

ATTACHMENT 1

Letter Number 2.18.038

Response to Request for Additional Information -
License Amendment Request to Revise the Pilgrim Nuclear Power Station
Emergency Plan to Address the Permanently Defueled Condition

ATTACHMENT 1 to Letter No. 2.18.038

A Nuclear Regulatory Commission (NRC) request for additional information (RAI) regarding a license amendment request to revise the Pilgrim Nuclear Power Station (PNPS) Site Emergency Plan was received by Entergy Nuclear Operations, Inc. (ENO) via electronic mail (email) dated May 4, 2018. ENO responses to the RAI request are provided below.

NRC REQUEST

By application dated January 12, 2018 (ADAMS Accession No. ML18023A687), Entergy requested a license amendment request (LAR) for PNPS to revise the Site Emergency Plan (SEP) for a permanently shut down and defueled condition. This LAR proposes to revise the on-shift and Emergency Response Organization staffing for permanent cessation of power operations and permanent removal of fuel from the reactor vessel.

The NRC staff has reviewed Entergy's submittal and determined that additional information is required to enable the NRC staff to make an independent assessment regarding its technical review.

NRC RAI-PNPS-1

Section 3.2.1.6, "Major Functional Area: Repair and Corrective Actions," of Attachment 1, "Description and Evaluation of the Proposed Changes," states on page 17 of 40:

Eliminate two (2) Nuclear Control Technicians (augmenting within 30 minutes)

However, on page 18 of 40, it states:

*Nuclear Maintenance Technician (electrical) duties include providing repairs and corrective actions for plant electrical equipment, as directed. **Nuclear Control Technician** duties include providing repairs and corrective actions to plant instrumentation, as directed.*

Please explain the apparent contradiction as to whether a Nuclear Control Technician will be an augmenting responder.

ENO Response to RAI-PNPS-1

Currently, PNPS SEP Part 2, Table B-1 specifies the on-shift and augmented staffing for certain positions in Major Functional Areas. Section 3.2.1 of the LAR provides an analysis for each proposed on-shift and augmenting Emergency Response Organization (ERO) staffing change that impacts the content of PNPS SEP Part 2, Table B-1. Specifically, Section 3.2.1.6 provided an analysis of the proposed elimination of two (2) Nuclear Control Technicians (augmenting within 30 minutes) included in the Major Functional Area of Repair and Corrective Actions of Table B-1, in addition to other changes that are outside the scope of this RAI. The excerpt cited in the RAI (page 18 of 40) describes the current duties of the augmenting Nuclear Control Technicians while PNPS is in operation.

The proposed on-shift and augmenting ERO staffing changes are indicated in the markup of SEP Table B-1, included in Attachment 3 of the LAR. These changes are also addressed in the SEP Change Summary included as Attachment 2 of the LAR. PNPS will not maintain a Nuclear

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Control Technician as an augmenting member of the ERO. However, PNPS will maintain trained and qualified Instrumentation & Controls personnel to respond to an emergency. The proposed elimination of the augmenting Nuclear Control Technicians is described in Section 3.2.2.2 of the LAR.

NRC RAI-PNPS-2

Section 3.2.1.6 of Attachment 1, states on page 18 of 40:

*The Engineering Coordinator is tasked with performing an engineering assessment of plant conditions and/or actions needed to mitigate damage to the plant. With respect to responding to engineering requests from the Engineering Coordinator, this function will **continue to be performed by augmenting qualified engineering resources**. The Engineering Coordinator will continuously evaluate the need for engineering resources and coordinate with the EOF Technical Advisor to call in additional qualified engineering personnel. These individuals may be tasked with activities to be completed at engineering offices external to the TSC [Technical Support Center], called to report to the TSC, or directed to other facilities.*

Please clarify if the Engineering Coordinator is or will be qualified to provide “engineering assessment of plant conditions and/or actions needed to mitigate damage to the plant,” specifically in response to a fuel handling accident or an event resulting in damage to the spent fuel pool (SFP) integrity or the loss of SFP cooling or inventory.

ENO Response to RAI-PNPS-2

In the permanently shut down and defueled condition, the TSC Engineering Coordinator would have the necessary qualifications, expertise, and capabilities to perform an engineering assessment of plant conditions and/or actions needed to mitigate damage to the plant in response to a fuel handling accident or an event resulting in damage to the spent fuel pool (SFP) integrity or the loss of a SFP cooling or inventory.

NRC RAI-PNPS-3

Attachment 3, “Proposed Revisions to the PNPS Site Emergency Plan, Revision 48 (Marked-up Version),” provides in Appendix 3, “Sample Copies of Letters of Agreements,” letters of agreement with the Town of Plymouth Police Department and the Plymouth Fire Department, that include statements indicating that the agreements are valid until December 31, 2014. Please provide the most recent letters of agreement or documentation that these letters of agreement will continue to be in effective upon the implementation of the proposed plan changes.

ENO Response to RAI-PNPS-3

The most recent letters of agreement between PNPS and the Town of Plymouth Police Department and the Plymouth Fire Department are included as Attachment 2 to this response.

ATTACHMENT 2

Letter Number 2.18.038

Letters of Agreement



TOWN OF PLYMOUTH
FIRE DEPARTMENT

114 Sandwich Street
Plymouth, Massachusetts 02360-2453

FAX (508) 830-4174
(508) 830-4213

**Agreement between the Plymouth Fire Department
And Entergy Nuclear Generation Company (Entergy Nuclear), or its
Predecessor Company**

In the event of an incident at the
Pilgrim Nuclear Power Station (PNPS)
This agreement is valid until December 31, 2018

The Plymouth Fire Department and Entergy Nuclear herewith agree to the following:

1. Plymouth Fire Department will provide Fire Protection and Suppression Assistance for the Pilgrim Station Site and activate the Plymouth Emergency Operations Center in the event of an emergency including those resulting from hostile actions at the site.
 - a) While providing Fire Protection and Suppression Assistance the senior Plymouth Fire Department Officer on scene and the pilgrim Station Fire Brigade Leader shall remain in continuous communications to co-ordinate the fire fighting, life saving and property protection activities.

In practice this means that Pilgrim Station will defer to Plymouth Fire Department expertise and authority for fire fighting, life saving and property protection activities and Plymouth Fire Department will defer to Pilgrim Station expertise and authority involving reactor plant safety.

- b) Entergy Nuclear and Plymouth Fire realize the need for force readiness training for fire crews and interaction of PNPS personnel and fire crews to ensure safe and efficient operations. To ensure force readiness, Entergy Nuclear shall arrange for and provide funding on an annual basis for;
 - I. The Plymouth Fire Department to train and drill on-site with the Station's Fire Brigade.
Radiological monitoring and instrumentation training for Plymouth Firefighters.



2. Plymouth Fire Department will carry out their emergency duties and exercise the powers granted to them pursuant to the General Laws of the Commonwealth of Massachusetts (MGL), the Code of Massachusetts Regulations (CMR), the Commonwealth of Massachusetts Comprehensive Emergency Management Plan and the bylaws of the Town of Plymouth.
3. The Plymouth Fire Department will dispatch crews to Pilgrim Station to provide emergency medical services when requested, through letter of agreement with ambulance companies or through mutual aid.
4. The Plymouth Fire Department will provide storage facilities (as such space and facilities are available) for the storage of off-site emergency equipment supplied by Entergy Nuclear and required by Planning Section H, Emergency Facilities and Equipment, of NUREG-0654.
 - a) This is intended to include all equipment currently stored (a compressor to fill SCBA bottles). Any additional equipment storage needs will be subject to negotiations between the Plymouth Fire Department and Entergy Nuclear and will be subject to available space that the Department can provide.

Approved Entergy Nuclear
Pilgrim Nuclear Power Station

Approved Plymouth Fire

Print name BRIAN SULLIVAN

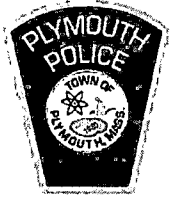
Print name G. Edward Bradley, Fire Chief

Signature [Handwritten Signature]

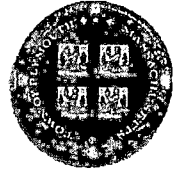
Signature [Handwritten Signature]

Date 10/27/17

Date 9/27/2017



PLYMOUTH POLICE DEPARTMENT



20 Long Pond Road, Plymouth, MA 02360

Phone (508) 830-4218 - Fax (508) 830-4217

www.plymouthpolice.com

Michael E. Botieri
Chief of Police

September 15, 2017

Brian R. Sullivan

Site VP Pilgrim, Entergy

Plymouth, MA 02360

Dear Mr. Sullivan,

The Plymouth Police Department agrees to respond to the request of the Pilgrim Nuclear Power Station operating personnel or security in the event of an emergency, including those from hostile actions to the site, in the following areas:

1. Control and limit access to the Town roads in the vicinity of the site including the erection of barriers on Rocky Hill Road,
2. Assist in the evacuation of the public from the site,
3. Provide locations off site for emergency equipment.

The Plymouth Police Department will carry out their emergency duties and exercise their powers granted to them pursuant to the General Laws of the Commonwealth of Massachusetts ("MGL's," specifically MGL 41, Section 98), the Code of Massachusetts Regulations ("CMR's") the Commonwealth of Massachusetts Comprehensive Emergency Management Plan, the Metropolitan Law Enforcement Council ("Metro-LEC"), and the laws of the Town of Plymouth.

This agreement is valid until December 31, 2018.

Sincerely,

Michael E. Botieri, Chief of Police

Cc Entergy Folder