only the new cellular telephone lines are used to determine their adequacy. Pending a successful drill, the licensee will then submit documentation supporting their corrective actions for this issue to the NRC for review. This item will remain open pending submittal of the supporting documentation.

11.2 Closed (IFI 50-333/95-12-02) Tone Alert Radios

During Inspection 95-12, the inspector was informed of a potential problem identified by the licensee concerning the distribution/availability of tone alert radios to individual residences within the 10 mile radius emergency planning zone (EPZ), which were potentially outside of siren coverage. Approximately 2000 households in the EPZ were initially provided with tone

alert radios. The licensee and the neighboring Nine Mile Point station had arranged for the county to be responsible for ensuring that all of the residences in the EPZ that were not covered by sirens would receive one tone alert radio. The county apparently did not assess the availability of tone alert radios following the initial distribution.

During this inspection, the inspector was shown documentation of the county's efforts to address the issue. Residences were identified that were eligible to receive tone alert radios by comparing property maps with a topographic map depicting the siren coverage. Residences not covered by sirens were entered into a database and compared to the existing database. The residences were then sent a brief letter pertaining to the tone alert radios and how they could obtain one, if needed. For those who did not respond to the first mailing, a second letter was sent. Finally, the county attempted to contact nonresponders via telephone. A media campaign was launched by the county to reinforce the mailings. Radio sound bites, newspaper articles, and brief cable television advertisements were used to inform the public about the tone alert radios. Two hundred additional radios were distributed. The inspector concluded that reasonable efforts had been undertaken to ensure that those members of the public who needed tone alert radios, had the opportunity to obtain one. This item is closed.

12.0 REVIEW OF THE EMERGENCY PLAN AND IMPLEMENTING PROCEDURES

An in-office review of revisions to the E-Plan and implementing procedures was completed prior to the inspection in the Region I office. The list of the documents and revisions that were reviewed are indicated below. The inspector concluded that the changes made were acceptable and did not decrease the effectiveness of the emergency preparedness program.

DOCUMENTS REVIEWED

<u>NO.</u>	<u>PROCEDURE TITLE</u>	<u>REVISION</u>
E-Plan	Section 5, Organization	26
E-Plan	Section 8, Maintaining Emergency Preparedness	17
IAP-2	Classification of Emergency Conditions	14
EAP-1.1	Off-site Notifications	32, 33
EAP-2	Personnel Injury	19
EAP-4	Dose Assessment Calculation	25
EAP-4.1	Release Rate Determination	3
EAP-8	Personnel Accountability	28
EAP-17	Emergency Staffing Organization	65, 66

DOCUMENTS REVIEWED (Cont'd.)

<u>NO.</u>	<u>PROCEDURE TITLE</u>	<u>REVISION</u>
EAP-43	Emergency Facilities Long Term Staffing	28
SAP-3	Emergency Communications Testing	45
SAP-7	Monthly Surveillance Procedure for On-Call Employees	26
SAP-20	Emergency Plan Assignments	7, 8, 9

13.0 CONCLUSIONS

Overall, the team assessed the licensee's performance during the exercise as very good. Positive attitudes were displayed by the exercise participants, who actively completed all their emergency response duties. All licensee exercise objectives were met. The licensee's critique was appropriately self-critical. The licensee successfully demonstrated its ability to implement the E-Plan and EIPs.

14.0 EXIT MEETING

The inspectors met with the licensee personnel listed in Detail 1.0 at the conclusion of the inspection to discuss the scope and findings of the inspection as mentioned above. The licensee acknowledged the findings and stated that they would be reviewed for appropriate corrective action.