

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-286/84-27

Docket No. 50-286

License No. DPR-64 Priority - Category C

Licensee: New York Power Authority
P. O. Box 215
Buchanan, New York 10511

Facility Name: Indian Point 3 Power Plant

Inspection At: Buchanan, New York

Inspection Conducted: November 27-30, 1984

Inspectors: Craig Z. Gordon
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Emergency Preparedness Specialist

2-19-85
date

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Inspection Summary:
Inspection on November 27-30, 1984, Report No. 50-286/84-27

Areas Inspected: Special announced emergency preparedness inspection and observation of the licensee's annual emergency exercise performed on November 27-30, 1984. The inspection involved 226 inspector-hours by a team of eight NRC and NRC contractor personnel.

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

DETAILS

1. Persons-Contacted

The following licensee representatives attended the exit meeting on November 30, 1984:

- D. Bell, Emergency Preparedness Engineer
- R. Bowman, Office Manager
- J. Brons, Resident Manager
- K. Chapple, Director, Nuclear Operations and Maintenance
- J. Cirilli, Quality Assurance Superintendent
- R. Deschamps, H.P. Supervisor
- C. Faison, Supervisory Emergency Preparedness Engineer
- S. Golemi, Personnel Manager
- J. Hahn, Security Supervisor
- W. Hamlin, Assistant to Resident Manager
- W. Josiger, Acting Vice President, Generic Support
- J. Kelly, Manager, Rad. Health and Chemistry
- L. Lomonaco, Assistant to Rad. and Env. Services Superintendent
- S. Masciulli, Supervisory Radiol. Engineer
- M. Mozzor, Training Specialist
- S. Munoz, Technical Services Superintendent
- C. Patrick, Nuclear Information Programs Manager
- M. Peckham, Emergency Preparedness Analyst
- J. Perrotta, Radiol. and Environ. Services Superintendent
- D. Quinn, Senior Rad. Engineer
- J. Russell, Superintendent of Power
- P. Saunders, H.P. Supervisor
- C. Spieler, Vice President, Public Relations
- E. Tagliamonte, Operations Superintendent
- J. Vignola, Maintenance Superintendent
- C. Webb, Site Services Manager
- J. Wollak, Information Officer
- S. Zulla, Vice President, Nuclear Support

The team observed and interviewed several licensee emergency response personnel, controllers, and evaluators as they performed their assigned functions during the exercise.

2. Emergency Exercise

The Indian Point 3 Nuclear Power Plant's full-scale exercise was conducted on November 27, 1984 from 6:15 a.m. until 7:00 p.m.

a. Pre-Exercise Activities

Prior to the emergency exercise, NRC Region I and FEMA Region II representatives had meetings and telephone discussions with licensee representatives to discuss the scope and content of the exercise

scenario. As a result, minor revisions were made by the licensee in order to clarify certain objectives and simulations.

NRC observers attended a licensee briefing and simulator training on November 27, 1984, and participated in the discussion of emergency response actions expected during the various phases of the scenario. The licensee stated that certain emergency response activities would be simulated and that controllers could intercede in activities to prevent both scenario deviations and disturbing normal plant operations.

The exercise scenario included the following events:

- Injury and contamination of a maintenance worker requiring transport to an offsite hospital;
- Gradual degradation of containment integrity;
- Incomplete closure of an accumulator check valve causing an RCS leak;
- Fire in the auxiliary boiler feedpump building;
- Double ended cold leg rupture causing a large break LOCA and fuel damage;
- Release of radioactivity to the atmosphere through a pressure relief valve;
- Declaration of unusual event, alert, site area, and general emergency classifications; and
- Plant stabilization, cool down, and demonstration of recovery efforts.

The above events caused the activation of the licensee's onsite emergency response facilities.

b. Activities Observed

During the conduct of the licensee's exercise, eight NRC team members made detailed observations of the activation and augmentation of the emergency organization; activation of emergency response facilities; and actions of emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

- Detection, classification, and assessment of the scenario events;
- Direction and coordination of the emergency response;

- Notification of licensee personnel and offsite agencies of pertinent information;
- Communications/information flow, and record keeping;
- Assessment and projection of radiological dose and consideration of protective actions;
- Provision for in-plant radiation protection;
- Performance of offsite and in-plant radiological surveys;
- Maintenance of site security and access control;
- Performance of technical support;
- Performance of repair and corrective actions;
- Performance of first-aid and rescue;
- Assembly and accountability of personnel;
- Fire fighting; and
- Management of accident recovery operations.

c. Exercise Observations

The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, and actions and use of the facilities were generally consistent with their emergency response plan and implementing procedures. The team also noted the following actions of the licensee's emergency response organization that were indicative of their ability to cope with abnormal plant conditions:

- Emergency response personnel were knowledgeable in their roles and assignments and in use of emergency plan implementing procedures. Individuals were conscientious and in general, demonstrated competency in performing assigned functions.
- TSC managers demonstrated effective control of TSC activities, communicated appropriate recommendations, and provided periodic briefings and updates to TSC personnel.
- The Radiological Communicator kept the offsite monitoring teams apprised of plant status, emergency classifications, and changing plant conditions.
- Dose assessment results were found to be accurate and the procedure for performing offsite dose calculations was effectively utilized.

- Onsite communications capability between each emergency response facility provided for efficient information flow.
- Discussion for recovery and reentry was well coordinated between the site and Recovery Center and covered the major concerns associated with short-term and long-term corrective actions.

d. Open Items

The NRC team identified the following areas for licensee improvement (the licensee conducted an adequate self-critique of the exercise which also identified some of these areas):

- (Open) 50-286/84-27-01: Communications between the NPO's dispatched to the fire scene and the Control Room staff were such that the fire was not immediately confirmed, thereby delaying declaration of the Site Area emergency. Also, the decision to investigate the fire should have included more than one individual since available personnel were on standby at the OSC.
- (Open) 50-286/84-27-02: Preplanning of security measures throughout the facility needs further consideration regarding the number of emergency personnel expected during all phases of response and recovery.
- (Open) 50-286/84-27-03: After accountability is verified, the number of emergency personnel required in the OSC should be determined in order to avoid unnecessary crowding, excessive noise, and congestion.
- (Open) 50-286/84-27-04: The OSC emergency procedure was not followed in that the OSC Manager did not designate himself as being in charge nor identify individual team leaders before and after shift changes.
- (Open) 50-286/84-27-05: Although the offsite monitoring teams were properly positioned, Iodine measurements were not taken immediately following the release since the radiological communicator did not make the appropriate request.
- (Open) 50-286/84-27-06: Confusion was observed among key EOF players regarding the status of protective measures actually implemented offsite compared with the protective actions recommended by the licensee.
- (Open) 50-286/84-27-07: Communications capability should be provided in the Recovery Center to allow continuous monitoring of Control Room, TSC, and EOF activities so that updates and changes can be determined by Recovery Center staff as they occur.

- (Open) 50-286/84-27-08: Repair and corrective action teams who were dispatched to investigate the pipe leak were not promptly sent to the appropriate area.
- (Open) 50-286/84-27-09: The use of evacuation (red) and shelter (yellow) overlays on the EOF display map has the potential to interfere with dose assessment capability since the map is used for two purposes, i.e., to display areas in which protective actions have been recommended and aiding in projections of radiological dose. On at least two occasions plume overlays were used incorrectly.

e. Recurring Items

The following area was found to recur from previous NRC assessments:

- (Open) 50-286/84-27-10: Accountability of onsite personnel and a determination of the names of missing individuals was not achieved within 30 minutes after declaration of the Site Area emergency.

f. Exercise Critique

The NRC team attended the licensee's post-exercise critique on November 30, 1984 during which the key licensee controller discussed observations of the exercise. The licensee participants highlighted both areas for improvement (which the licensee indicated would be evaluated and appropriate action taken) and areas in which improvements have been made. Specific improvement areas which were identified related to crowding and access control at the EOF, communications problems in areas of security, OSC, and survey teams, and delays in accountability of personnel. Improvements were made in Control Room/TSC information flow, activation of emergency response centers, and implementation of offsite protective measures.

3. Exit Meeting and NRC Critique

Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1. The team leader summarized the observations made during the exercise. The team leader noted that the issue of accountability was a recurring item.

The licensee was informed that no violations were observed and 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 which would adequately provide protective measures for the health and safety of the public.

Licensee management acknowledged the findings and indicated that appropriate action would be taken regarding the identified improvement areas. At no time during this inspection did the inspectors provide any written information to the licensee.