



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

September 1, 2011

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 05000293/2011006)**

Dear Mr. Smith:

On August 10, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of the 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, 2010 through June 30, 2011. 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 performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined the performance at Pilgrim Nuclear Power Station during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. 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.

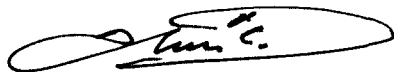
On Thursday, September 1, 2011, the NRC issued a Special Inspection Team (SIT) inspection report (05000293/2011012) which documented one finding that, using the reactor safety Significance Determination Process (SDP), was preliminarily determined to be White, or of low to moderate safety significance. The finding involved the failure of Pilgrim personnel to implement conduct of operations and reactivity control standards and procedures during a reactor startup, which contributed to an unrecognized subcriticality followed by an unrecognized return to criticality and subsequent reactor scram. The cover letter to the inspection report describes the process available to you before the NRC makes a final decision on this matter.

In the days following the Fukushima Daiichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed Temporary Instruction (TI) 183, "Follow-up to Fukushima Daiichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century: The Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident." The NRC is currently reviewing the Task Force's recommendations to determine what additional actions may be warranted.

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 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).

Please feel free to contact me at (610)337-5200 with any questions you have regarding this letter.

Sincerely,

 FOR

Dr. Ronald R. Bellamy, Chief  
Projects Branch 5  
Division of Reactor Projects

Docket Nos. 50-293  
License No. DPR-35

Enclosure: Pilgrim Inspection/Activity Plan

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In the days following the Fukushima Daiichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed Temporary Instruction (TI) 183, "Follow-up to Fukushima Daiichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century: The Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident." The NRC is currently reviewing the Task Force's recommendations to determine what additional actions may be warranted.

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Sincerely,  
**/RA by Thomas C. Setzer Acting For/**  
 Dr. Ronald R. Bellamy, Chief  
 Projects Branch 5  
 Division of Reactor Projects

Docket Nos. 50-293  
 License No. DPR-35  
 Enclosure: Pilgrim Inspection/Activity Plan

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**Pilgrim**  
**Inspection / Activity Plan**  
**07/01/2011 - 12/31/2012**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>SIT - REACTIVITY MANAGEMENT EVENT</b>		<b>3</b>
1	05/16/2011	07/20/2011	IP 93812	Special Inspection	
			<b>EP PROGR - EP PROGRAM INSPECTION</b>		<b>1</b>
1	07/20/2011	07/29/2011	IP 7111402	Alert and Notification System Testing	
1	07/20/2011	07/29/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	07/20/2011	07/29/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	07/20/2011	07/29/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	07/20/2011	07/29/2011	IP 71151-EP01	Drill/Exercise Performance	
1	07/20/2011	07/29/2011	IP 71151-EP02	ERO Drill Participation	
1	07/20/2011	07/29/2011	IP 71151-EP03	Alert & Notification System	
			<b>711111B - PILGRIM REQUAL INSP W/ P/F RESULTS</b>		<b>2</b>
1	10/03/2011	10/07/2011	IP 7111111B	Licensed Operator Requalification Program	
			<b>71124.08 - RAD MATERIAL AND TRANSPORTATION</b>		<b>1</b>
1	08/08/2011	08/12/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			<b>7111121 - CDBI</b>		<b>7</b>
1	09/12/2011	09/16/2011	IP 7111121	Component Design Bases Inspection	
1	09/26/2011	09/30/2011	IP 7111121	Component Design Bases Inspection	
1	10/03/2011	10/07/2011	IP 7111121	Component Design Bases Inspection	
			<b>71124.01 - RAD HAZARD ASSESS, ALARA</b>		<b>1</b>
1	10/17/2011	10/20/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/17/2011	10/20/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/17/2011	10/20/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/17/2011	10/20/2011	IP 71124.04	Occupational Dose Assessment	
1	10/17/2011	10/20/2011	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/17/2011	10/20/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
			<b>71124.01 - RAD HAZARD ASSESS, ALARA, AIR, DOSE</b>		<b>2</b>
1	11/14/2011	11/18/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	11/14/2011	11/18/2011	IP 71124.02	Occupational ALARA Planning and Controls	
1	11/14/2011	11/18/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	11/14/2011	11/18/2011	IP 71124.04	Occupational Dose Assessment	
			<b>71124 - RADIATION SAFETY INSPECTION</b>		<b>1</b>
1	01/30/2012	02/03/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1	01/30/2012	02/03/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	01/30/2012	02/03/2012	IP 71124.04	Occupational Dose Assessment	

This report does not include INPO and OUTAGE activities.  
 This report shows only on-site and announced inspection procedures.

**Pilgrim**  
**Inspection / Activity Plan**  
 07/01/2011 - 12/31/2012

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>71124 - RADIATION SAFETY INSPECTION</b>		<b>1</b>
1	04/09/2012	04/13/2012	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>TI251601 - TI2516/001 REVIEW LR ACTIV</b>		<b>6</b>
1	04/16/2012	04/20/2012	IP 2516/001	Review of License Renewal Activities	
1	04/30/2012	05/04/2012	IP 2516/001	Review of License Renewal Activities	
			<b>71124 - RADIATION SAFETY INSPECTION</b>		<b>1</b>
1	05/21/2012	05/25/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	05/21/2012	05/25/2012	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			<b>71124 - RADIATION SAFETY INSPECTION</b>		<b>1</b>
1	07/09/2012	07/13/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	07/09/2012	07/13/2012	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>TRI FI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>6</b>
1	10/22/2012	10/26/2012	IP 7111105T	Fire Protection [Triennial]	
1	11/05/2012	11/09/2012	IP 7111105T	Fire Protection [Triennial]	
			<b>EP EX - EP EXERCISE EVALUATION</b>		<b>5</b>
1	11/12/2012	11/16/2012	IP 7111401	Exercise Evaluation	
1	11/12/2012	11/16/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	

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