



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I**  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

September 4, 2012

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

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
PILGRIM NUCLEAR POWER STATION (REPORT 05000293/2012006)**

Dear Mr. Smith:

On August 14, 2012, the U. S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Pilgrim Nuclear Power Station. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2011, through June 30, 2012. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This assessment reflects the integration of the Security Cornerstone into the Reactor Oversight Process (ROP) performance assessment program governed by Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program."

The NRC determined the performance at Pilgrim during the most recent quarter was within the Regulatory Response Column of the NRC's ROP Action Matrix based on one finding originating in the third quarter of 2011 having low to moderate safety significance (White) in the Initiating Events Cornerstone. The finding involved the failure of Pilgrim personnel to implement conduct of operations and reactivity control standards and procedures during a reactor startup on May 10, 2011, which contributed to an unrecognized subcriticality followed by an unrecognized return to criticality and subsequent reactor scram.

As a result of our review of Pilgrim's performance, we plan to conduct a supplemental inspection using NRC Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," in November 2012. This inspection procedure is conducted to provide assurance that the root cause and contributing causes of risk significant performance issues are understood, the extent of condition is identified, and the corrective actions are sufficient to prevent recurrence.

During this assessment period, the NRC completed inspections of Entergy's strike contingency plans, operations during an extended lockout, and resumption of normal operations following a job action that occurred after the expiration of a union contract on May 15, 2012. The NRC implemented 24-hour onsite coverage to ensure the plant continued to be operated in a safe manner. The NRC Branch Chief responsible for Pilgrim was also onsite to assist the resident and regional inspectors, and to observe Entergy's operations to ensure Pilgrim continued to

meet its regulatory requirements. The NRC verified that the plant was operated in a safe manner during and subsequent to the job action.

The enclosed inspection plan lists the inspections scheduled through December 31, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to the baseline inspections, consistent with the Agency's actions related to Fukushima, the NRC will perform TI-187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns," and TI-188, "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." Furthermore, the NRC will perform NRC inspection procedure 71003, "Post-Approval Site Inspection for License Renewal," in November 2012. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter 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 Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Dr. Ronald R. Bellamy at 610-337-5200 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Darrell J. Roberts, Director  
Division of Reactor Projects

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

Enclosure: Pilgrim Inspection/Activity Plan

cc w/encl: Distribution via ListServ

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Sincerely,  
**/RA/**  
 Darrell J. Roberts, Director  
 Division of Reactor Projects

Docket Nos.: 50-293  
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## Pilgrim

## Inspection / Activity Plan

07/01/2012 - 12/31/2013

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
1	08/15/2012	12/31/2012	<b>2515/187</b> IP 2515/187	<b>- FLOODING WALKDOWNS</b> Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	2
1	08/15/2012	12/31/2012	<b>2515/188</b> IP 2515/188	<b>- SEISMIC WALKDOWNS</b> Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	2
1	08/13/2012	08/17/2012	<b>71124</b> IP 71124.05	<b>- RADIATION SAFETY INSPECTION</b> Radiation Monitoring Instrumentation	1
1	08/13/2012	08/17/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	1
1	08/13/2012	08/17/2012	<b>71124</b> IP 71124.05	<b>- RAD MONITORING SYSTEM</b> Radiation Monitoring Instrumentation	1
1	08/13/2012	08/17/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	1
1	10/01/2012	12/31/2012	<b>92702</b> IP 92702	<b>- FOLLOWUP TO CONFIRMATORY ORDER (QA/QC)</b> Followup On Corrective Actions For Violations And Deviations	1
1	10/01/2012	12/31/2012	<b>92702</b> IP 92702	<b>- CONF. ORDER FOLLOWUP RIVERBEND ADR QA/QC</b> Followup On Corrective Actions For Violations And Deviations	1
1	10/22/2012	10/26/2012	<b>TRI FI</b> IP 7111105T	<b>- TRIENNIAL FIRE PROTECTION INSPECTION</b> Fire Protection [Triennial]	5
1	11/05/2012	11/09/2012	IP 7111105T	Fire Protection [Triennial]	5
1	11/06/2012	11/10/2012	<b>EP EX</b> IP 7111401	<b>- EP EXERCISE EVALUATION</b> Exercise Evaluation	5
1	11/06/2012	11/10/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	5
1	11/05/2012	11/09/2012	<b>71124</b> IP 71124.06	<b>- RADIATION SAFETY INSPECTION</b> Radioactive Gaseous and Liquid Effluent Treatment	1
1	11/05/2012	11/09/2012	IP 71151-OR01	Occupational Exposure Control Effectiveness	1
1	11/13/2012	11/16/2012	<b>71003</b> IP 71003	<b>- LR-PHASE III FOLLOWUP</b> Post-Approval Site Inspection for License Renewal	2
1	01/01/2013	03/31/2013	<b>2515/187</b> IP 2515/187	<b>- FLOODING WALKDOWNS</b> Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	2
1	01/15/2013	03/31/2013	<b>2515/188</b> IP 2515/188	<b>- SEISMIC WALKDOWNS</b> Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	2
1	02/11/2013	02/15/2013	<b>71124</b> IP 71124.01	<b>- RADIATION SAFETY INSPECTION</b> Radiological Hazard Assessment and Exposure Controls	1
1	02/11/2013	02/15/2013	IP 71124.02	Occupational ALARA Planning and Controls	1

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

## Pilgrim

## Inspection / Activity Plan

07/01/2012 - 12/31/2013

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1	02/25/2013	03/01/2013	<b>71124.08 - RADWASTE</b> IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	1
1	04/22/2013	04/26/2013	<b>711108G - INSERVICE INSPECTION</b> IP 711108G	Inservice Inspection Activities - BWR	1
1	05/13/2013	05/17/2013	<b>71124 - RADIATION SAFETY INSPECTION</b> IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	1
1	05/13/2013	05/17/2013	IP 71124.04	Occupational Dose Assessment	
1	06/03/2013	06/07/2013	<b>711107T - TRIENNIAL HEAT SINK</b> IP 711107T	Heat Sink Performance	1
1	10/07/2013	10/11/2013	<b>711111B - PILGRIM REQUAL INSPN WITH P/F RESULTS</b> IP 711111B	Licensed Operator Requalification Program	2
1	11/11/2013	11/15/2013	<b>12/9 EXM - PILGRIM INITIAL EXAM</b> U01876	FY14-PILGRIM INITIAL OPERATOR LICENSING EXAM	4
1	12/09/2013	12/13/2013	U01876	FY14-PILGRIM INITIAL OPERATOR LICENSING EXAM	
1	08/12/2013	08/16/2013	<b>71124 - RADIATION SAFETY INSPECTION</b> IP 71124.05	Radiation Monitoring Instrumentation	1
1	08/12/2013	08/16/2013	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	08/19/2013	08/23/2013	<b>EP PROGR - EP PROGRAM INSPECTION</b> IP 7111402	Alert and Notification System Testing	1
1	08/19/2013	08/23/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	08/19/2013	08/23/2013	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	08/19/2013	08/23/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	09/16/2013	09/20/2013	<b>PI&amp;R - PI&amp;R</b> IP 71152B	Problem Identification and Resolution	4
1	09/30/2013	10/04/2013	IP 71152B	Problem Identification and Resolution	
1	10/21/2013	10/25/2013	<b>71124 - RADIATION SAFETY INSPECTION</b> IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	1
1	10/21/2013	10/25/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/21/2013	10/25/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/21/2013	10/25/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/21/2013	10/25/2013	IP 71124.04	Occupational Dose Assessment	
1	10/21/2013	10/25/2013	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	11/04/2013	11/08/2013	<b>711117 - PERMANENT PLANT MODIFICATIONS</b> IP 711117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	4

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Pilgrim

Inspection / Activity Plan

07/01/2012 - 12/31/2013

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1	11/18/2013 11/22/2013	7111117 - PERMANENT PLANT MODIFICATIONS	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	4

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