

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-443/90-01

Docket No. 50-443

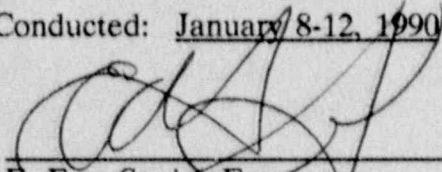
License No. CPPR-125

Licensee: Public Service Company of New Hampshire
P. O. Box 330
Manchester, New Hampshire 03105

Facility Name: Seabrook Nuclear Power Station

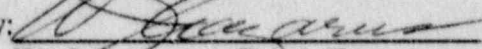
Inspection At: Seabrook, New Hampshire

Inspection Conducted: January 8-12, 1990

Inspectors: 
E. Fox, Senior Emergency
Preparedness Specialist

July 5, 1990
date

C. Amato, Emergency Preparedness Specialist

Approved By: 
W. J. Lazarus, Chief, Emergency
Preparedness Section

2/6/90
date

Inspection Summary: Inspection on January 8-12, 1990 (Report No. 50-443/90-01)

Areas Inspected: A routine, announced emergency preparedness inspection was performed at Seabrook Station including observation of a test of the Vehicle Alert and Notification System (VANS). The inspection areas included the VANS, emergency response facilities and equipment, procedures, training, and licensee audits of the emergency preparedness program.

Results: No violations or deviations were identified. The licensee's emergency preparedness program is maintained in a state of operational readiness.

DETAILS

1.0 Persons Contacted

The following licensee representatives attended the exit meeting held on January 12, 1990.

- R. Badger, Facilities and Equipment Supervisor Vehicle Alert Notification System (VANS)
- A. Callendrello, Emergency Preparedness Licensing Manager
- T. Carter, VANS Consultant
- P. Casey, Emergency Planning Drill Supervisor
- R. Donald, Quality Assurance Auditor
- S. Ellis, Manager Response and Implementation
- G. Gram, Executive Director, Emergency Preparedness and Community Relations (EP/CR)
- B. Gretter, Community Relations Supervisor
- T. Grew, Speciality Training Manager
- C. Heckscher, EP Support Services Supervisor
- W. Leland, Health Physics/Chemistry Supervisor
- J. McDonald, Radiological Technical Specialist
- J. Martin, Community Relations Manager
- R. McCormack, Resources Facilities Manager
- P. Stroup, Director Emergency Response and Implementation
- D. Tailleart, Emergency Preparedness Manager
- W. Temple, Licensing Coordinator
- D. Young, Lead Planner, Scenario Development

The inspector also interviewed and observed the activities of other licensee personnel.

Other personnel present at the exit meeting:

- N. Dudley, Senior Resident Inspector Seabrook, NRC
- R. Donovan, Regional Assistance Committee Chairman for Seabrook, Federal Emergency Management Agency

2.0 Operational Status of the Emergency Preparedness Program (EPP)

2.1 Emergency Plan and Implementing Procedures

The inspector reviewed the changes to the emergency plan and implementing procedures made since the last inspection in this area to determine if any of the changes adversely affected the licensee's overall state of emergency preparedness and that changes had been appropriately reviewed, approved, and distributed.

Revisions 43 - 48 to the Emergency Plan Implementing Procedures were received and reviewed in the Regional Office since the last inspection. None of these changes were significant in nature or had an adverse impact on the licensee's emergency plan. All changes were appropriately reviewed, approved, and distributed. The Office of Nuclear Reactor Regulation has reviewed the Emergency Plan through Revision 4 and determined that there were no significant changes or any adverse effect on the plan.

2.2 Organization and Management Control

The EPP organizational structure was reviewed to determine whether any significant changes had been made to the emergency organization and/or management control systems and to verify that the licensee continues to meet the requirements of 10 CFR 50.54(t), 10 CFR 50.47(b) and Section IV of Appendix E to 10 CFR 50.

A review of the organizational structure of the EPP revealed that the Office of Emergency Preparedness and Community Relations (EP/CR), one of the seven major Offices of the New Hampshire Yankee (NHY) organization, is responsible for the EPP. The EP/CR Office Executive Director reports to the Senior Vice President and Chief Operating Officer of NHY. EP/CR is divided into Departments and Groups with responsibility for: the NHY (Seabrook) Emergency Response Organization; the NHY Off-Site Response Organization (NHY ORO)- the surrogate for the Commonwealth of Massachusetts's emergency response organization; liaison and cooperation with the New Hampshire Office of Emergency Management, Rockingham County, New Hampshire Towns, special and support facilities; and preparation of drill and exercise scenarios. The EP/CR staff is divided into three groups: managers; NHY staff; and consultants. NHY continues to convert consultant positions to permanent NHY staff positions. The only change to the organizational structure since the last inspection involved reassignment of an Emergency Preparedness Manager and creation of a staff position of Radiation Technical Specialist who reports to the Director of Emergency Response and Implementation.

EP/CR managers track EPP activities via an Incomplete Item List, weekly staff meetings, schedule tracking, and review of in-house reports, Quality Assurance Reports, and NRC inspection reports. The NHY President and Chief Executive Officer tracks EP/CR progress and briefs representatives of the Joint Owners regarding emergency preparedness status.

Based on the above review, this portion of the licensee's emergency plan is acceptable.

2.3 Emergency Facilities, Equipment, Instrumentation and Supplies

Emergency Response Facilities (ERFs) are designed to meet the requirements of 10 CFR 50.47(b), Section IV of Appendix E to 10 CFR 50, Supplement I to NUREG-0737 and Regulatory Guide 1.97. Equipment, status boards, communications systems, plans, procedures, habitability and access control provisions were reviewed for the control room (CR), Simulator, Technical Support Center (TSC), Operations Support Center (OSC), the Emergency Operations Facility (EOF), the Remote Assembly Area (RAA), and the Radiological Emergency Area (REA) at Exeter Hospital.

Plans and procedures, equipment and supplies were checked on a sampling basis. Results indicated that equipment was inventoried, instrumentation was calibrated as required, and equipment and instruments were operable. Plans and procedures were in place and current. On-site and off-site monitoring kits were also checked. Equipment and supplies matched the inventory lists. Equipment was in calibration and functional. The TSC data and information displays include permanent graphical displays for the Reg. Guide 1.97 accident variables, terminals for the plant computer and the Safety Parameter Display System, wall mounted "Emergency Safety System Features Overview" diagram, a Critical Safety Function System Status Board and a status board for tracking Operations Support Center teams sent in plant. The graphical displays facilitate plotting and extrapolation of plant data in a manner visible to TSC staff and have been proven effective during exercises.

The building housing the EOF provides space for the NHY-ORO Emergency Operating Center as well as for representatives of the New Hampshire State Government and Towns. These facilities were also inspected and no deficiencies were identified. The inspectors observed the EOF emergency power supply test and a power interrupt test. Both were completed satisfactorily. The decontamination area within the EOF, field sampling kits, and the sample analysis laboratory were checked and found to be in compliance with the licensee's plans and procedures. Seabrook site access provisions for response personnel reporting to the Technical Support Center and EOF were checked and found to be current.

The RAA and its supporting warehouse were inspected and it was determined that the prescribed equipment was in place and currently calibrated. The facilities to be used are adequate.

The REA of the licensee's support hospital at Exeter, N. H. was inspected. Plans and Procedures were in place. Supplies were in agreement with inventories. Security and public information procedures were current. Decontamination

facilities were in a state of readiness. Direct ambulance access was possible and provisions established for helicopter transfer, if needed, of injured to a Boston hospital.

Based upon the above review, this area of the licensee's emergency plan is acceptable.

2.4 Knowledge and Performance of Duties (Training)

Emergency preparedness training (EPT) activities, training records, lesson plans, Emergency Response Organization (ERO) qualification roster, and the training matrix were reviewed. The Training Department (TD) staff was interviewed in order to verify that emergency preparedness training is in compliance with 10 CFR 50. 47(b) and Section IV.F of Appendix E to 10 CFR 50.

Emergency preparedness training is the responsibility of the NHY Training Department (TD). The TD trains the NHY Seabrook Station Emergency Response Organization (ERO), the NHY ORO staff, the staffs of the New Hampshire State Office of Emergency Management, New Hampshire Town personnel, fire department and ambulance crews (who would come on site to support the NHY ERO as needed) and to a limited degree support hospital staffs (a contractor provides medical training). Nuclear Security Officers (NSO) are contractor employees and are trained by the contractor. Lessons Plans have been developed as well as a training matrix. Written and practical examinations are given to NHY ERO and ORO staffs and to NSOs. Trainers are qualified. Training is scheduled uniformly throughout the year so it is completed before the NRC observed exercise. Adequate training records are maintained and are retrievable.

Reactor operators receive emergency preparedness training. This training includes classroom and simulator training. Classification training is given on the simulator. Phones duplicating the NRC's Emergency Notification System, and the NHY Nuclear Alert System are used by operator trainees; these phones ring a terminal in the instructor's observation post. Senior reactor operators receive additional training in the development of Protective Action Recommendations (PARs).

The licensee has ample qualified staff to implement the emergency plan. At least three NHY managers are qualified for each key NHY ERO position.

During 1989, 35 varied drills and exercises were conducted in one or more of seven response categories. NHY has developed a five year schedule calling for 17 drills and exercises during each of the next five years.

Based upon the above review, this area is acceptable.

2.5 Independent Reviews/Audits

An independent review/audit is required at least every twelve months by 10 CFR 50.54(t) which includes determination for adequacy of the licensee State/local government interface and the availability of the results of this study to State/local governments. The licensee's Technical Specifications (TS) also require an audit of the EPP and EPT. The audit/review reports were reviewed to verify that these requirements were met.

In addition to the requirements of 10 CFR 50.54(t), Seabrook Station Technical Specification also requires EP/CR audits which meet the previously noted citation. These audits are based on NHY Quality Assurance Procedures traceable to requirements of Appendix B to 10 CFR 50. These audits are conducted by the Nuclear Quality Assurance (NQA) staff which also evaluates the NHY TD. Auditors are selected from the NQA staff and organizations external to the NHY organization. Auditors for the previous year's audit were verified to be independent of the EP/CR Office. Preliminary and final audit meetings are held. An audit matrix has been developed. While activities audited are selected on a sampling basis, the adequacy of the NHY/New Hampshire interface was always reviewed. Drills are observed if they are held during the audit period. In addition, an Independent Review Team (IRT) may be assigned to observe exercises.

Unacceptable audit results are placed in one of two categories: *findings* and *observations*. A finding indicates an activity has been identified which does not meet an NHY requirement while an observation indicates improvement in the quality of an activity is in order. Last year's audit (89-A03-03) contained nine findings and seven observations identified by auditors. At the time of this inspection, all findings had been closed. The licensee requires that findings be satisfactorily resolved as rapidly as possible. The NHY audit program has an escalation clause which provides that disputed findings be brought to attention of the Chief Operating Officer for final resolution.

The NHY/New Hampshire interface adequacy was evaluated and determined to be adequate. The NHY EP/CR Office has established written procedures to ensure the results of this determination are called to the attention of the State and this part of the audit report will be made available upon request. The procedure is EP/CR No. 94300, "Government Notification of 10 CFR 50.54(t) Audits", dated 9-12-89. This procedure specifies three methods which may be used to do this:

letter; conversation; and meeting. The inspector verified that the 1989 audit results were brought to the State government's attention during a meeting with the licensee.

Based on the above, this portion of the licensee's emergency plan is acceptable.

2.6 Vehicular Alert and Notification System

As the Emergency Planning Zone communities of Massachusetts do not allow installation of fixed sirens, NHY developed a prompt notification system known as Vehicular Alert and Notification System (VANS) to provide equivalent alerting capability for these communities. This system was declared operational on January 3, 1990. Sirens are attached to the tip of a truck mounted, hydraulic, telescoping crane. When the truck is in position, the crane is elevated and the siren will sound and rotate when the activation signal is received. These trucks are deployed as follows: 16 at staging areas; four in reserve; and two in testing and maintenance. The 16 trucks are located at six staging areas from which they are driven to predetermined acoustical locations at which the sirens will be sounded upon authorization of the Commonwealth of Massachusetts, or a Massachusetts Town. The sirens can be activated from the NHY ORO, a Massachusetts Emergency Operations Center or directly from the truck.

To assure readiness and operability frequent tests are conducted. Procedures require silent tests to be performed at least six times a month. Additional tests will be done during the routine maintenance checks. The inspector verified that the siren truck drivers were selected, trained and qualified. It was also noted that the fitness for duty rules apply to these drivers.

During this inspection, the inspectors observed a deployment test of the VANS trucks. Inspectors accompanied the VANS trucks on a sampling basis from the staging area to the acoustical location. All trucks reached their assigned acoustical location and would have been capable of siren activation within 15 minutes.

Based on the above, this portion of the licensee's emergency program is acceptable.

2.7 Off-Site Activities and Public Information

The NHY EP/CR staff was interviewed and appropriate records and documents reviewed to determine if the requirements of 10 CFR 50.47(b) and Section IV of Appendix E to 10 CFR 50 were met regarding interface with off-site agencies and providing of public information.

Distribution of Public Information Material is a full power operating license commitment. To meet this commitment, NHY prepared and distributed various forms of Public Information Material designed to meet the needs of different groups living within the ten mile Emergency Planning Zone (EPZ) in Massachusetts and New Hampshire. As of November 30, 1989, Public Information Material had been sent to appropriate organizations including schools, government and private offices, employers, recreational facilities, hotels and motels, hospitals, day care centers, special care facilities, farmers, and food processors and distributors within the EPZ.

Brochures in the form of calendars have been prepared and mailed to residents of the Emergency Planning Zone. Public Information Material in English and French has also been prepared for the transient population. Emergency Information for the agricultural industry within the fifty mile Ingestion Pathway Planning Zone lying within Maine, Massachusetts and New Hampshire has been prepared.

The inspectors verified that Letters of Agreement (LOAs) in support of the on-site plan are on file with NHY. Licensee staff stated all LOAs were under review and would be re-negotiated for renewal during 1990.

Based on the above, this portion of the licensee's emergency program is acceptable.

2.8 Security-Emergency Preparedness Interface

NUREG/CR-3251 was reviewed and security personnel were interviewed to determine if the requirements of Appendix B to 10 CFR 73 and Supplement I to NUREG-0737 were met regarding training of security personnel in the area of emergency preparedness.

The Security service for the Seabrook Station and the Emergency Operations Facility (EOF) are provided by a single contractor who is responsible for both facilities. Security officers are initially qualified and requalified annually. A passing grade of 80% is required for qualification and requalification. The contractor provides qualified trainers and retains examination records. Security Officers receive 24 to 30 hours of emergency preparedness training. They are radiation worker qualified. Emergency preparedness training includes actions to be taken at each of the four emergency action level classifications and to follow the standing order to remain part of the functional unit. Security Officers are trained in accountability, search and rescue, and the proper procedure to follow when making notifications to the NRC required by 10 CFR 73.71. They are also trained to activate the NHY ORO staff.

Based on the above, this portion of the licensee's emergency plan is acceptable.

3.0 Exit Meeting

The inspector met with licensee personnel denoted in Section 1 at the conclusion of the inspection to discuss the findings of this inspection as detailed in this report. The licensee was informed that no violations were identified.