



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

March 4, 2019

EA-17-086

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

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR PILGRIM NUCLEAR POWER STATION  
(REPORT 05000293/2018006) AND CONFIRMATORY ACTION LETTER  
CLOSURE**

Dear Mr. Sullivan:

The U.S. Nuclear Regulatory Commission (NRC) has completed its end-of-cycle performance assessment of Pilgrim Nuclear Power Station (Pilgrim), including review of performance indicators, inspection results, and enforcement actions from January 1, 2018, through December 31, 2018. This letter informs you of the NRC's assessment of your facility during this period and our plans for future inspections.

The NRC determined that Entergy Nuclear Operations, Inc. (Entergy) demonstrated sustained improvement at Pilgrim throughout 2018, addressed all of the Reactor Oversight Program (ROP) Action Matrix inputs that led to Pilgrim's placement in the Multiple/Repetitive Degraded Cornerstone Column (Column 4), and satisfactorily completed all Recovery Plan items identified in the Confirmatory Action Letter (CAL) (ML17214A088<sup>1</sup>). In arriving at this assessment, the NRC considered the results of NRC inspections (including the five team inspections tasked to follow up on the CAL commitments), plant performance indicators and the reliability of safety significant equipment, Entergy's decision-making and response to plant events, and enforcement actions since Pilgrim was placed in Column 4. We noted several areas of sustained performance improvement including: (1) significant reduction in human performance-related events that adversely affected plant safety; (2) more effective and timely corrective action program implementation; (3) improved risk recognition and conservative decision-making; and (4) marked improvement in the site's safety culture. Furthermore, no Greater-than-Green findings or performance indicators were identified since Pilgrim was placed in Column 4. As a result, as of the date of this letter, Pilgrim will transition out of Column 4 and into Column 1 of the Action Matrix. Further, the Confirmatory Action Letter is closed.

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<sup>1</sup> The designation in parentheses refers to an Agencywide Documents Access and Management System (ADAMS) Accession Number. Documents referenced in this letter are publicly available using the Accession Number in ADAMS.

In a letter (ML15328A053) dated November 10, 2015, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.82(a)(1)(i), you notified the NRC of your intent to permanently cease power operations at Pilgrim no later than June 1, 2019. Once you formally notify the NRC that the plant is permanently shut down and that all fuel has been removed from the reactor vessel, then Pilgrim will transition from Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," and IMC 2515, "Light Water Reactor Inspection Program – Operations Phase," to IMC 2561, "Decommissioning Power Reactor Inspection Program." As a result, inspections after June 2019 in the enclosed schedule are tentative. Any inspections scheduled after the final shutdown date will be reevaluated at that time for applicability and the staff will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant.

The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The ROP provides inherent flexibility to permit inspection sampling adjustments. These adjustments are made to better inform our assessment of performance during this unique period of transition from operating status to permanent shutdown. In addition, the NRC will be implementing quarterly assessment reviews, consistent with the guidance contained in IMC 0305, "Operating Reactor Assessment Program," to more closely monitor and review overall plant activities to assure there are no issues emerging that might indicate a decline in focus on the safe operation of the facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available for public inspection in the NRC's Public Document Room or electronically from the NRC's document system (ADAMS), which is accessible from the NRC's website at [www.nrc.gov/reading-rm/adams.html](http://www.nrc.gov/reading-rm/adams.html).

Please contact Anthony Dimitriadis at (610) 337-6953 with any questions you have regarding this letter.

Sincerely,

*/RA/*

David C. Lew  
Regional Administrator

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

Enclosure:  
Inspection Plan

cc w/encl: Distribution via ListServ

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(REPORT 05000293/2018006) AND CONFIRMATORY ACTION LETTER  
CLOSURE DATED MARCH 4, 2019

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DOCUMENT: S:\ROP Assessment Meetings\ROP-19 EOC Review\Branch 5\Pilgrim\2018\_Pilgrim Annual Assessment Letter Final.docx  
 ADAMS ACCESSION NUMBER: **ML19063A126**

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DATE	2/21/19	2/21/19	2/22/19	2/25/19	3/4/19

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# IP 22 Inspection Activity Plan Report

## Pilgrim

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
<b>Radiological Hazards &amp; Control; IP 71124.01</b>						1
1	02/11/2019	02/15/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	02/11/2019	02/15/2019	IP 71124.04	000728	Occupational Dose Assessment	
<b>Triennial Heat Sink</b>						1
1	03/17/2019	03/23/2019	IP 71111.07T	000700	Heat Sink Performance -Triennial	
<b>ACCESS CONTROL, EQUIP PERF, TRAINING</b>						3
1	04/08/2019	04/12/2019	IP 71130.02	000734	Access Control	
1	04/08/2019	04/12/2019	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1	04/08/2019	04/12/2019	IP 71130.07	000739	Security Training	
1	04/08/2019	04/12/2019	IP 71151	001338	Performance Indicator Verification	
<b>Evaluations of Changes, Tests and Experiments (50.59)</b>						2
1	04/14/2019	04/20/2019	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
<b>Rad Gas &amp; Liquid Effluent Treatment, Occ. Dose Assessment; IP's 71124.06, .04</b>						1
1	05/13/2019	05/17/2019	IP 71124.04	000728	Occupational Dose Assessment	
1	05/13/2019	05/17/2019	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
<b>PILGR REQUAL INSP WITH P/F RESULTS</b>						2
1	09/09/2019	09/13/2019	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance (Annual)	
1	09/09/2019	09/13/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance (Biennial)	
<b>EQ PROGRAM</b>						3
1	11/04/2019	11/08/2019	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
1	11/18/2019	11/22/2019	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
<b>EP PROGRAM INSPECTION</b>						2
1	12/02/2019	12/06/2019	IP 71114.02	000717	Alert and Notification System Testing	
1	12/02/2019	12/06/2019	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1	12/02/2019	12/06/2019	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1	12/02/2019	12/06/2019	IP 71151	001397	Performance Indicator Verification	

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

# IP 22 Inspection Activity Plan Report

## Pilgrim

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
<b>PILGRIM EP EXERCISE INSPECTION</b>						5
1	04/06/2020	04/10/2020	IP 71114.01	000716	Exercise Evaluation	
1	04/06/2020	04/10/2020	IP 71151	001397	Performance Indicator Verification	
<b>FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS</b>						6
1	11/16/2020	11/20/2020	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1	12/07/2020	12/11/2020	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	