U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-333/94-05

Docket No. 50-333

License No. DPR-59

Licensee: New York Power Authority (NYPA)

Facility Name: James A. FitzPatrick Nuclear Power Plant

Inspection Period: February 1 - 4, 1994

Inspectors: David Silk 3/2/94
D. Silk, Senior Emergency Preparedness Specialist Date
J. Laughlin, Emergency Preparedness Specialist
W. Maier, Emergency Preparedness Specialist

Approved By: W Maier for 3/3/94
R. Keimig, Chief Date
Emergency Preparedness Section

Areas Inspected: Emergency Preparedness (EP) readiness, including: program changes; emergency facilities and equipment, instrumentation, and supplies; organization and management control; emergency response organization (ERO) training; independent reviews/audits; and public information and off-site interfaces.

Results: The EP program was thoroughly implemented and administered. Emergency response facilities and designated equipment were operationally ready. Management involvement in the EP program was evident. ERO staffing levels were maintained with individuals qualified in the EP training program. Independent program audits were performed but lacked depth. No violations of regulatory requirements were identified.

DETAILS

1.0 Personnel Contacted

New York Power Authority

+* D. Ackley, Training
+* N. Avrakotos, Emergency Preparedness Coordinator
 * R. Barrett, General Manager, Operations
 G. Brower, Oswego County Emergency Management Director
 * P. Brozenich, Assistant Operations Manager
+ M. Colomb, General Manager - Support Services
+* S. Chubon, Training
 * F. Elder, Technical Services Manager
+* D. Lindsey, General Manager - Maintenance
+* J. McCarty, Senior Quality Assurance Engineer
+* E. Mulcahey, Operational Review Group
+ T. Plumpton, Shift Supervisor - Operations
+* M. Prarie, Assistant Emergency Preparedness Coordinator
 * H. Salmon, Resident Manager
+* J. Sipp, Manager, Radiological and Environment Services
 * D. Topley, Training Manager
+* D. Vandermark, Quality Assessment Supervisor
 * A. Zaremba, Operations Review Manager

Other licensee personnel were contacted during the inspection.

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 * W. Cook, Senior Resident Inspector
 * R. Keimig, Chief, Emergency Preparedness Section, Region I
+* J. Laughlin, Emergency Preparedness Specialist
+* W. Maier, Emergency Preparedness Specialist
+ J. Tappert, Resident Inspector

+ Denotes attendance at the entrance meeting.
 * Denotes attendance at the exit meeting.

2.0 Program Changes

2.1 Procedures

Changes made to the Emergency Plan (the Plan) and the Implementing Procedures during the past year were reviewed by the inspector in the Region I Office. A majority of the changes were administrative in nature, and those that were more substantial did not decrease the effectiveness of the Plan or the procedures. Several change packages were reviewed on site and

the inspector determined that the appropriate reviews had been conducted. The most significant change made was the deletion of Emergency Action Procedure (EAP) 18, Protective Action Recommendations (PARs). The PARs were incorporated into EAP-4, Dose Assessment Calculations. During the Plan review, the inspector noted an incorrect reference. When this was brought to the attention of the Emergency Preparedness Coordinator (EPC), he produced documentation which showed that it had been identified and was scheduled for correction. The inspector determined that the incorrect reference would not have caused confusion if an emergency were to occur because appropriate personnel (Emergency Directors (EDs)) knew of the error.

2.2 Emergency Action Levels

The Emergency Action Level (EAL) for screenwell intake water level was reviewed by the inspector due to a problem identified at another plant. In order to result in the declaration of a Notification of Unusual Event (NUE) or an Alert, intake water level would have to be above or below a specified range, in conjunction with a set wind speed at the plant. The further the level deviated from the normal range (with the set wind speed), the higher the classification. In order for a Site Area Emergency (SAE) to be declared, water level would be near the design high and low ranges for equipment operation. At high water levels, the threat is motor flooding while at low water levels, it is loss of net positive suction head. However, at the SAE, wind speed is not an input parameter for the EAL. Therefore, without the specified wind speed, the potential theoretically exists for levels to reach the SAE EAL without first triggering an NUE or an Alert. The most likely occurrence of an SAE would be due to low intake level caused by an ice buildup blocking lake water from the intake. The licensee is reviewing changes to the EAL that would remove the problem. The NRC will review this specific change in the next inspection (IFI 50-333/94-05-01).

3.0 Emergency Facilities, Equipment, Instrumentation, and Supplies

The inspector toured the control room, Technical Support Center (TSC), Operations Support Center (OSC), and Emergency Operations Facility and found all facilities in a good state of operational readiness. A random check of facility controlled procedures found that all revisions were current. The inspector also spot-checked facility equipment for proper calibration and operability and viewed emergency supply lockers against inventory lists to ensure that the required numbers of items were available.

3.1 Emergency Response Facilities

Since the last inspection, the TSC and OSC were converted to dedicated emergency response facilities. They were formerly dual-use facilities and required set up for emergency response operation. These dedicated facilities represented a significant EP program enhancement. These facilities functioned well in the December 1993 exercise that was observed by the station NRC resident inspectors.

3.2 Equipment

In the TSC, one of the two Health Physics Network (HPN) telephones and the Protective Measures Counterpart Link telephone were found to be inoperable. These telephones are part of the federal government FTS 2000 network and are used for NRC communications during an actual emergency. The licensee stated that the cause of the malfunction was a network problem and maintenance work had rendered these lines inoperable. When the maintenance was complete, both telephones worked properly. However the next day, the HPN line was again inoperable. The licensee determined that this was due to a faulty telephone, and replaced it immediately. That solved the problem.

The inspector found that the copy of EAP-8, Accountability, located at the OSC card reader, was revision 18 instead of the latest revision, number 19. The licensee immediately replaced this procedure with the correct revision. Also in the OSC, the inspector found emergency equipment in lockers that was not listed in Procedure SAP-2, Emergency Equipment Inventory, Revision 13, dated 6/10/93. This equipment, when required, was found to be calibrated properly and operational. A licensee representative stated that he was in the process of rearranging emergency equipment storage by placing more of it in the OSC. He said that SAP-2 would be revised to reflect the new arrangement. This revision will be reviewed in a future inspection to ensure that inventory lists accurately reflect storage locations (IFI 50-333/94-05-02).

The inspector found that the downwind survey kit, located in the Administration Building foyer adjacent to the OSC, contained seven silver zeolite filter cartridges instead of the 12 required by the inventory list. The licensee immediately replaced the missing cartridges. All other items checked were present in the proper amounts and all equipment was within the calibration period and operational. Also, all other kits checked by the inspector had the most recent procedure revision, contained all listed supplies and equipment, and properly calibrated instruments.

This program area was much improved since the last inspection.

4.0 Organization and Management Control

The inspector interviewed the Resident Manager (RM), General Manager (GM), Support Services, and the EPC, and reviewed the EP line organization and ERO status to assess management involvement and EP program administration.

4.1 Organization

The EPC's management chain was unchanged. The EPC reported to the GM Support Services, who reported to the RM. The RM stated that he talks with the EPC concerning EP issues on an as-needed basis. The EPC attends the morning department manager meetings where he can raise EP issues and he also makes a monthly presentation to those managers on the status of the EP program. The RM also stated that he occasionally met with county officials concerning

offsite issues and was negotiating with Niagara Mohawk Power Company (NMPC) (operator of two adjacent nuclear plants) on the formation of a new Joint News Center to be used by both utilities, at the NMPC's Syracuse office.

4.2 Management Involvement

During the last inspection, only the RM and GM Operations were qualified as EDs. Since then, the GM Support Services and GM Maintenance were also qualified as EDs. All four EDs were interviewed concerning their emergency manager duties and responsibilities. All demonstrated a very good knowledge level. Overall, management support and involvement in EP were evident at all appropriate levels.

5.0 EP Training

The inspector evaluated the programmatic implementation of EP training. Training and drill participation records for emergency response personnel were reviewed for completeness and accuracy. The inspector reviewed lesson plans and examinations for three functional EP areas. The inspector also interviewed the EP training coordinator and other training instructors and reviewed training procedures to determine if requirements were being met.

5.1 ERO Training

The inspector randomly sampled individuals in the ERO to determine the completion status of their functional training and 1993 drill participation. All of the individuals sampled had received proper training prior to their assignment into the ERO. Only one individual (a Shift Technical Advisor) did not participate in an EP drill or exercise prior to assignment in the ERO. The EP training coordinator stated that due to the operationally-oriented nature of that individual's EP duties, he considered the STA's operations simulator training equivalent to EP drill experience. The inspector reviewed the STA's duties during an emergency and concluded that they were not different from the normal operating duties. The inspector determined that the normal emergency operating procedure drills given as part of licensed operator training were adequate to ensure that STAs were prepared for emergency preparedness duties.

5.2 Records

The inspector also reviewed 1993 exercise and drill attendance records for individuals in significant ERO positions to determine if there was a sufficient variety in individuals in each position. The inspector determined that there was adequate participation during the twelve month period preceding the exercise.

The inspector examined training records and interviewed the EP training coordinator to determine if there was adequate training conducted on the revised 10 CFR Part 20 and the Environmental Protection Agency protective action guidelines (EPA PAGs) as they related to radiological dose assessment and protective action recommendations. These changes were

reflected in EAP-4. EAP-4 was revised in December, 1993. The inspector determined that almost all of the personnel in ERO positions who required training in EAP-4 had been trained before the revision was implemented. The inspector also found that the training coordinator was aware of the training completion status. He indicated that he expected to have all individuals trained in the near future. The inspector concluded that the training effort for the new regulation and guidelines was effectively implemented and timely.

5.3 Lesson Plans

The inspector reviewed lesson plans for three functional areas of the EP curriculum: Radiological Assessment, Emergency Director/Coordinator Training, and Emergency Plan Indoctrination for Essential Personnel. Lesson plans were performance-based for the specific position being taught. Lesson plans were found to be detailed with many references to procedures, forms, and plans. The inspector noted that a revision history was kept in the front of each lesson plan and that frequent revisions were made and documented. Lesson plans were revised as soon as revisions were made to procedures or the Plan. The inspector interviewed the training coordinator to determine how he ensured that changes to the Plan and procedures were reflected in lesson plan revisions. He stated that since he was in the technical review chain for Plan revisions and since he was a record copy holder, he had several ways to learn of Plan or procedure revisions and could modify lesson plans accordingly. The inspector was satisfied that the lesson plans were being maintained adequately and that they were updated in a timely manner.

5.4 Respirator Qualifications

The inspector reviewed training procedures and interviewed training instructors to determine if emergency response personnel were adequately trained in the use of respiratory protection and that their qualifications were current. The instructors demonstrated the computerized data base that tracks respirator qualifications for employees with access to the radiologically controlled area. The inspector noted that the data base has the capability of providing reports on individuals whose qualifications are expiring. The instructors also showed how a particular person's qualification status could be immediately determined. The inspector found training procedures that ensure all employees who are granted access to the radiologically controlled area are expected to qualify on respiratory equipment unless they have a disqualifying medical condition. The inspector noted that the training procedures included the types of respiratory protection to be used by ERO members.

5.5 Emergency Director Interviews

The inspector interviewed four EDs and two Shift Supervisors (SSs) to assess the quality of emergency response manager training. All stated that they had received their annual EP requalification training. Each ED stated that he had participated in a drill within the last year; however, the SSs had not functioned in the ED position since 1992. The inspector questioned the EPC concerning SS training since ERO qualification is dependent on drill participation every

18 months. The EPC stated that training credit is given to SSs for such positions as control room phone talker, not just the SS position itself. The inspector stated that SSs should receive periodic training requiring emergency decision-making as well, since that is their primary emergency function. This issued will be reviewed in the next inspection (IFI 50-333/94-05-03).

The six interviewees were asked questions concerning their emergency responsibilities, including ERO mobilization, classification of events, PARs, and arrival of an NRC site team. All were very familiar with the Emergency Plan Implementing Procedures. They used EALs to make correct event classifications, and used the PAR flowchart in EAP-4 to issue PARs that would protect the public. However, they had not received training on the arrival of the NRC Site Team and were not very familiar with the associated responsibilities. The EPC acknowledged that emergency managers had not received this training and said it would be considered in the future. Overall, the quality and depth of emergency response manager training was very good.

5.6 Summary

The inspector determined that the EP training program was adequately maintained and that personnel were properly trained on EP subjects.

6.0 Independent Reviews/Audits

The inspector examined the EP audit program for adequacy of coverage and timeliness of corrective actions. The inspector reviewed the report of the 1993 independent annual EP audit that was conducted by the White Plains Office and interviewed the lead auditor and also a site quality assurance (QA) auditor. The inspector also reviewed a site QA audit report for an audit completed in October, 1993. In addition, the inspector reviewed the Action/Commitment Tracking System (ACTS) backlog for the EP department and interviewed the EPC and the Assistant EPC.

6.1 Audit Quality and Content

The 1993 independent annual review of the EP program, required by 10 CFR Part 50.54(t), had no findings or recommendations; however, the inspector noted that it contained several suggestions for improvements to the program in the body of the report. The inspector reviewed these with the EPC and his assistant and was informed that these suggestions were considered. The audit also contained excerpts of previous audits that were conducted by the site QA department, as well as descriptions of earlier NRC and FEMA report findings. Some of these site QA audit results were restated in the audit in great detail. By restating these earlier findings the independence of the audit was questioned. The Plan specifically states that the 50.54(t) review will be an independent review.

The audit report also commented on the adequacy of site exercises. The audit was conducted over a period of four days by a team of three auditors. The auditors observed an ingestion pathway exercise conducted by the Niagara Mohawk Power Corporation at the adjacent Nine

Mile Point plant. The auditors used this exercise as the basis for their evaluation of NYPA's exercise capabilities despite the fact that the licensee's (NYPA) participation was limited to assisting at the Joint News Center in Oswego, NY and establishing a reception center at the state fairgrounds in Syracuse. The inspector did not consider these limited activities to provide a sufficient basis for determining the adequacy of licensee's exercise capability. The inspector did note, however, that the site QA department observed the exercises and drills that were conducted. He concluded that there was adequate observation of these activities by independent auditors.

6.2 Interviews

The inspector also interviewed a site QA auditor and reviewed the report that was prepared following a October, 1993 audit. The auditors used NUREG-0654 (Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants) as an audit plan. The inspector verified the findings and recommendations of that report were being tracked in the ACTS system and that EP personnel were aware of their status.

6.3 Tracking System

In addition, the inspector reviewed the ACTS backlog and interviewed EP personnel to determine the status of corrective actions. The ACTS backlog contained 43 items, two of which were overdue by three days. The EPC showed the inspector significant items are coded with due dates that cannot be revised without justification. The inspector was satisfied that the EPC was well aware of the items on the ACTS list and was tracking their resolution.

6.4 Summary

The inspector concluded that the EP program audits and reviews were potentially weak although this NRC inspection found no significant discrepancies in the program. The inspector informed the licensee that further development of the 50.54(t) audit effort is needed to ensure adequate coverage and independence, i.e., less reliance on the work of others. Licensee representatives stated during the inspection and at the exit meeting that the audit program would be enhanced in the near future. This area will be reviewed further in the next inspection (IFI 50-333/94-05-04).

7.0 Public Information and Off-site Interface

To determine if 10 CFR 50.47(b)(7) and 10 CFR 50, Appendix E, Section IV.D.2. (emergency planning information) continued to be met, the inspectors reviewed the Plan and interviewed the Oswego County Emergency Management Director.

7.1 Public Information

Information sent to the public annually contained items that fulfilled the licensee's commitments as stated in the Plan. The information was presented clearly and provided points of contact for further information. Emergency Response Planning Areas (ERPAs) with bus pickup points were schematically presented. Also, a schedule of the siren tests for the upcoming year was provided in the information to alert the public of future siren soundings.

7.2 Offsite Interface

The Oswego County Emergency Management Director was asked about items in The Code of Federal Regulations that pertain to offsite interfaces by the licensees. With regard to public information, emergency response training, annual EAL training, availability of audit reports, and communications with the county, the director stated that the site staff were very responsive and supportive. Site personnel were prompt in installing a new dose projection computer for the county. The county has also been advised about the revision to the EALs. Overall, he indicated that they had an excellent working relationship with the station's EP staff.

The inspector reviewed the documentation pertaining to the annual meeting held on December 16 and 17, 1993 that was sponsored by the NMPC and NYPA licensees for the county and state agencies. The topics included plant implementation of the new 10 CFR 20, EPA-400 dose concepts and issues, the new site dose model, NUMARC EALs, and a thorough review of the current EALs. The documentation indicated that the meeting was well attended by offsite agencies and the topics were presented in sufficient scope and depth.

8.0 Exit Meeting

The inspectors met with the licensee personnel denoted in Section 1 at the conclusion of the inspection to discuss the inspection scope and findings. The licensee acknowledged the findings and stated their intention to evaluate them for further action as appropriate.