

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-220/87-19
50-410/87-31

Docket Nos. 50-220
50-410

License Nos. DPR-63 Priority _____ Category C
NPF-54

Licensee: Niagara Mohawk Power Corporation
301 Plainfield Road
Syracuse, New York 13212

Facility Name: Nine Mile Point Units 1 & 2

Inspection At: Scriba, New York

Inspection Conducted: August 25-27, 1987

Inspectors: [Signature]
T. Tuccinardi, Team Leader, EP&RPB, DRSS

10/7/87

Date

[Signature]
E. Fox, EP Section, EP&RPB, DRSS

10/7/87

Date

C. Conklin, EPS
W. Thomas, EPS
G. Stoetzel, PNL
W. Cook, SRI
C. Marshal, RI
W. Schmidt, RI

Approved by: [Signature]
W. Lazarus, Chief, EPS, EP&RPB, DRSS

10/7/87

Date

Inspection Summary: Inspection on August 25-27, 1987 (Report Nos.
50-220/87-19, 50-410/87-31)

Areas Inspected: Routine announced emergency preparedness inspection and observation of the licensee's partial emergency exercise conducted on August 26, 1987. The inspection was performed by a team of eight NRC regional, resident and contractor personnel.

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



DETAILS

1.0 Persons Contacted

T. J. Chwalek, Emergency Coordinator
T. Roman, Station Superintendent
T. Lempges, Vice President, Nuclear Generation
T. Perkins, General Superintendent
F. Kaish, Joint News Center, Director
E. W. Leach, Radiation Protection Manager
A. L. Salem, Assistant Emergency Coordinator
R. B. Burtch, Jr., Director, Nuclear Information
G. Burgess, Assistant Emergency Coordinator
B. Drews, Technical Superintendent
L. Wolf, Site Licensing Engineer
K. F. Zollitsch, Training Superintendent
S. W. Wilczer, Jr., Manager Nuclear Technology

In addition, other licensee personnel were contacted, interviewed and observed during the inspection.

2.0 Emergency Exercise

The Nine Mile Point Nuclear Power Plant announced exercise was conducted on August 26, 1987 from 6:15 a.m. to 2:30 p.m.

2.1 Pre-exercise Activities

The exercise objectives, submitted to NRC Region I on June 11, 1987 were reviewed and determined to adequately test the licensee's Emergency Plan. On July 6, 1987, 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 Emergency Plan (EP) and the 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.

NRC observers attended a licensee briefing on August 25, 1987. Suggested NRC changes to the scenario were made by the licensee in the areas of technical support and radiological data. The licensee stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities to prevent disruption of normal plant operations.



2.2 Scenario

The exercise scenario included the following key events:

1. Loss of torus integrity
2. Spent fuel pool level decrease
3. Technical Support Center (TSC), Operations Support Center (OSC), and Emergency Operations Facility (EOF) activation
4. Major feedwater line break
5. Site evacuation
6. Core spray initiation
7. Core spray sparger failure and resulting fuel damage
8. Atmospheric release
9. Use of Post Accident Sampling System
10. In-Plant, onsite, and offsite radiological monitoring
11. Dispatch of teams from the OSC
12. Formulation of Protective Action Recommendations

2.3 Activities Observed

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

1. Recognition of initiating conditions, correlation of these with Emergency Action Levels (EALs), selection and use of emergency operation procedures; and completion of notification to offsite governmental authorities.
2. Staffing and activation of ERFs.
3. Communication between and within ERFs.
4. Formulation of Protective Action Recommendations.
5. Performance of technical support, repair and corrective actions.
6. Assembly and accountability of personnel.
7. Capability of the Health Physics organization to maintain radiological controls.
8. Ability of Joint News Center to develop and release clear, concise, and timely news releases.



3.0 Exercise Observation

3.1 The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, 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.

1. Procedures, including use of activation check lists, were well used in the EOF.
2. Good information flow and use of status boards within the EOF were exhibited.
3. Good technical discussions occurred between staff and personnel manning plant facilities and between emergency response facilities.
4. Protective action recommendations (PAR) were prompt and conservative. All PAR's were made in consultation with offsite officials. There was good interaction between offsite officials and the licensee.
5. TSC and OSC organization personnel were decisive and calm, and showed good command of their job functions.
6. Good communications use of procedures and use of P&ID's were noted in the control room. Reliable voice communications were established and maintained throughout the drill with the control room, TSC and EOF.
7. The OSC was activated and fully functional in a timely manner.
8. Assignment of OSC personnel to perform specific tasks requested by the control room or TSC was done in a timely manner. Clear instructions were given to assigned team members during briefings prior to dispatch from the OSC.

3.2 The NRC identified the following areas of concern that need to be evaluated by the licensee. The licensee conducted an adequate self critique of the exercise that also identified some of these areas.

1. The present arrangement of the OSC facilities does not ensure that all personnel actively assigned to the OSC are accounted for at all times as required by EAP-3.



2. EOF activation was delayed while waiting for the technical liaison staff member (TLSM). Activation could have taken place without this staff member or a temporary TLSM assigned.
3. The plant conditions for EAL declassification per station procedure EPP 24 were not met. Condition of the core was not known, and declassification of the EAL served no useful purpose.
4. The inspector noted two people in the TSC did not receive emergency TLD's when required.
5. Radiological assessment group in the EOF was slow in performing the initial dose assessment after the initial release. It took approximately 25 minutes to get the results. This appeared to be due to a problem in getting release rate data.
6. There was no place on the status boards in the EOF to display whole body and thyroid dose rate at the site boundary.
7. The initial accountability of onsite personnel was accomplished within 22 minutes and 129 people were listed as being missing. Subsequent actions by the personnel accountability team members located all except one individual within an hour. Later it was determined that the missing individual was not on site and had not been onsite for over a month. (During the previous exercise, accountability was accomplished within 30 minutes and with 147 people identified as missing). Accountability should not be considered complete until the licensee has a bona fide listing of persons who cannot be accounted for. This item is unresolved (50-220/87-19-04).
8. The control of OSC trades personnel staged for use by the OSC Coordinator (OSCC) was inadequate. The OSCC did not maintain a log of trades people available and continue accountability of these personnel after initial accountability was complete. These personnel were staged for use outside the OSC facility. When a plume exposure was possible in the scenario, sheltering was not provided. Access to the OSC was through a number of unlocked doors to the outside, none of which had step-off pads, frisking equipment, or health physics technicians. The licensee was informed that this would be reviewed in a subsequent inspection. (50-220/87-19-02)



4.0 Scenario Related Areas of Concern

1. During the exercise, the control room operators did not recognize the loss of containment or the feed line break in a timely manner. However, the untimely recognition of these changes in plant conditions was the fault of the scenario. The scenario had simultaneous multiple equipment failures at unlikely points in the scenario, causing the operators to misdiagnose plant conditions. Additionally, the quality control performed on data sheets prior to the exercise did not correct incompatibilities between data sheets and real plant characteristics. The licensee was informed that this would be reviewed in a subsequent inspection. (50-220/87-19-01)
2. Radiological data for the exercise was obtained from the plant process computer. The computer is ordinarily used by control room personnel for plant conditions, but cannot be used simultaneously for both purposes. When it was used for the exercise, the plant process computer shut down for two fifteen minute periods, placing the real time plant in a Limiting Condition for Operation. The licensee was informed that this would be reviewed in a subsequent inspection. (50-220/87-19-03)

5.0 Licensee Action on Previously Identified Items

Based upon discussions with licensee representatives, observations of the exercise, and review of records, the following items were not repeated and are closed.

1. (Closed) 50-220/86-22-05, 50-410/86-58-05 IFI
The licensee should evaluate the crowded and noisy conditions of the Operations Support Center.

During the exercise congestion and noise within the OSC were maintained at minimum levels. Crowding conditions within the OSC were averted. All briefing of teams dispatched from the OSC were conducted in the corridor outside of the OSC. Damage assessment and repair operations were not impacted by the accountability procedure. Damage control teams were dispatched from the OSC in a timely manner.

2. (Closed) 50-220/86-22-07, 50-410/86-58-07 IFI
The accountability of onsite personnel resulted in two weaknesses: training of individuals on the proper use of the computerized accountability system; and re-evaluation of the plant paging system, especially on Unit 2 side of the plant.

Training of individuals on the proper use of the computerized accountability system was accomplished during quarterly drills in 1986 and 1987. Training has been effective as evidenced by the



rapid response of the personnel accountability system, security, and accountability team members. With the decrease in construction activity at Unit-2 re-evaluation of the plant paging system is no longer an issue. During the exercise the plant page was audible in all areas.

3. (Closed) 50-220/85-10-02 IFI
Control room logs not maintained.

Event reconstruction logs for the control room and operations support center were verified to be adequately maintained.

4. (Closed) 50-220/86-22-03, 50-410/86-58-03 IFI
The coordination and flow of information between CR, TSC, and EOF needs to be improved.

The coordination and flow of information between control room, technical support center and emergency operation facility were excellent. In some instances redundant logs were maintained.

5. (Closed) 50-220/86-22-01, 50-410/86-58-01 IFI
The station superintendent didn't maintain a written log or effectively utilize the control room communicator as specified by EAP-3.

The licensee demonstrated the effective use of logs and the effective use of the Control Room communicator during the exercise.

6. (Closed) 50-220/86-22-02, 50-410/86-58-02 IFI
The SSS was distracted by requests from TSC/OSC for verbal authorization of Radiation Work Permits (RWP).

Authorization of RWP's from TSC and OSC was verified to be performed in a timely and orderly fashion with a minimum of distraction for SSS.

7. (Closed) 50-220/86-22-04, 50-410/86-58-04 IFI
Notifications and follow-up messages to offsite agencies need to be improved.

Notification and Follow-up messages to offsite agencies were verified to include sufficient information to ensure an appropriate offsite response to be accurate, clear and well documented.

8. (Closed) 50-220/86-22-06, 50-410/86-58-06 IFI
Licensee, state, and county PAR's were inconsistent.

The licensee, state and county representatives were verified to work well together and to communicate frequently to ensure consistency of PAR's.



6.0 Exit Meeting and NRC Critique

The licensee was informed no violations were observed; and previously identified items were adequately addressed. Although there are areas of concern identified, the NRC team determined that within the scope and limitation of the scenario, the licensee's performance demonstrated they could implement their Emergency Plan and emergency procedures in a manner that would adequately provide protective measures for the health and safety of the public.

Licensee management acknowledged the findings and indicated they would evaluate them and take appropriate action regarding the items identified and corrective action.

At no time during this inspection did the inspectors provide any written information to the licensee.

