

SECTION I - GENERAL

A. Background

1. The Pilgrim Nuclear Power Station (PNPS) is located in the Town of Plymouth in the Commonwealth of Massachusetts on the shore of Cape Cod Bay.
2. The Town of Marshfield boundary is located approximately 9 miles to the Northwest of the PNPS. The 2012 Town population was 24,238 in winter and 40,000 in summer, and, of that, the EPZ population was 3010.
3. A hazard consideration for PNPS is the potential unplanned release of radioactive material resulting from an emergency at the plant. The probability of such a release is very low due to design and structural specifications required and enforced by the Nuclear Regulatory Commission (NRC) and redundant safety systems. The unplanned release of radiation from PNPS remains a possibility and therefore, appropriate plans to protect the public health and safety must be maintained.
4. Federal guidelines require emergency planning for the areas within approximately a 10-mile and a 50-mile radius of PNPS. These areas, referred to as Emergency Planning Zones (EPZ), are areas in which certain types of protective measures for the public may need to be taken in the event of a radioactive release. Areas in close proximity to PNPS are more likely to be affected by a release; therefore, the 10-mile EPZ has been divided into sub-areas. The EPZ sub-area boundaries are based upon compass direction and distance radii from PNPS as well as geographical and political considerations.

5. Within the 10-mile EPZ, the exposure to the public may come from direct contact with deposited radioactive material, the radioactive plume or by intake of contaminated air, food and water. Exposure within the 50-mile EPZ may come from ingestion of contaminated food, water or milk. The majority of this plan is concerned with emergency planning and protective measures for the portion of the Town of Marshfield situated within the 10-mile EPZ.
6. The Town of Marshfield has a governmental system capable of handling emergency situations as a result of severe weather, hurricanes, and snow emergencies. This has been demonstrated through actual experience in evacuations during all seasons of the year, whereby governmental units support evacuation and have procedures in place for warning and evacuation assistance. This experience provides a realistic basis for adequate response to an emergency at PNPS.

B. Assumptions

1. A radiological emergency can arise from operations at PNPS, whether from a minor release of radioactive material contained within the PNPS site or a major release of material from the most serious design basis accident.
2. PNPS will comply with the prompt notification requirement.
3. PNPS will provide essential information to State agencies as to the magnitude of the release, areas affected, and any recommended protective actions.
4. Town governmental agencies will respond, as required, to fulfill their responsibilities in providing for public safety.

5. State agencies will respond to assist the Town of Marshfield and implement responsibilities assigned in the Massachusetts Comprehensive Emergency Response Plan, Appendix 2. (Radiological Emergency Response Plan).

C. Scope

1. This plan includes Town, State, and Federal agencies, and quasi-government and private volunteer organizations responsible for or capable of planning for and responding to an emergency at PNPS.
2. The plan designates responsibilities and the method of implementation for agencies to fulfill their response roles.
3. The plan describes the various protective actions to be taken in the event of an emergency at PNPS.
4. The plan was prepared to conform with requirements and guidelines established by the Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC), and is consistent with the Massachusetts Comprehensive Emergency Response Plan, Appendix 2. (Radiological Emergency Response Plan).
5. The Commonwealth has adopted the National Incident Management System (NIMS). Utilizing guidance from NIMS, the MARERP has incorporated standardized terminology and the Incident Command System (ICS), where applicable. The plan is supported by Standard Operating Procedures that include detailed instructions on when and how each of the response actions will be performed.

D. Purpose

Preparation for coping with an emergency at PNPS necessitates a joint cooperative effort by Town, State, and Federal agencies, quasi-government and private volunteer organizations; and PNPS. This plan defines the role of the Town of Marshfield and identifies the resources and interface that must exist among involved agencies at all levels. This plan is supported by Standard Operating Procedures (SOP's), which include detailed instructions on when and how each of the response actions are to be performed.

E. Concept of Operations

1. Direction and Control

The direction and control of off-site emergency activities in the Town of Marshfield is the responsibility of the Board of Selectmen.

(a) The Board of Selectmen will receive advice and support from the Emergency Management Director, and other Emergency Operations Center (EOC) staff members.

(b) The Emergency Management Director will coordinate response efforts with Town, State, and Federal agencies, and quasi-government and private volunteer organizations.

2. Notification

(a) In the event of an emergency at PNPS, the Marshfield Police Dispatcher will be notified by the PNPS Operations Shift Manager.

(b) The Marshfield Police Dispatcher at the 24-hour dispatch point will notify the Board of Selectmen, Emergency Management Director, and other designated agencies/individuals as described in Section II, Part E of the plan. The Emergency Management Director will verify and ensure that Town agencies/individuals are notified.

(c) In the event of an emergency involving protective actions, the Board of Selectmen will ensure notification of the EPZ population in the Town.

3. Emergency Communications

Communications will be maintained among principal response organizations during an emergency at PNPS.

(a) BECONS and commercial telephone will be used as the primary means of communications between the Town EOC and other EOC's. Local emergency response radio networks will serve as alternate means of communications.

(b) The EOC Communications Officer will be responsible for activating and managing the Town EOC Communications Center used to support communications to and from EOC staff. The Communications Center has radio communications capabilities to include Fire, EMS, Police, Highway, Harbormaster, RACES/ARES, CB and BECONS.

4. Public Information

- (a) Information will be provided to the public in an accurate and timely manner before, during and after an emergency at PNPS using public information materials and news statements disseminated from the Joint Information Center.
- (b) Emergency public information materials will be produced and distributed to Town residents within the EPZ on an annual basis.
- (c) The Town of Marshfield Public Information Officer (PIO) will coordinate with Federal, State, Town, and PNPS PIO's to provide information to the public. News statements will be disseminated from the Joint Information Center.
- (d) Rumor Control telephone numbers will be activated in the EOC and publicized for informational purposes in the public information calendar and through the Joint Information Center.

5. Emergency Facilities and Equipment

- (a) The Town of Marshfield EOC located in the Police Station will serve as the central location for coordination of Town response efforts, during an emergency at PNPS.
- (b) Radiological equipment, communications equipment and emergency supplies have been identified and are available to support the Town response.

6. Accident Assessment

Accident assessment is the primary function of the Massachusetts Department of Public Health (MDPH). The MDPH Nuclear Incident Advisory Team (NIAT) personnel will determine the consequences of any radiological release from PNPS based upon Utility data and field monitoring results.

7. Protective Response

The State is responsible for deciding the protective action to be implemented. The Town is responsible for implementing the protective action selected. Protective actions will be based on recommendations from the Utility and State assessment teams, and other available sources of information.

- (a) Sheltering may be recommended when Plant, weather, or road conditions indicate that sheltering would be the appropriate action. The public will be instructed via Emergency Alert System (EAS) announcements to remain indoors with ventilation systems turned off and doors and windows closed.
- (b) Evacuation may be recommended when there is sufficient lead time before a release of radioactive materials. The public will be instructed via EAS announcement to travel out of the affected area using designated evacuation routes.
- (c) Evacuees who report to the designated reception center shall be registered, monitored for decontamination, and decontaminated, as necessary.

8. Radiological Exposure Control

- (a) Emergency workers will be provided with dosimeters, as directed by MDPH, and potassium iodide (KI). Exposure records will be maintained for all emergency workers and doses will be reported to MDPH.
- (b) Monitoring and decontamination of emergency workers, and equipment will be performed at a Regional Emergency Worker Monitoring and Decontamination Station (REWMDS).

9. Relocation, Reentry and Return

- (a) The Massachusetts Emergency Management Agency will terminate the emergency response effort based upon recommendations from the MDPH and Town EOC staff. Relocation, reentry and return efforts will be implemented to ensure a safe and orderly recovery phase.
- (b) Following a determination that the area is safe for return, evacuees will be notified that they may return to the area.
- (c) Limited access to restricted areas may be permitted for essential duties. Re-entry will be coordinated between MDPH and the Board of Selectmen.

F. Support Areas

1. Staff

Staff support will rest with each agency according to the personnel resources and capabilities of the agency. Arrangements for inter-agency support will be made through the Emergency Management Director.

2. Material

Material support will be provided by each agency as appropriate and necessary. Additional or unusual materials may be obtained through the Emergency Management Director.