

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-309/85-12

Docket No. 50-309

License No. DPR-36

Priority --

Category C

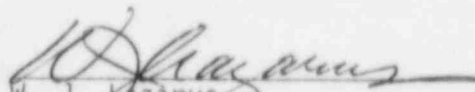
Licensee: Maine Yankee Atomic Power Company
83 Edison Drive
Augusta, Maine 04336

Facility Name: Maine Yankee Atomic Power Station

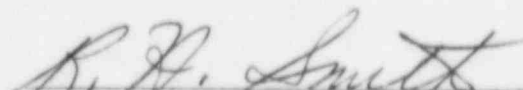
Inspection At: Wiscasset, Maine

Inspection Conducted: June 21-23, 1985

Inspectors:


W. J. Lazarus
Senior Emergency Preparedness Specialist

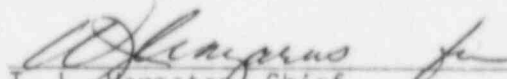
7/12/85
date


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date

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Approved by:


T. L. Harpster, Chief
Emergency Preparedness Section, DRSS

7/12/85
date

Inspection Summary: Inspection on June 21-23, 1985 (Report No. 50-309/85-12)

Areas Inspected: Routine announced emergency preparedness inspection to review open items identified on the previous exercise and to observe the Licensee's annual full participation emergency exercise performed on June 22, 1985. The inspection involved 142 inspector hours by a team of seven NRC and NRC contractor personnel.

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

DETAILS

1.0 Persons Contacted

The following licensee representatives attended the exit meeting on June 23, 1985:

J. Arnold, Public Affairs Director
R. Arsenault, Operations Support
S. Evans, Emergency Coordinator
T. Fuller, Radiation Protection Engineer
J. Garrity, Plant Manager
D. McDavitt, Emergency Planner
J. Randazza, Executive Vice President
W. Riethle, Manager, Radiation Protection
M. Swartz, Supervisor, Simulator Group
P. Thompson, Manager of Public Affairs
D. Whittier, Manager, Nuclear Engineering and Licensing
E. Wojnas, Emergency Planning Engineer

The team observed and contacted several licensee personnel prior to and during the exercise.

2.0 Emergency Exercise

The Maine Yankee Atomic Power Station full participation exercise was conducted on June 22, 1985, from 6:00 A.M. to 1:40 P.M.

2.1 Pre-Exercise Activities

Prior to the emergency exercise, NRC Region I representatives had telephone discussions with licensee representatives to review the scope and content of the exercise scenario. As a result, minor revisions were made to the scenario and the supporting data sheets.

The NRC observers and licensee controllers/observers attended a scenario briefing on June 21, 1985. The changes in the scenario and the emergency response actions expected during the various phases of the scenario were discussed.

The exercise scenario included the following events:

- Reactor coolant leak;
- Reactor trip;
- Loss of power to charging pumps;
- Equipment hatch failure in containment;
- Reactor core degradation;
- Release of radioactivity; and
- Implementation of the Recovery Organization.

The above events caused the activation of the licensee's emergency facilities and also permitted the state and local government agencies to exercise their Emergency Plans.

2.2 Activities Observed

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:

- 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;
- Assessment and projection of radiological (dose) data and consideration of protective actions;
- Provisions for in-plant radiation protection;
- Performance of offsite, onsite, and in-plant radiological surveys;
- Maintenance of site security and access control;
- Performance of technical support;
- Performance of repair and corrective actions;
- Communications/information flow, and record keeping; and
- Management of Recovery Operations.

2.3 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 emergency response organization that were indicative of their ability to cope with abnormal plant conditions.

- Emergency response personnel appeared generally knowledgeable in performing their duties and maintained an active role in demonstrating assigned functions in accordance with emergency procedures.
- Control room personnel demonstrated teamwork and effectively used the established Emergency Action Levels for classification of the events.
- The TSC personnel promptly recognized problems and evaluated events for potential in a manner that demonstrated effective coordination of support activities.
- Staff briefings were timely in each of the emergency facilities, and the team briefings in the OSC were thorough.

- The EOF coordinated the actions of the offsite monitoring teams and routinely informed the teams of plant conditions.
- Habitability surveys of each of the emergency facilities were performed in a timely manner.

The following areas were identified which require licensee attention:

- (Open) 50-309/85-12-01: The PA announcement of the Unusual Event did not include the reason for the classification and the PA announcements for the Site Area and General Emergency classifications included instructions for personnel to take actions that had previously been implemented.
- (Open) 50-309/85-12-02: The Plant Shift Supervisor (PSS) was distracted from directing the Control Room (CR) personnel during lengthy telephone discussions with the Technical Support Center (TSC).
- (Open) 50-309/85-12-03: The Control Room did not request the TSC to calculate the leak rate when operators became occupied with cooldown.
- (Open) 50-309/85-12-04: There were no PA announcements relative to who was directing the emergency response force when the PSS was relieved.
- (Open) 50-309/85-12-05: There were no PA announcements to inform emergency response personnel that the EOF, TSC, and OSC were activated.
- (Open) 50-309/85-12-06: The primary dose assessment system does not include estimation of a source term for iodine and there is no methodology provided to estimate the iodine source term for different release pathways nor to estimate the effective filter efficiencies for different removal systems. This resulted in an inappropriate decision to issue potassium iodide during the exercise.
- (Open) 50-309/85-12-07: The OSC did not track cumulative exposure of corrective action team members.

The licensee's actions in addressing these items will be reviewed in a subsequent inspection.

3.0 Licensee Actions On Previously Identified Items

(Closed) 50-309/84-21-01 through 84-21-08: The inspectors confirmed that adequate protective actions had been implemented regarding the eight open items identified during the annual emergency exercise conducted on September 19, 1984, and all items are considered closed.

4.0 Licensee's Critique

The NRC team attended the licensee's post-exercise critique on June 23, 1985, during which key licensee controllers discussed observations of the exercise. The critique adequately addressed the several areas which were identified requiring further evaluation to prevent recurrence, and also areas where corrective actions had been implemented.

5.0 Exit Meeting

The NRC team met with the licensee representatives listed in Section 1.0 on June 23, 1985. The NRC team leader summarized the observations made during the exercise.

At no time during this inspection was written material provided to the licensee by the inspectors.