U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-336/85-31

Docket No. 50-336

License No. DPR-65 Priority -- Category C

Licensee: Northeast Nuclear Energy Company

P.O. Box 270

Hartford, Connecticut 06101

Facility Name: Millstone Unit 2

Inspection At: Waterford, Connecticut

Inspection Conducted: November 6-8, 1985

Inspectors: _____ 11/23/85
W. J. Lazarus, Senior EP Specialist date

J. Hawxhurst, EP Specialist
J. Shedlosky, Senior Resident Inspector, Millstone 1 and 2
P. Swetland, Senior Resident Inspector, Haddam Neck Plant
R. Hogan, NRC HQ
G. Wehmann, Battelle
L. Smith, Battelle

Approved by: _____ 11/26/85
T. Harpster, Chief, Emergency Preparedness Section date

Inspection Summary: Inspection on November 6-8, 1985 (Report No. 50-336/85-31)

Areas Inspected: Observations of the licensee's annual partial - scale Emergency Exercise conducted on November 7, 1978. This inspection involved 84 hours by 7 resident and region-based inspectors and contractor personnel.

Results: No violations were identified.

DETAILS

1. Principal Persons Contacted

*W. Buch, Emergency Planning Coordinator
*J. Kangley, Radiation Services Supervisor
*E. Molloy, Supervisor of Emergency Preparedness
*W. Romberg, Station Superintendent

*Denotes those present at the exit interview on November 7, 1985.

2. Emergency Exercise

The Millstone Nuclear Power Station Unit 2 partial scale exercise was conducted on November 7, 1985.

a. Pre-Exercise Activities

Prior to the emergency exercise, NRC Region I representatives had telephone discussions with licensee representatives and provided written comments on the scope and contents of the objectives and scenario. In addition, the NRC observers attended a licensee briefing on November 7, 1985.

The exercise scenario included the following events:

(1) Primary coolant system leak from No. 1 steam generator hot leg manway;

(2) Loss-of-coolant accident from No. 1 steam generator hot leg manway failure (Containment spray pump "A" out of service);

(3) Three Safety injection tanks late injecting; one fails to discharge;

(4) Radioactive release from containment from personnel hatch leakage with 5 R/hr dose rate at the site boundary.

The above events resulted in activation of the licensee's Emergency Plan and emergency response facilities.

b. Exercise Observation

During the conduct of the licensee's exercise, 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:

(1) Detection, classification, and assessment of the scenario events;

(2) Direction and coordination of the emergency response;

(3) Notification of licensee personnel and offsite agencies of pertinent information;

(4) Communications/information flow, and record keeping;

(5) Assessment and projection of radiological (dose) data and consideration of protective actions;

(6) Provision for in-plant radiation protection;

(7) Performance of offsite and in-plant radiological surveys;

(8) Performance of technical support;

(9) Performance of repair and corrective actions;

(10) Activation and operation of new EOF;

(11) Assembly and accountability of personnel;

(12) Planning of accident recovery operations; and

(13) Dissemination of public information

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 consistent with their emergency response plan and implementing procedures. The team also noted the following areas where the licensee's activities were efficiently implemented:

(1) Operators remained cognizant of plant conditions and limits;

(2) Operators made timely, appropriate recommendations regarding making changes to plant status;

(3) Technical Support Center (TSC) personnel questioned and verified data to ensure that it was correct;

(4) TSC shift turnover was orderly and thorough;

(5) TSC work on procedure changes to line-up LPSI pumps to containment spray and to use an RBCCW pump breaker to restore Containment Spray pump "B" to service was thorough;

(6) The Director of Site Emergency Organization exercised good direction and control;

(7) Information flow was good; status displays were kept current;

(8) Dose assessment in the EOC was performed in a timely manner; projected doses were calculated prior to a release, by postulating various release paths; dose projections were compared with actual field measurements;

(9) The offsite monitoring teams were well organized and trained.

The following areas were identified which could have degraded the ideal response to the simulated emergency, and should be evaluated for possible corrective action.

(1) Sufficient information was available immediately following the LOCA (subcooled margin and RCS temperature) to indicate high fuel temperature, but was overlooked by operators. (50-336/85-31-01)

(2) An actual loss of emergency phones late in the exercise may indicate a need for a more accessible backup communication system (50-336/85-31-02)

(3) The Nuclear Emergency Status System (NESS) lagged actual plant conditions throughout the exercise. Some confusion resulted because NESS information was not consistent with other more current sources. NESS data could be more useful for trending parameters if displayed in a tabular format (50-336/85-31-03).

(4) Radiation surveys of the safeguards pump room were not requested early enough to support the entry of repair personnel (50-336/85-31-04).

(5) The licensee should be sensitive to over - conservatism in classifying events because the resulting automatic protective actions may could be premature. (50-336/85-31-05).

The licensee demonstrated the ability to make appropriate recommendations for the protection of the health and safety of the public.

3. Exit Interview

The inspectors met with licensee representatives (see detail 1 for attendees) at the conclusion of the inspection to discuss the findings of the exercise observations as detailed in this report. At no time during this inspection was any written information provided to the licensee.