

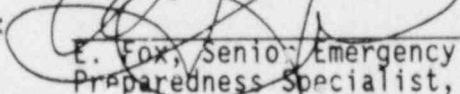
U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-443/88-09
Docket No. 50-443
License No. CPPR-135 Priority _____ Category C
Licensee: Public Service Company of New Hampshire
P. O. Box 330
Manchester, New Hampshire 03105

Facility Name: Seabrook Nuclear Power Station

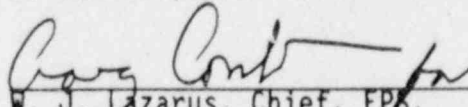
Inspection At: Seabrook, New Hampshire

Inspection Conducted: June 27-29, 1988

Inspectors: 
E. Fox, Senior Emergency
Preparedness Specialist, DRSS

July 6, 1988
date

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Approved By: 
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7/6/88
date

Inspection Summary: Inspection on June 27-29, 1988 (Report No. 50-443/88-09)

Areas Inspected: Routine, announced emergency preparedness inspection and observation of the licensee's annual full-participation emergency exercise performed on June 28-29, 1988. The inspection was performed by a team of seven NRC Region I, headquarters and contractor personnel.

Results: No violations were identified. Emergency response actions were adequate to provide protective measures for the health and safety of the public.

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DETAILS

1.0 Persons Contacted

The following licensee representatives attended the exit meeting held on June 29, 1988.

E. Brown, President and Chief Executive Officer
D. Bovino, Exercise Coordinator
P. Casey, Senior Emergency Planner
T. Feigenbaum, Vice President Engineering/Quality
G. Gram, Executive Director, Emergency Preparedness and Community Affairs
T. Harpster, Director, Emergency Preparedness Licensing
D. Moody, Station Manager
P. Stroup, Director, Emergency Implementation and Response
G. Thomas, Vice President, Nuclear Production
J. MacDonald, Radiological Assessment Manager

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

2.0 Emergency Exercise

The Seabrook Nuclear Power Station full-participation exercise was conducted on June 28, 1988 from 9:00 AM to 7:00 PM. The State of New Hampshire, 11 local towns and the State of Maine participated. The Commonwealth of Massachusetts and 6 local towns in New Hampshire did not participate. The State of New Hampshire compensated for the local non-participants. The New Hampshire Yankee Offsite Response Organization (NHY ORO) compensated for the Commonwealth non-participants. The licensee, New Hampshire, Maine and NHY ORO conducted field monitoring activities, an ingestion pathway exercise and recovery and reentry activities on June 29, 1988. The Federal Emergency Management Agency (FEMA) observed all off-site activities.

2.1 Pre-exercise Activities

Prior to the emergency exercise, NRC Region I and FEMA representatives held meetings and had telephone discussions with licensee representatives to discuss objectives, scope and content of the exercise scenario. As a result, minor changes were made in order to clarify certain objectives, revise certain portions of the scenario and ensure that the scenario provided the opportunity for the licensee to demonstrate the stated objectives as well as those areas previously identified by NRC and FEMA as in need of corrective action.

NRC observers attended a licensee briefing on June 27, 1988, and participated in the discussion of emergency response actions expected during the various phases of the scenario. The licensee stated that controllers would intercede in exercise activities to prevent scenario deviation or disruption of normal plant operations.

The exercise scenario included the following events:

- Fuel damaged by loose parts;
- Damage to a turbine driven emergency feedwater pump;
- Large break Loss of Coolant Accident (LOCA) due to a total weld failure;
- Venting of the containment into the containment enclosure building with a subsequent elevated, filtered release to the atmosphere;
- Declaration of Alert, Site Area Emergency and General Emergency Classifications;
- Calculation of offsite dose consequences; and
- Recommendation of protective actions to off-site officials.

2.2 Activities Observed

During the conduct of the licensee's exercise, seven 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 scenario events;
2. Direction and coordination of the emergency response;
3. Augmentation of the emergency organization and response facility activation;
4. Notification of licensee personnel and offsite agencies of pertinent plant status information;
5. Communications/information flow, and record keeping;

6. Assessment and projection of offsite radiological dose and consideration of protective actions;
7. Provisions for inplant radiation protection;
8. Performance of offsite and inplant radiological surveys;
9. Maintenance of site security and access control;
10. Performance of technical support, repair and corrective actions;
11. Assembly, accountability and evacuation of personnel;
12. Preparation of information for dissemination at the Emergency News Center; and
13. Management of recovery and reentry operations.

3.0 Exercise Observations

3.1 Exercise Strengths

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 that provided strong positive indication of their ability to cope with abnormal plant conditions:

1. Very good command and control of all emergency response facilities (ERF's) was demonstrated;
2. Plant conditions were quickly recognized and classified;
3. Shift turnover was accomplished smoothly and with no apparent loss of control of the situation;
4. The ERF's were activated in a timely manner; and
5. Protective Action Recommendations (PAR's) were prompt and conservative. Evacuation time estimates were effectively utilized in determining the PAR's.

3.1 Exercise Weaknesses

The NRC identified the following exercise weaknesses which needs to be evaluated and corrected by the licensee. The licensee conducted an adequate self critique of the exercise that also identified these areas.

1. The Technical Support Center (TSC) and Emergency Operations Facility (EOF) staff displayed questionable engineering judgement and/or did not recognize or address technical concerns (50-443/88-08-01). For example:
 - Neither the EOF or TSC staff questioned a release of greater than 7000 curies per second with only clad damage and no core uncoverly;
 - Efforts continued to restore the Emergency Feedwater Pump after a large break LOCA;
 - A questionable fix for the Containment Building Spray system;
 - A lack of effort to locate and isolate the release path; and
 - No effort was noted to blowdown Steam Generators to lessen the heat load in containment.
2. The TSC and Operational Support Center (OSC) have multiple entrances and exits that are not controlled. As a result, contamination controls were ineffective at times as personnel entered without frisking and it couldn't be determined if continuous accountability was, or could be, maintained (50-443/88-09-02).
3. No apparent consideration was given to the departing first shift to account for possible dose when leaving the plant during the release, as they were not given dosimetry (50-443/88-09-03).
4. The response to some questions in the Media Center were not adequate such as: the NRC's role in an emergency; and why a reactor trip wasn't performed earlier (50-443/88-09-04).

4.0 Licensee Actions on Previously Identified Items

The following items were identified during a previous inspection (Inspection Report No. 50-443/87-25). Based upon observations made by the NRC team during the exercise the following opens item were acceptably demonstrated and are closed:

(CLOSED) 87-25-01 IFI: The simulator Shift Supervisor did not use classification procedures and failed to recognize the loss of both Radiation Monitoring Systems trains as an Unusual Event.

(CLOSED) 87-25-02 IFI: Lack of a Post Accident Containment air sample prevented dose assessment personnel from estimating the containment atmosphere iodine concentration.

5.0 Licensee Critique

The NRC team attended the licensee's post-exercise critique on June 29, 1988, during which the key licensee controllers discussed observations of the exercise. The licensee indicated these observations would be evaluated and appropriate corrective actions taken.

6.0 Exit Meeting and NRC Critique

The NRC team met with the licensee representatives listed in Section 1 of this report at the end of the inspection. The team leader summarized the observations made during the exercise.

The licensee was informed that previously identified items were adequately addressed and no violations were observed. Although there were areas identified for corrective action, 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 open items.

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