

U. S. Nuclear Regulatory Commission  
Region I

Docket/Report: 50-293/93-18 License: DPR-35  
Licensee: Boston Edison Company  
Facility Name: Pilgrim Nuclear Power Station  
Inspection: December 6-8, 1993  
Inspection At: Plymouth, Massachusetts

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Area Inspected

Announced inspection of full-participation, ingestion pathway, emergency preparedness exercise.

Results

The exercise scenario was deemed to be challenging by the inspectors and involved venting the containment to prevent its failure, thereby mitigating the consequences of the simulated accident.

Overall, the exercise demonstrated that the licensee's onsite emergency plan and procedures are adequate and that the plant staff is capable of implementing them. However, problems with communications resulted in two exercise weaknesses. The first was the lack of adequately communicating ongoing plant conditions and activities that resulted in insufficient accident assessment. The second was insufficient communications that led to reduced performance of the

Operations Support Center staff. Additionally, drill control was identified as an area for potential improvement.

## DETAILS

### 1. Persons Contacted

The following individuals were interviewed by the inspectors; others were also interviewed.

G. Basileco, Senior Compliance Engineer  
E. Boulette, Boston Edison Company (BECO), Senior Vice President, Nuclear  
J. Bellefeuille, BECO, Deputy Plant Manager  
W. Clancy, BECO, Materials and Component Engineering Manager  
G. Davis, BECO, Executive Vice President  
J. Keenan, Executive Assistant to Executive Vice President  
E. Kraft, Jr., Vice President Nuclear Operations  
D. Landahl, Emergency Preparedness Onsite Division Manager  
R. Lewis, Radiological Training Supervisor  
R. Markovich, Emergency Preparedness Offsite Division Manager  
J. Morlino, Emergency Preparedness Drills and Exercise Coordinator  
H. Oheim, Regulatory Affairs Manager  
W. Rothert, General Manager, Technical  
L. Schemeling, Plant Manager  
P. Sherman, Emergency Planner/Corporate Public Information  
J. Spangler, Facilities and Equipment Division Manager  
W. Stone, Maintenance Section Manager  
D. Tarantino, BECO, Manager of Nuclear Information  
T. Trepanier, Chief Operating Engineer  
G. Vazquez, BECO, Lead Radiological Engineer  
S. Verrochi, Mechanical Maintenance Division Manager  
C. Walker, Operations Planner  
B. Yetman, Boston Edison Company, Community Representative

All of the above were present at the Exit Meeting.

### 2. Inspection Scope

A full-participation emergency exercise was conducted at the Pilgrim Nuclear Power Station on December 7, 1993 from 0700 to 1500 hours. An NRC inspection team observed the licensee's performance in executing its emergency plan and implementing procedures, in particular, the activation and augmentation of the Emergency Response Facilities (ERFs) and the actions of the Emergency Response Organization (ERO) staff. The following specific exercise-related activities were observed:

- Selection and use of control room procedures
- Detection, classification, and assessment of scenario events
- Direction and coordination of emergency response
- Notification of licensee personnel and off-site agencies
- Communications/information flow, and record keeping

- Assessment and projection of off-site radiological doses
- Protective Action Recommendations (PARs)
- Provisions for in-plant radiation protection
- Provisions for communicating information to the public
- Accident analysis and mitigation
- Accounting for personnel
- Post-exercise critique by the licensee

The exercise objectives, including the ingestion pathway objective, were submitted to NRC on August 30, 1993 for review. The NRC reviewers found that the requisite objectives were included in the exercise and that the scenario adequately challenged major portions of the licensee's emergency plan and implementing procedures. It also implemented those activities from the previous exercise that were identified as a weakness or an area for potential improvement. These findings were conveyed to the licensee in a telephone conversation with Mrs. J. Morlino on November 22, 1993, by Mr. J. Lusher.

On December 6, 1993, the NRC inspection team attended a pre-exercise briefing provided by the licensee's Drill Coordinator, Lead Controllers and scenario developer. The licensee discussed minor revisions in the scenario to accommodate the Federal Emergency Management Agency (FEMA) requested ingestion pathway changes. The licensee also stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities to prevent disrupting plant activities.

Inspection findings in this report are categorized and defined, as follows:

**An Exercise Strength** is a strong positive indicator of the licensee's ability to cope with abnormal plant conditions and implement the emergency plan.

**An Exercise Weakness** is less than effective Emergency Plan implementation which did not, alone, constitute an overall response inadequacy.

**An Area for Potential Improvement** is an aspect which did not significantly detract from the licensee's response, but which merits licensee evaluation for possible corrective action.

The NRC inspection team determined that the licensee's onsite emergency plan and procedures met NRC requirements and that the licensee was capable of implementing its plan and procedures. Adequate correction for the potential weakness and areas for potential improvement identified by the NRC during the 1992 exercise were also demonstrated. Additionally, the team noted that security and accountability were established and maintained at all of the ERFs.

There were no exercise strengths observed. However, problems with the transfer of information (communications) resulted in two exercise weaknesses. One was the reduced performance of the Operations Support Center staff. The other was the lack of adequately communicating ongoing plant conditions and activities that resulted in insufficient accident assessment. These

exercise weaknesses are discussed further in Sections 6.1 and 8.4 of this report. Additionally, an area for potential improvement was identified in the control of drill activities, as discussed in Section 6.2.

### 3. Exercise Scenario

The scenario included the following simulated events:

- The plant had operated at 100% power for the past 220 days.
- A plant shutdown was initiated during the night shift in preparation for a plant maintenance outage.
- Reactor power was at 33%.
- Containment de-inerting was in progress in anticipation of making a drywell inspection to identify steam leaks while the plant was still at pressure.
- An unanticipated loss of shutdown and startup transformers occurred, resulting in loss of all offsite AC power (Unusual Event).
- The fire protection panel indicated a fire in Emergency Diesel Generator (EDG) room.
- A fire was confirmed in the "A" EDG room (Alert).
- A controlled plant shutdown was initiated due to loss of all offsite vital power and an inoperable EDG.
- High main steam line radiation caused an alarm and resulted in containment isolation. Failure of the automatic reactor scram (anticipated transient without scram - ATWS). A manual scram was successful, but a steam line leak inside the drywell was indicated.
- The drywell high range radiation monitors increased to 1000 R/hr (drywell high range radiation monitors reading  $\geq 200$  R/hr - Site Area Emergency).
- A severe Reactor Coolant System (RCS) leak was indicated inside containment (loss of coolant accident (LOCA)).
- The Reactor Pressure Vessel (RPV) water level dropped below the top of active fuel causing severe core damage.
- Containment radiation and hydrogen levels increased (containment hydrogen and oxygen concentration above combustible limits - General Emergency).

- The startup transformer was returned to service.
- RPV water level was restored to above the top of active fuel.
- The drywell (containment) was vented in accordance with Emergency Operating Procedure (EOP) -03, "Primary Containment Control," to reduce hydrogen and oxygen concentrations below combustible limits, requiring the Protective Action Recommendation (PAR) of evacuation of a five-mile radius and five to ten miles downwind in affected sectors.
- The exercise was terminated.

#### 4. Simulator Control Room (SCR) Findings

##### 4.1 Recognition and classification of events

The inspectors' observed that the SCR operators quickly recognized, diagnosed and responded to the indications of off-normal plant conditions, and properly classified the events in accordance with emergency procedures.

The SCR operators demonstrated knowledge of the technical specifications and oversight of plant conditions throughout the exercise. As an example, when offsite power was unavailable early in the exercise, they requested regulatory relief from a required plant shutdown. Without offsite power, the only source of electrical power would have been the emergency diesel generators if the plant had been shut down.

##### 4.2 Off-site Notifications

Following the declaration of the Unusual Event (UE) and the Alert, notifications to offsite agencies were made by the SCR operators within the 15 minute criterion. For both classifications, the NRC was notified well within the one-hour time limit, i.e., in 19 minutes and 17 minutes, respectively.

##### 4.3 Command and control

The senior person in the SCR immediately assumed the role and responsibilities of the Emergency Director (ED) and announced that following the declaration of the UE that occurred at 0704 hours. At about 0855, the responsibilities of the ED position were transferred to the appropriate individual in the Emergency Operations Facility (EOF) in a clear and orderly fashion. The EOF was declared activated at 0900.

The SCR operators generally remained in close contact with personnel in the Technical Support Center (TSC) and the EOF after those emergency response facilities (ERFs) were activated. The operators provided updates on plant status, concurrences for Site

Emergency (SAE) and General Emergency (GE) declarations, and information about necessary repair efforts.

Throughout the exercise, SCR operators correctly referred to and implemented plant procedures, including Emergency Operating Procedures (EOPs). Shift supervision effectively coordinated procedure implementation and operator responses to address both plant conditions and Emergency Preparedness (EP) concerns.

## **5. Technical Support Center (TSC) Findings**

### **5.1 Staffing and Activation**

The inspectors found that the TSC personnel performed their functions adequately during the exercise. Personnel began arriving at the TSC within minutes after the declaration of the Alert at 0811 hours. The TSC was activated 27 minutes after the declaration. The activation was orderly. Personnel were knowledgeable of plant systems and normal and emergency operations procedures. Command and control was strong and communication within the TSC was generally acceptable. However, some communications problems hampered the overall effectiveness of the TSC in interfacing with the other ERFs. (See Section 5.3)

### **5.2 Facility Management and Control**

Strong command and control was demonstrated by the Emergency Plant Manager (EPM). The EPM held frequent meetings with the TSC and Operations Support Center (OSC) managers and also provided briefings to TSC and OSC personnel on plant and equipment status. He also established priorities for actions such as work for OSC repair teams, engineering analyses, analyses of regulatory requirements, requests for regulatory relief and was alert for evolving emergency action levels (EALs). The priorities were continuously maintained and adjusted based on changing conditions and needs.

The EPM's plant status briefings were clear and precise. When questions on equipment status were raised, the EPM assigned individuals to obtain answers. For example, during the briefing of TSC and OSC managers, the condition of electrical bus A-5 was questioned because of a simulated fire in an associated emergency diesel generator. Because there had been no reports to the contrary, the EPM instructed the managers to assume that the bus was still energized and operable, but instructed the operations engineer to confirm this assumption with personnel in the SCR. Additionally, when the results of an actual (not part of the scenario) HPCI surveillance test, which was conducted at about 0900, confused the TSC staff, the EPM quickly clarified that this was a normal plant surveillance and was not scenario-related.

### 5.3 Accident Assessment and Classification

The inspectors observed that the TSC operations engineering personnel were carefully monitoring, tracking and analyzing plant conditions and parameters and using EOPs to detect degrading conditions that could result in successive EALs. For example, they promptly identified the increase in the simulated steam leak in containment following the ATWS (anticipated transient without scram) event by closely monitoring drywell parameters in accordance with EOP-03, Primary Containment. Near the end of the exercise, following the LOCA and restoration of electrical power, TSC operations engineering personnel questioned data that indicated the emergency core cooling system (ECCS) was unable to restore reactor vessel water level. Although the erroneous data was probably caused by a problem with the simulator computer, a plan of action was developed to counteract the indicated condition of low pressure coolant injection (LPCI) loop selection logic malfunction with all LPCI injection flow being pumped through the break.

However, some information pertinent to accident mitigation and assessment was not conveyed from the responsible groups in the TSC to the EPM and the ED; for example, estimates of core damage, location of LOCA, containment venting, and its pathway. This problem resulted in reduced accident assessment capability by personnel in the OSC and EOF. (See Section 7 and Section 8)

## 6. Operations Support Center (OSC) Findings

The inspectors observed that the OSC was staffed and activated in about 27 minutes after the declaration of the Alert. Responsibilities and authorities were clearly established and communicated to the OSC staff. Action item and team status boards were used and generally reflected the strategy and priority of accident mitigation efforts. Emergency Plan Implementing Procedures (EPIPs) provided detailed requirements for the control of the emergency response team. EPM directions and expectations, as articulated during his briefings, were reflected in the priority of OSC activities. However, problems with the management of the emergency repair teams were categorized as an exercise weakness. Additionally, problems identified with the control of drill activities were categorized as an area for potential improvement. The problems observed are listed below.

### 6.1 Management of Emergency Repair Teams (IFI 50-293/93-18-01)

Several factors affected the management of the repair teams and resulted in this area being identified as an exercise weakness.

#### 6.1.1 High noise levels in the OSC led to confusion and missed communications, as indicated by:



- Some repair teams were dispatched without an accurate list of team members.
  - One repair team was dispatched without authorization from the OSC Supervisor and had to be called back to the OSC.
  - Some repair teams remained listed as "out" on the plant status board long after they returned to the OSC following completion of assigned tasks.
  - Debriefings of some repair teams were significantly delayed and some were not debriefed at all.
- 6.1.2 Inadequate preparation led to ill-equipped emergency repair teams, as indicated by the following:
- The Safety Precautions block on the OSC Task Assignment sheets provided to departing repair teams contained generic descriptions such as "normal," "routine," or "standard." Further, requirements for protective clothing, known safety hazards, or specific warnings for problems that could be encountered were not stated.
  - The list of required tools and equipment on the Task Assignment Sheets was not completed for most teams; repairs were delayed while tools necessary to do the work were obtained.
  - Planning for emergency maintenance activities was weak; generally, it occurred during the pre-job briefings.
- 6.1.3 Inadequate transfer of radiological information had the potential to cause unnecessary radiation exposure to in-plant emergency responders, as indicated by the following:
- An emergency team remained outside the OSC building, rather than inside where protection would have been afforded, for about 12 minutes (waiting for a team member) within a short distance from the plant stack which was releasing 53 R/hour from containment venting; a radiation protection (RP) technician on the team failed to obtain radiological conditions before the team was dispatched or to survey for the team after dispatch.
  - The radiological hazards section of most of the Task Assignment Sheets was not filled out prior to team dispatch.
  - Most teams were informed that the radiological conditions were unknown despite the availability of significant amounts of radiation survey information and data from the area radiation monitoring system.

- Potassium Iodide (KI) was not issued as a thyroid blocking agent for in-plant emergency responders even though both field monitoring team survey results and radiological dose projections exceeded applicable Environmental Protection Agency Protective Action Guides (EPA PAGs).
- 6.1.4 Station radiological protection procedures were not always followed, as indicated by the following:
- Several RP Technicians conducted cursory surveys with meters that were turned off.
  - One RP Technician on a survey team entered the reactor building without having properly donned his protective clothing (PCs) and respirator (there was a large patch of exposed skin on his neck where the PC hood was not properly sealed to the respirator); the problem was not identified for over 15 minutes.
  - Significant radiological information was unavailable to OSC personnel because many surveys conducted by RP technicians were not documented.
  - One repair/survey team did not count some of the air samples and smears taken inside the reactor building even though they expended the effort to obtain them.

## 6.2 Control of Drill Activities (IFI 50-293/93-18-02)

Some emergency response activities were not conducted in accordance with the Exercise Controller Guide and pre-scenario controller briefings, resulting in this area being identified as an area for potential improvement. These included:

- During the fire brigade response to a fire in the "A" emergency diesel generator (EDG), the controller gave credit for the use of foam and for a key to unlock the isolation valve for the fuel oil supply to the EDG, but the key was not available.
- During efforts to backfeed power to the unit auxiliary transformer, the controller gave credit to the repair team for using the tools specified in the plant procedure even though the tools were not available.
- A repair team controller, rather than the OSC Coordinator, provided a detailed briefing of plant conditions to the repair team after the team left the OSC.
- A repair team controller directed the team he was to escort to depart the OSC without him and to inform him when they returned to the OSC; the OSC Lead Controller stopped the team from proceeding when he learned of this until the controller joined the team.

## 7. Communications Problems

The inspectors observed many good communication activities throughout the exercise. Several instances, however, were identified where poor or lack of communications caused problems among the ERFs. Though these instances were noted in the TSC and OSC, they had an overall adverse effect on the capability of the other ERO groups to carry out their functions. The following were observed:

- SCR personnel communicated directly with OSC personnel, rather than through the EPM in the TSC, when requesting repair teams to install jumpers on the drywell vents and to investigate a suspected leak in the turbine building component cooling system.
- Personnel in the TSC did not learn of the initiation of containment venting through a two-inch line until thirty-four minutes after the venting was initiated. They attributed the resultant increase in stack radiation release to a primary containment leak and tried to locate the nonexistent leak.
- One core damage estimate was announced in the TSC at 1107 hours. Two additional estimates, one at 1307 and one at 1320, were recorded in the Reactor Engineer's log book and the Radiation Protection Engineer's log book, respectively. Other personnel in the TSC, EOF, and Media Center were not made aware of those later estimates, and therefore could not disseminate that information or use it for assessment purposes. (The TSC status board did not have a designated space for recording core damage estimates.)
- Although the TSC status boards were generally accurate and kept up to date and personnel analyzed and acted on the data presented, the equipment status board incorrectly indicated that the B-Core Spray sub-system was not operating following the large break LOCA. This caused unnecessary analyses to be conducted by the engineering group. The status board was corrected about an hour after the LOCA occurred.
- TSC, OSC and plant personnel were not told when the "A" EDG fire was initially out, that it had reflash, or when it was finally extinguished. This information could have altered the course of some response activities.

## 8. Emergency Operations Facility (EOF) Findings

### 8.1 Staffing and Activation

The inspectors observed that the EOF was activated promptly and efficiently following declaration of the Alert. The Emergency Director (ED) and the EOF support staff performed their assigned tasks in an organized and systematic manner. The EOF Operations Advisor (OA) and the Emergency Offsite Manager (EOM) played key roles in supporting the ED.

## 8.2 Facility Management and Control

Facility management and control were effective. Periodic briefings were provided by the ED and the EOM to keep the EOF staff informed of plant conditions and significant changes. However, the briefings did not include engineering support from the TSC or radiological assessment support from the EOF, which reduced their effectiveness as discussed in section 9.3.

Upon arrival at the EOF, the NRC Site Incident Response Team performed its activities with minimal disruption of the licensee's ongoing operational activities.

## 8.3 Classification

Event classifications were performed appropriately by EOF personnel. Frequent reference was made to the EALs in anticipation of the potential need to upgrade the emergency classification. Declaration of the Site Area Emergency (SAE) at 1046 hours and the General Emergency (GE) at 1301 hours were appropriately made based on deteriorating plant conditions.

## 8.4 Accident Assessment (IFI 50-293/93-18-03)

While the ED, EOM, and OA performed in a credible manner, the ED's staff did not include engineering support and he did not effectively use the engineering resources in the TSC. The ED, EOM, and OA were therefore conducting analyses to obtain needed information instead of referring to other sources for the information. This led to an NRC identified exercise weakness in that accident conditions, and their potential consequences, were not being fully assessed. For example, information such as the containment venting path, the estimate of core damage, the location of the LOCA, and the results of offsite monitoring was known to other personnel in other ERFs, but was not readily provided to or sought by the ED in the EOF. Despite these problems, the ED and his immediate staff used other available information to make the appropriate decisions regarding accident mitigation and Protective Action Recommendations (PARs).

## 8.5 Offsite Dose Assessment

The Dose Assessment group in the EOF demonstrated its capability to perform dose assessments and to project offsite radiological consequences. However, doses were not projected for an unmonitored release, in the event such a release were to occur. Additionally, the dose assessment group did not focus on comparing and evaluating offsite measured doses with projected doses and plant conditions. Such evaluations could have been useful to the ED for making decisions and PARs. For example, the projections showed measurable amounts of iodine beyond 10 miles which were not readily explainable by the amount of plume dose core damage and the release pathway. This issue was not adequately discussed or presented in the facility briefings.

## **8.6 Protective Action Decision-Making**

The ED and the EOF staff considered both plant and radiological conditions in developing protective action recommendations (PARs) at the GE level. The PARs issued by the EOF were based primarily on plant conditions in accordance with the guidance contained in the PAR flow chart. The EOF staff developed PARs that were considered to be reasonable and appropriate for the situation. The determination of the emergency planning zone (EPZ) subareas affected by the PAR took into account the simulated meteorological conditions. The rationale and the basis for the PARs were discussed with the Commonwealth of Massachusetts representatives in the EOF. The NRC Site Team representatives in the EOF were also consulted in the development of PARs.

## **8.7 Notification and Communications**

The required notifications and communications from the EOF following the declaration of the SAE and the GE were made promptly and accurately within the prescribed time limit in accordance with the established procedures. Notifications were made directly to the Commonwealth of Massachusetts representatives in the EOF and by telephone and facsimile transmission to offsite agencies using the offsite notification forms.

## **8.8 Implementation of Protective Actions**

The implementation of protective actions for the public was effectively monitored by the EOF staff. Information on the implementation of protective actions (which is the responsibility of offsite officials) was provided by the State representatives in the EOF in discussions with the ED and the key EOF staff. Protective action information was also prominently displayed in the EOF. Status boards showed both the protective actions recommended by the licensee and the protective action directives issued by the State as well as a chronological listing of the major events occurring offsite that were provided by the State representatives in the EOF.

## **8.9 Interaction with Offsite Officials**

Representatives of the Massachusetts Emergency Management Agency (MEMA) and the Massachusetts Department of Public Health (MDPH) were present in the EOF. Interaction between the Massachusetts personnel and the EOF staff was positive. The EOF staff brought significant plant events to the attention of the State representatives and the State representatives were proactive in seeking out desired information. Interaction with the offsite officials included communicating the basis and rationale for the General Emergency PAR. The inspectors observed good rapport and positive interaction among State representatives and the NRC Site Team in the EOF.

## **9. Media Center Findings**

The inspectors observed three press briefings by Boston Edison Company (BECO) and Commonwealth of Massachusetts officials to utility personnel who were acting as news media representatives and evaluated them for accuracy, timeliness and completeness. The inspectors also reviewed sixteen news releases for accuracy and detail, and observed operations in the Boston Edison work room at the Media Center.

### **9.1 Security Operations**

The inspectors observed the security precautions at the Media Center and concluded that they were well-planned. The security measures established were effective for an actual civil demonstration (not scenario related) that occurred during the first four hours of the exercise.

### **9.2 Dissemination of Information to the Media**

The BECO company spokesperson demonstrated an adequate level of technical detail in his descriptions as the simulated accident progressed. He used visual aids and familiar, layman's terminology in explaining the plant components affected by the simulated accident. He restated previous explanations when giving updates on the status of affected equipment. The inspectors concluded that the information provided by the licensee at the Media Center was reasonably understandable to the public.

### **9.3 Rumor Control**

The inspectors observed that staff personnel at the Media Center were generally very effective in controlling rumors. This was evident with scenario introduced rumors as well as in handling reports from an actual demonstration outside the center. Additionally, the moderator for the news briefings worked quickly to obtain the name and telephone number of an NRC spokesperson when asked for this information by members of the press.

### **9.4 Communication of Information to the Media Center**

The inspectors noted that some significant information known to personnel in onsite ERFs was not timely conveyed to licensee Media Center personnel and, therefore, was not mentioned in news releases and briefings. The 1107 hours estimate of core damage and the LOCA, which occurred at 1255 hours, were not mentioned by the company spokesperson at a briefing around 1320 hours. Not until about one-half hour after a reporter, at that briefing, stated that he had learned of the core damage and LOCA during a telephone conversation with an NRC spokesperson in the Region I office, were company Media Center personnel able to confirm that information. Additionally,

company news releases reviewed by the inspectors did not mention the core damage, LOCA, or the ATWS, which occurred early in the scenario, at about 1030 hours.

The inspectors concluded that the briefings and press releases at the Media Center were generally adequate in keeping the members of the press informed about matters that affected the health and safety of the public. The communications problems that hindered the performance of personnel at the various onsite ERFs also affected the Media Center, but these problems did not prevent Media Center personnel from providing generally timely, accurate and understandable information to the public.

## **10. Licensee Action on Previously Identified Items**

### **10.1 Exercise Weakness**

CLOSED (IFI 50-293/92-07-01)

In a 1992 exercise, an announcement to the licensee and Massachusetts personnel in the EOF erroneously stated that there was fuel damage with a fission product release in progress. Also, the Site Area Emergency Notification Form which would have been sent to local communities in an actual emergency, contained this erroneous information. The form further indicated that protective actions had been recommended by the licensee, indicating a more serious event than the scenario presented.

The form was revised since the 1992 exercise, and based upon observations during the 1993 exercise, this exercise weakness has been corrected. (See Section 9.6). This IFI is closed.

### **10.2 Areas for Potential Improvement**

All previous areas for potential improvement from the 1992 exercise appeared to be effectively corrected as indicated below:

- Feedback to the simulator controllers and operators that in-plant assignments were completed by damage repair teams was not evident through the 1992 exercise. During this exercise, as damage repair teams completed their tasks, the simulator controllers were provided with the information, and equipment which was made operable was returned to service on the simulator.
- The procedural requirements for establishing habitability prior to activation of the Media Center in downtown Plymouth delayed the activation of the center. The procedure was changed to activate the Media Center and if it was in the projected plume path, determine whether habitability requirements could be met. If not, the center would be relocated. In this exercise the Media Center was activated in a timely manner.

- The licensee's spokesperson had difficulty responding to questions which could have been more readily answered if better graphics were available. During this exercise, there were new and better graphics available at the Media Center.

## **11. Licensee Critique**

On December 8, 1993, the NRC team attended the licensee's exercise critique. The Drill and Exercise Coordinator summarized the licensee's observations from the exercise. The summary provided what the licensee considered as exercise strengths or areas for improvement which corresponded to the majority of the NRC's findings. The licensee also indicated that corrective actions for these items would be defined and scheduled. The NRC team determined that the critique was acceptable.

## **12. Other inspection activities**

The inspector met with licensee personnel to discuss the status of the Reception Center location change from Wellesley to South Weymouth. The following information was provided by the licensee and confirmed in a subsequent telephone conversation with the FEMA Regional Assistance Committee (RAC) Chairman.

### **12.1 Wellesley Reception Center**

The licensee informed the inspector that the Wellesley Reception Center was being maintained in operational readiness. The inspector was provided with and reviewed the training records showing that the National Guard unit and the Beverly Civil Defense group had been fully trained, both in classroom instruction and practical performance, to carry out reception center activities. The training included Emergency Operations Center (EOC) operations and personnel monitoring and decontamination. It was completed November 30, 1993.

### **12.2 South Weymouth Reception Center**

The licensee informed the inspector that its representatives were in the process of installing spare communications and portal monitoring equipment at the South Weymouth reception center. Consumable equipment (disposable protective clothing, decontamination materials, administrative supplies etc.) will be transferred from Wellesley to South Weymouth after the South Weymouth facility has been qualified by FEMA. That is anticipated to occur during the first quarter of 1994. The transfer will take approximate four to five hours, which includes travel time between the two reception centers of about 45 minutes.



The FEMA RAC Chairman indicated to the inspector that licensee representatives have been working very closely with and assisting the Commonwealth of Massachusetts personnel in identifying and training the personnel who will staff the South Weymouth Reception Center.

### **12.3 Plan and procedures**

The licensee informed the inspector that the emergency plan and procedures for the South Weymouth Reception Center have been drafted and were being reviewed by the Commonwealth of Massachusetts. The licensee stated that FEMA was also reviewing the draft plan and some of the procedures. The licensee indicated that the annual review of all off-site plans and procedures was to be done by the Commonwealth of Massachusetts during the first quarter of 1994.

The licensee also indicated that the new study for the Evacuation Time Estimates (ETEs) for the communities which are to use the South Weymouth facility was expected to be completed by February 1994.

### **12.4 Public information**

The licensee informed the inspector that the 1994 calendar, which provides the emergency preparedness information for the public, was in the process of being mailed out to all of the residents in the ten mile EPZ around the Pilgrim station. The required Emergency Information brochure was contained in a pocket in the calendar. When the South Weymouth facility is qualified, a new information brochure will be sent to all of the residents in the EPZ with updated emergency information. Also, telephone book advertisements, placards, and other emergency information brochures will be updated in March 1994 to reflect the new facility.

The NRC inspector offered the FEMA RAC Chairman NRC assistance, if needed, to review and observe the reception center location change from the Wellesley to South Weymouth reception centers. The RAC Chairman indicated that FEMA was following the progress very closely and that he would inform the inspector of any problems.

## **13. Exit Meeting**

On December 8, 1993, the NRC inspection team met with the licensee personnel listed in Detail 1 of this report. Team observations were summarized. The licensee was informed of the following:

- Overall, the exercise demonstrated that the onsite emergency plan and procedures met NRC requirements and that the licensee is capable of implementing them
- The exercise weaknesses identified and their apparent root causes

- The specific areas for potential improvement which were identified

The licensee acknowledged the inspection findings, indicated that the findings would be evaluated and appropriate actions would be taken as necessary.