# U.S. NUCLEAR REGULATORY COMMISSION REGION I

Report No. <u>50-286/90-08</u>

Docket No. <u>50-286</u>

License No. DPR-64

Licensee:

<u>New York Power Authority</u> <u>P.O. Box 215</u> <u>Buchanan, New York 10511</u>

Facility Name: Indian Point, Unit 3 Nuclear Power Plant

Inspection At: <u>Buchanan, New York</u>

Inspection Conducted: June 5-7, 1990

Inspectors:

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Inspection Summary: Inspection on June 5-7, 1990 (Report No. 50-286/90-08)

<u>Areas Inspected:</u> Routine, announced emergency preparedness inspection and observation of the licensee's on-site emergency exercise conducted June 5-7, 1990.

<u>Results:</u> No violations, deviations or unresolved items were identified. The licensee's emergency response actions demonstrated in this exercise provided adequate protective measures for the health and safety of the public.

# **Details**

1.0 Persons Contacted

## New York Power Authority

- \*M. Albright, Superintendent Instrumentation and Controls
- \*D. Bell, Emergency Planning Coordinator
- \*C. Caputo, Technical Services Superintendent
- \*M. Chaubard, Emergency Planning Specialist
- \*K. Dulgerian, Quality Assurance Engineer
- \*C. Faison, Supervisory Nuclear Emergency Preparedness Engineer
- \*T. Forte, Information Officer
- \*T. Gander, Radiological and Environmental Training Supervisor
- \*J. Kelly, Manager of Radiological Health and Chemistry
- \*J. Kahabka, Senior Nuclear Emergency Director
- \*D. Mayer, Senior Radiological Engineer
- \*M. Morrissey, Technical Services Department
- \*C. Patrick, Director Nuclear Policy and Information
- M. Peckham, Assistant to Resident Manager
- \*J. Perrotta, Superintendent of Power
- \*D. Quinn, Radiological and Environmental Services Superintendent
- \*J. Russell, Resident Manager
- \*D. Sporbert, Operations Coordinator

The inspectors also observed the actions of, and interviewed other licensee personnel.

\*Denotes those present at the exit interview on June 7, 1990.

# 2.0 Licensee Action on Previously Identified Inspection Findings

The following findings were identified during the previous exercise. Based upon observations made by the NRC team during this exercise, review of the scenario, and information provided by the controllers, the following items were successfully demonstrated and are closed.

• During the start of the 1989 annual exercise, there were players within the Control Room boundary while the plant was operating at power. These players encroached upon that area and the real-time shift supervisor in the Control Room had to request these personnel to move to the area prescribed for drills/exercises which is outside the Control Room boundary. During this exercise, the exercise participants kept their encroachment to an essential minimum and the real-time shift supervisor did not appear to be impacted.



• The second shift personnel remained at their duty stations throughout the exercise and did not relieve anyone nor were they dismissed so that they could rest in the event the emergency lasted more than 12 hours. During this exercise, the licensee conducted a split shift which allowed for the second shift personnel to leave the emergency response facility and obtain rest.

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• Page announcements at the Security Building were inaudible. During this exercise, page announcements at the Security Building were audible.

### 3.0 <u>Emergency Exercise</u>

The Indian Point Unit 3 Nuclear Power Plant on-site announced exercise was conducted on June 6, 1990 from 7:15 a.m. to 1:15 p.m. The state of New York and the local governments did not participate and the Federal Emergency Management Agency did not observe.

### 3.1 <u>Pre-Exercise Activities</u>

The exercise objectives submitted to NRC Region I on February 21, 1990, were reviewed and determined to be adequate to test the licensee's emergency plan. On April 4, 1990, the licensee submitted the complete 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. As a result, minor revisions were made to the scenario which allowed adequate testing of the major portions of the Indian Point Unit 3 Nuclear Power Plant Emergency Plan and Implementing Procedures and also provided the opportunity for licensee personnel to demonstrate those areas previously identified by the NRC as in need of corrective action. Suggested changes to the scenario made by the licensee were discussed during a pre-exercise briefing. The licensee stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities to prevent scenario deviations or disruption of normal plant operations.

## 3.2 Exercise Scenario

The exercise scenario began with a plant shutdown as required by the plant's technical specifications, toxic gas released in vicinity of the site, loss of coolant accident; and loss of two of three fission barriers and potential loss of the third. Other aspects of the scenario involved demonstration of the ability to conduct and maintain accountability throughout the exercise and to search and rescue a missing person.

### 3.3 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 Facilities (ERFs) and the Emergency Response Organization (ERO) staff and actions of ERO staff during operations of the ERFs. The following activities were observed:

- Detection, classification, and assessment of scenario events;
- Direction and coordination of emergency response;
- Staffing and augmentation of the emergency organization and response facility activation;
- Notification of licensee personnel and off-site agencies;
- Communications/information flow, and record keeping;
- Assessment and projection of off-site radiological dose and protective action recommendation decision making, and
- Engineering analysis and accident mitigation techniques.

#### 4.0 Classification of Exercise Findings

Emergency Preparedness exercise findings are classified as follow:

#### 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.

#### Exercise Weaknesses

Exercise weaknesses are areas of the licensee's response in which the performance was such that it could have precluded effective implementation of the Emergency Plan in the event of an actual emergency in the area being observed. Existence of an exercise weakness does not of itself indicate that overall response was inadequate to protect the health and safety of the public.

# Areas for Improvement

An area for improvement is an area which did not have a significant negative impact on the ability to implement the Emergency Plan and response was adequate. However, it should be evaluated by the licensee to determine if corrective action could improve performance.

### 5.0 Exercise Observations

The inspectors observed licensee response actions in the emergency response facilities.

### Control Room

The following exercise strengths were identified:

- Prompt classifications made in anticipation of initiating conditions.
- Excellent knowledge of and use of plant Technical Specifications.
- Good discussions on ways to possibly repair MOV 731 and containment air lock door.

No exercise weaknesses were identified.

The following areas for improvement were identified.

- The shift technical advisor was assigned duties other than stated in NYPA Administrative Procedure 1, Plant Staff Organization and NYPA Emergency Plan, Volume 1, Sec. 5.1.12.D.
- Equipment and General Information status boards were not kept current.

## **Operations Support Center (OSC)**

The following exercise strength was identified.

• The repair team members sent to the warehouse were able to locate required parts in short time with no assistance from warehouse personnel.

No exercise weaknesses were identified.

The following areas for improvement were identified.

- Plant page announcements were barely audible in the OSC such that the OSC was not aware of RCS leakage increase at 0952 hours.
- The release had been declared as stopped (scenario) at 1315 hours but the repair team had not yet been dispatched to the auxiliary building and could not have actually stopped the leak for at least two additional hours.

# Technical Support Center (TSC)

The following exercise strengths were identified.

- The Mechanical Engineer performed a very good analysis of air lock repair and maintained close coordination with respect to the repair by the OSC.
- The Mechanical Engineer foresaw the need for hydrogen recombiners and planned staff and operations requirements for their use.
- The Reactor Engineer promptly and accurately used IP 1028, "Core Damage Assessment", and did an excellent job of handling data inconsistencies.

No exercise weaknesses were identified.

The following areas for improvement were identified.

- Emergency Operations Procedures are available to the TSC but were not used to support the Control Room.
- Implementing Procedure 1028 used for Core Damage Assessment should list the exposure rate due to the iodine spike following reactor shut down.
- Although TSC staff devised a workable plan to seal the containment air lock leak, the plan was not assessed to assure it would work and no contingency plans were developed if it was not successful.

### Emergency Operations Facility (EOF)

The following exercise strengths were identified.

• Excellent command and control exhibited by the Emergency Director.

- Very good off-site monitoring team briefings given by the Offsite Radiation Communicator.
- Good "what if" dose projections made and then correlated with actual offsite readings.
- Control of access to EOF was very good.

No exercise weaknesses were identified.

The following area for improvement was identified.

• Present position of the Security Guards precludes them from being kept informed of plant status.

# 6.0 <u>Licensee Critique</u>

The NRC Team attended the licensee's critique on June 7, 1990, during which the licensee's lead controllers discussed observations of the exercise. The licensee's critique was adequate. The licensee indicated that these observations would be evaluated and appropriate corrective actions taken.

# 7.0 Exit Meeting

Following the licensee's self critique, the NRC team met with the licensee's representatives listed in Section 1 to discuss findings as detailed in this report.

The NRC Team Leader summarized the observations made during the exercise. The licensee was advised no violations, deviations, unresolved items or exercise weaknesses were identified. Although areas for improvement were identified, the NRC team determined that within the scope and limitations of the scenario, the licensee's performance demonstrated 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.