STATE OF THE STATE

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA. PA 19406-1415

December 7, 2010

Robert G. Smith Site Vice President Entergy Nuclear Operations, Inc. Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5508

SUBJECT:

PILGRIM NUCLEAR POWER STATION - NRC EVALUATED EMERGENCY

PREPAREDNESS EXERCISE - INSPECTION REPORT NO.

05000293/2010502

Dear Mr. Smith:

On November 18, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the November 16, 2010, evaluated emergency preparedness exercise at your Pilgrim Nuclear Power Station. The enclosed inspection report documents the inspection results, which were discussed on November 18, 2010, with Mr. S. Bethay, Site Director of Nuclear Safety Assurance, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

Som Trava

James M. Trapp, Chief Plant Support Branch 1

Division of Reactor Safety

Docket Nos. 50-293 License Nos. DPR-35

Enclosure:

NRC Inspection Report 05000293/2010502

cc w/encl: Distribution via ListServ

Robert G. Smith Site Vice President Entergy Nuclear Operations, Inc. Pilgrim Nuclear Power Station 600 Rocky Hill Road Plymouth, MA 02360-5508

SUBJECT:

PILGRIM NUCLEAR POWER STATION - NRC EVALUATED EMERGENCY

PREPAREDNESS EXERCISE - INSPECTION REPORT NO.

05000293/2010502

Dear Mr. Smith:

On November 18, 2010, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the November 16, 2010, evaluated emergency preparedness exercise at your Pilgrim Nuclear Power Station. The enclosed inspection report documents the inspection results, which were discussed on November 18, 2010, with Mr. S. Bethay, Site Director of Nuclear Safety Assurance, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely, /RA/

James M. Trapp, Chief Plant Support Branch 1 Division of Reactor Safety

Docket Nos. 50-293 License Nos. DPR-35

Enclosure:

NRC Inspection Report 05000293/2010502

cc w/encl: Distribution via ListServ

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRS	RI/DRP	RI/DRS	
NAME	SBarr/STB	DJackson/TCS for	JTrapp/JMT	
DATE	12/03/10	12/06/10	12/06/10	

Distribution w/encl: (via E-mail)

W. Dean, RA
M. Dapas, DRA
D. Lew, DRP
J. Clifford, DRP
D. Roberts, DRS
P. Wilson, DRS

(R1ORAMAIL RESOURCE)
(R1DRPMAIL RESOURCE)
(R1DRPMAIL RESOURCE)
(R1DRSMAIL RESOURCE)
(R1DRSMAIL RESOURCE)

- J. Andersen, RI OEDO
- D. Jackson, DRP
- T. Setzer, DRP
- M. Schneider, DRP, SRI
- B. Smith, DRP, RI
- S. Campbell, Resident OA
- D. Bearde, DRS
- R. Kahler, NSIR/EPD
- S. LaVie, NSIR/EPD

RidsNrrPMPilgrim Resource

RidsNrrDorlLPL1-1 Resource

ROPreports Resource@nrc.gov

- J. Trapp, DRS
- S. Barr, DRS
- C. Crisden, DRS

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No:

50-293

License No:

DPR-35

Report No:

05000293/2010502

Licensee:

Entergy Nuclear Operations, Inc.

Facility:

Pilgrim Nuclear Power Station (PNPS)

Location:

600 Rocky Hill Road Plymouth, MA 02360

Dates:

November 15 - 18, 2010

Inspectors:

S. Barr, Sr. Emergency Preparedness Inspector, DRS, Region I (Lead)

D. Silk, Sr. Operations Engineer, DRS, Region I

C. Crisden, Emergency Preparedness Inspector, DRS, Region I

R. Rolph, Health Physicist, DRS, Region I B. Smith, Resident Inspector, DRP, Region I

K. Dunham, Reactor Engineer, DRP, Region I (Observer)

Approved By:

James M. Trapp, Chief Plant Support Branch 1 Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000293/2010502; 11/15/2010-11/18/2010; Pilgrim Nuclear Power Station; Emergency Preparedness Exercise Report.

This was an announced inspection conducted by five region-based inspectors and one resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Cornerstone: Emergency Preparedness

No findings were identified.

REPORT DETAILS

REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 <u>Exercise Evaluation</u> (71114.01 – 1 Sample)

a. Inspection Scope

Prior to the November 16, 2010, emergency preparedness exercise, the NRC inspectors conducted an in-office review of the exercise objectives and scenario, which Entergy had submitted to the NRC, to determine if the exercise would test major elements of the Pilgrim Nuclear Power Station (PNPS) emergency plan as required by 10 CFR 50.47(b)(14). This overall exercise inspection activity represented the completion of one sample on a biennial cycle.

The exercise evaluation consisted of the following review and assessment:

- The adequacy of Pilgrim's performance in the biennial full-participation exercise regarding the implementation of the risk-significant planning standards (RSPS) described in 10 CFR 50.47(b)(4), (5), (9), and (10), which are: emergency classification; offsite notification; radiological assessment; and, protective action recommendations, respectively.
- The overall adequacy of Pilgrim's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the Control Room Simulator, Technical Support Center (TSC), Joint Information Center (JIC), and Emergency Operations Facility (EOF).
- A review of other performance areas, such as: the emergency response organization's (ERO's) recognition of abnormal plant conditions; command and control; intra- and inter-facility communications; prioritization of mitigating activities; utilization of repair and field monitoring teams; interface with offsite agencies; staffing and procedure adequacy; and, the overall implementation of the emergency plan and its implementing procedures.
- A review of past performance issues from the last PNPS NRC exercise inspection report and Pilgrim's EP drill reports, to determine the effectiveness of licensee corrective actions as demonstrated during the November 16th exercise and to ensure compliance with 10 CFR 50.47(b)(14).

The licensee's post-exercise critiques, to evaluate Entergy's self-assessment
of the Pilgrim ERO performance during the November 16th exercise and to
ensure compliance with 10 CFR 50, Appendix E, Section IV.F.2.g.

The inspectors reviewed the documents listed in the attachment to this report.

b. Findings

No findings were identified.

1EP4 <u>Emergency Action Level (EAL) and Emergency Plan Changes</u> (71114.04 – 1 Sample)

a. Inspection Scope

Since the last NRC inspection of this program area, Entergy implemented various changes to the PNPS Emergency Plan. Entergy determined that in accordance with 10 CFR 50.54(q), those changes did not result in a decrease in effectiveness of the Plan, and that the revised Plan continued to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. The inspectors reviewed all EAL changes made since November 2009, and conducted a sampling review of other Emergency Plan changes, including changes to lower-tier emergency plan implementing procedures, to evaluate for any potential decreases in effectiveness of the Emergency Plan. However, this review was not documented in a Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator (PI) Verification (71151 – 3 Samples)

a. Inspection Scope

The inspectors reviewed data for the Pilgrim EP Pls, which are: (1) Drill and Exercise Performance (DEP); (2) Emergency Response Organization (ERO) Drill Participation; and, (3) Alert and Notification System (ANS) Reliability. The last EP inspection at Pilgrim was conducted in the fourth calendar quarter of 2009, so the inspectors reviewed supporting documentation from EP drills and tests from the fourth calendar quarter of 2009, and the first, second and third calendar quarters of 2010, to verify the accuracy of the reported PI data. The review of these PIs was conducted in accordance with NRC Inspection Procedure 71151,

using the acceptance criteria documented in NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revision 6.

This inspection activity represented the completion of three samples on an annual cycle.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On November 18, 2010, the inspectors presented the results of this inspection to Mr. S. Bethay, the PNPS Director of Nuclear Safety Assurance, and other members of the Pilgrim staff. No proprietary information was provided to the inspectors during this inspection.

A-1

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

S. Bethay, Director, Nuclear Safety Assurance

M. Wilson, Manager, Emergency Preparedness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Section 1EP1: Exercise Evaluation

EP-PP-01, Pilgrim Nuclear Power Station Emergency Plan (Revision 35)

PNPS Emergency Implementing Procedures

PNPS Emergency Plan Administrative Procedures

PNPS November 16, 2010, Emergency Exercise Scenario Package

PNPS Emergency Preparedness Drill Reports, January 2009 - October 2010

November 16, 2010, NRC/FEMA EP Evaluated Exercise Report (10-05), describing all Condition Reports from the exercise

Section 1EP4: Emergency Action Level and Emergency Plan Changes

EP-PP-01, Pilgrim Nuclear Power Station Emergency Plan (Revision 35)

EN-LI-100, Process Applicability Determination (Revision 6)

EN-LI-101, 10CFR50.59 Evaluation Program (Revision 5)

EN-LI-113, Licensing Basis Document Change Process (Revision 2)

EN-EP-305, Emergency Planning 10CFR50.54(q) Review Process (Revision 1)

10 CFR 50.54(g) Reviews, performed November 2009 through October 2010

Section 40A1: Performance Indicator Verification

EN-EP-201, Performance Indicators (Revision 10)

DEP PI data, October 2009 - September 2010

ERO Drill Participation PI data, October 2009 - September 2010

ANS Reliability PI data, October 2009 - September 2010

A-2

LIST OF ACRONYMS

ANS	Alert Notification System
DEP	Drill and Exercise Performance
EAL	Emergency Action Level
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
JIC	Joint Information Center
NRC	Nuclear Regulatory Commission
PI	Performance Indicator
PNPS	Pilgrim Nuclear Power Station
RSPS	Risk Significant Planning Standard
TSC	Technical Support Center