



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

May 12, 2016

Mr. John Dent  
Site Vice President  
Entergy Nuclear Operations, Inc.  
600 Rocky Hill Road  
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION – INTEGRATED INSPECTION  
REPORT 05000293/2016001

Dear Mr. Dent:

On March 31, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Pilgrim Nuclear Power Station (PNPS). The enclosed inspection report documents the inspection results, which were discussed on April 28, 2016, with you 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 violations of NRC requirements were identified.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly

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Sincerely,

*/RA/*

Arthur L. Burritt, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

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

Enclosure:  
Inspection Report 05000293/2016001  
w/Attachment: Supplementary Information

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**U.S. NUCLEAR REGULATORY COMMISSION**

REGION I

Docket No. 50-293

License No. DPR-35

Report No. 05000293/2016001

Licensee: Entergy Nuclear Operations, Inc. (Entergy)

Facility: Pilgrim Nuclear Power Station (PNPS)

Location: 600 Rocky Hill Road  
Plymouth, MA 02360

Dates: January 1, 2016 through March 31, 2016

Inspectors: E. Carfang, Senior Resident Inspector  
S. Elkhiamy, Resident Inspector (Acting)  
S. Horvitz, Resident Inspector (Acting)  
B. Sienel, Resident Inspector  
B. Dionne, Health Physicist

Approved By: Arthur L. Burritt, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

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**SUMMARY**

Inspection Report 05000293/2016001; 01/01/2016 – 03/31/2016; Pilgrim Nuclear Power Station (Pilgrim); Routine Integrated Inspection Report.

This report covered a three-month period of inspection by resident inspectors and announced baseline inspections performed by regional inspectors. No findings were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

## REPORT DETAILS

### Summary of Plant Status

The unit began the inspection period at 100 percent power. On February 7, 2016, operators commenced a controlled shutdown due to predicted weather conditions. After the winter storm concluded, the unit returned to 100 percent power on February 12, 2016. On February 15, 2016, the unit down powered to 50 percent power due to a main condenser tube leak. The unit returned to 100 percent power on February 16, 2016. The unit down powered to 48 percent power for a planned thermal backwash on March 29, 2016, and returned to 100 percent power on March 30, 2016. The unit remained at or near 100 percent power for the remainder of the inspection period.

### 1. REACTOR SAFETY

#### **Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity**

#### 1R01 Adverse Weather Protection (71111.01 – 2 samples)

##### Readiness for Impending Adverse Weather Conditions

##### a. Inspection Scope

The inspectors reviewed Entergy's preparations for the onset of severe winter weather conditions listed below. The inspectors reviewed the implementation of adverse weather preparation procedures before the onset of and during this adverse weather condition. The inspectors walked down the emergency diesel generators (EDGs) and switchyard to ensure system availability. The inspectors verified that operator actions defined in Entergy's adverse weather procedure maintained the readiness of essential systems. The inspectors discussed readiness and staff availability for adverse weather response with operations and work control personnel. Documents reviewed for each section of this inspection report are listed in the Attachment.

- Nor'easter winter storm on January 22, 2016
- Blizzard on February 7-8, 2016

##### b. Findings

No findings were identified.

#### 1R04 Equipment Alignment

#### .1 Partial System Walkdowns (71111.04 – 3 samples)

##### a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- Salt service water (SSW) swing pump 'C' during maintenance on SSW pump 'B' on February 17, 2016

- Core spray (CS) 'B' system during maintenance on the 'A' CS loop on February 24, 2016
- 345 kilovolt (kV) line 355 during maintenance on 345 kV line 342 on March 23, 2016

The inspectors selected these systems based on their risk-significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the Final Safety Analysis Report (FSAR), technical specifications (TSs), work orders (WOs), condition reports (CRs), and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted the system's performance of its intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed whether Entergy staff had properly identified equipment issues and entered them into the corrective action program (CAP) for resolution with the appropriate significance characterization.

b. Findings

No findings were identified.

.2 Full System Walkdown (71111.04S – 1 sample)

a. Inspection Scope

On February 28, 2016, the inspectors performed a complete walkdown of accessible portions of the SSW system, to verify the existing equipment lineup was correct. The inspectors reviewed operating procedures, surveillance tests, drawings, equipment lineup check-off lists, and the FSAR to verify the system was aligned to perform its required safety functions. The inspectors also reviewed electrical power availability, component lubrication and equipment cooling, hanger and support functionality, and operability of support systems. The inspectors performed field walkdowns of accessible portions of the systems to verify as-built system configuration matched plant documentation, and that system components and support equipment remained operable. The inspectors confirmed that systems and components were aligned correctly, free from interference from temporary services or isolation boundaries, environmentally qualified, and protected from external threats. The inspectors also examined the material condition of the components for degradation and observed operating parameters of equipment to verify that there were no deficiencies. For identified degradation, the inspectors confirmed the degradation was appropriately managed by the applicable aging management program. Additionally, the inspectors reviewed a sample of related CRs and WOs to ensure Entergy appropriately evaluated and resolved any deficiencies.

b. Findings

No findings were identified.



## 1R05 Fire Protection

### .1 Resident Inspector Quarterly Walkdowns (71111.05Q – 5 samples)

#### a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that Entergy controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression equipment was available for use as specified in the area pre-fire plan, and passive fire barriers were maintained in good material condition. The inspectors also verified that station personnel implemented compensatory measures for out of service, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- Control rod drive hydraulic control units east side on January 21, 2016
- Refueling floor on January 21, 2016
- Reactor core isolation cooling (RCIC) pump quadrant on January 21, 2016
- Reactor building truck lock on January 21, 2016
- Plant computer room on January 26, 2016

#### b. Findings

No findings were identified.

### .2 Fire Protection – Drill Observation (71111.05A – 1 sample)

#### a. Inspection Scope

The inspectors observed a fire brigade drill scenario conducted on January 15, 2016, that involved announced fire drill prep activities in the 'B' battery room and switchgear room. The inspectors evaluated the readiness of the plant fire brigade to fight fires. The inspectors verified that Entergy personnel identified deficiencies, openly discussed them in a self-critical manner at the debrief, and took appropriate corrective actions as required. The inspectors evaluated the following specific attributes of the drill:

- Proper wearing of turnout gear and self-contained breathing apparatus
- Proper use and layout of fire hoses
- Employment of appropriate fire-fighting techniques
- Sufficient fire-fighting equipment brought to the scene
- Effectiveness of command and control
- Smoke removal operations
- Utilization of pre-planned strategies
- Adherence to the pre-planned drill scenario
- Drill objectives met

The inspectors also evaluated the fire brigade's actions to determine whether these actions were in accordance with Entergy's fire-fighting strategies.

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)

Internal Flooding Review

a. Inspection Scope

The inspectors reviewed the FSAR, the site flooding analysis, and plant procedures to identify internal flooding susceptibilities for the site. The inspectors review focused on the SSW intake structure. The inspectors verified the adequacy of equipment seals located below the flood line, floor and water penetration seals, common drain lines, level alarms, control circuits, and temporary or removable flood barriers. The inspectors assessed the adequacy of operator actions that Entergy had identified as necessary to cope with flooding in this area and also reviewed the CAP to determine if Entergy was identifying and correcting problems associated with both flood mitigation features and site procedures for responding to flooding.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program and Licensed Operator Performance  
(71111.11Q – 2 samples)

.1 Quarterly Review of Licensed Operator Regualification Testing and Training

a. Inspection Scope

The inspectors observed two scenarios as part of licensed operator simulator training on March 17, 2016. The first training scenario involved an offshore oil spill, which led to the loss of all SSW, requiring the declaration of an Unusual Event when flooding had the potential to affect safety-related equipment in the SSW bay. The second scenario involved a loss of hotwell level control and the failure of select components to respond or start as required. The inspectors evaluated operator performance during the simulated event and verified completion of risk significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. The inspectors verified the accuracy and timeliness of the emergency classification made by the shift manager and the TS action statements entered by the shift control room engineer. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Room

a. Inspection Scope

The inspectors observed the controlled shutdown and subsequent startup associated with predicted blizzard conditions on February 7-11, 2016. The inspectors observed and reviewed rod scram time testing on February 11, 2016. The inspectors observed pre-shift briefings and reactivity control briefings to verify that the briefings met the criteria specified in Entergy's procedure EN-OP-115, "Conduct of Operations," Revision 16. Additionally, the inspectors observed test performance to verify that procedure use, crew communications, and coordination of activities between work groups similarly met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12Q – 2 samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system, and component performance and reliability. The inspectors reviewed system health reports, CAP documents, maintenance WOs, and maintenance rule basis documents to ensure that Entergy was identifying and properly evaluating performance problems within the scope of the maintenance rule. For each sample selected, the inspectors verified that the structure, system, or component was properly scoped into the maintenance rule in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.65 and verified that the (a)(2) performance criteria established by Entergy staff was reasonable. As applicable, for structures, systems, and components classified as (a)(1), the inspectors assessed the adequacy of goals and corrective actions to return these structures, systems, and components to (a)(2). Additionally, the inspectors ensured that Entergy staff was identifying and addressing common cause failures that occurred within and across maintenance rule system boundaries.

- 'B' SSW pump on January 6, 2016
- Fire protection system on March 23, 2016

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 4 samples)

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that Entergy performed the appropriate risk assessments prior to removing equipment for work. The inspectors selected these activities based on potential risk significance relative to the reactor safety

cornerstones. As applicable for each activity, the inspectors verified that Entergy personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When Entergy performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's probabilistic risk analyst to verify plant conditions were consistent with the risk assessment. The inspectors also reviewed the TS requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- Elevated risk with 'A' shutdown cooling train providing decay heat removal during 'Mars' blizzard outage on February 8-10, 2016
- Planned maintenance on 'A' EDG with 'B' EDG out of service on February 29, 2016
- Planned maintenance on RCIC pump out of service in conjunction with emergent maintenance on 'B' SSW pump on March 4, 2016
- Planned heavy lift of a resin cask to the refuel floor area on March 16, 2016

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 5 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions based on the risk significance of the associated components and systems:

- 'A' EDG room temperature on January 23, 2016
- Shutdown transformer disconnect switch hot spot on February 3, 2016
- Main turbine electronic pressure regulator power failure alarm on February 11, 2016
- Seismic evaluation of SSW pumps restraints on February 25, 2016
- 'A' CS system on February 29, 2016 (operator workaround (OWA))

The inspectors evaluated the technical adequacy of the operability determinations to assess whether TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and FSAR to Entergy's evaluations to determine whether the components or systems were operable. The inspectors confirmed, where appropriate, compliance with bounding limitations associated with the evaluations. Where compensatory measures were required to maintain operability, such as in the case of OWAs, the inspectors determined whether the measures in place would function as intended and were properly controlled by Entergy. Based on the review of the selected OWA listed above, the inspectors verified that Entergy identified OWAs at an appropriate threshold and addressed them in a manner that effectively managed OWA-related adverse effects on operators, and structures, systems, and components.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18 – 4 samples)

.1 Temporary Modifications

a. Inspection Scope

The inspectors reviewed the temporary modifications listed below to determine whether the modifications affected the safety functions of systems that are important to safety. The inspectors reviewed 10 CFR 50.59 documentation and post-modification testing results, and conducted field walkdowns of the modifications to verify that the temporary modifications did not degrade the design bases, licensing bases, and performance capability of the affected systems.

- Switchyard bushing heat lamps on January 11, 2016
- Temporary supplemental heating to the EDG building on January 23, 2016

b. Findings

No findings were identified.

.2 Permanent Modifications

a. Inspection Scope

The inspectors reviewed the permanent modifications listed below. The inspectors verified that the design bases, licensing bases, and performance capability of the affected systems were not degraded by the modifications. The inspectors observed the installation of the modifications in the field. In addition, the inspectors reviewed modification documents associated with the upgrades and design changes. Inspectors reviewed testing requirements to ensure code standards, when appropriate, were met.

- Movement of temperature element 8125-102 in the 'A' EDG room on February 1, 2016
- Replacement of 'B' SSW pump baseplate February 15-23, 2016

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 6 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests for the maintenance activities listed below to verify that procedures and test activities adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in

the procedure were consistent with the information in the applicable licensing basis and/or design basis documents, and that the test results were properly reviewed and accepted and problems were appropriately documented. The inspectors also walked down the affected job site, confirmed work site cleanliness was maintained, and witnessed the test or reviewed test data to verify quality control hold point were performed and checked, and that results adequately demonstrated restoration of the affected safety functions.

- 'A' fuel pool cooling pump motor replacement on January 1-2, 2016
- 'B' SSW pump adjustment to correct high vibrations on January 12 and 19, 2016
- Control room high efficiency air filtration system 'A' relative humidity switch replacement and instrumentation calibration on February 3, 2016
- Replacement of hydraulic control unit 14-03 riser outlet valve 305-112-14-03 and directional control valve SV-305-121 on February 9, 2015
- 'B' SSW pump rebuild after baseplate replacement on February 23, 2016
- 'A' CS full flow test valve MOV-1400-4A torque switch setting adjustment on February 24, 2016

b. Findings

No findings were identified.

1R20 Refueling and Other Outage Activities (71111.20 – 1 sample)

a. Inspection Scope

The inspectors reviewed the station's work schedule and outage risk plan for the forced outage during the period February 7-11, 2016 due to the 'Mars' blizzard. The inspectors reviewed Entergy's development and implementation of outage plans and schedules to verify that risk, industry experience, previous site-specific problems, and defense-in-depth were considered. During the outage, the inspectors observed portions of the shutdown and cooldown processes and monitored controls associated with the following outage activities:

- Configuration management, including maintenance of defense-in-depth, commensurate with the outage plan for the key safety functions and compliance with the applicable TSs when taking equipment out of service
- Implementation of clearance activities and confirmation that tags were properly hung and that equipment was appropriately configured to safely support the associated work or testing
- Monitoring of decay heat removal operations
- Activities that could affect reactivity
- Monitoring of cooldown and heat up rates
- Fatigue management
- Identification and resolution of problems related to forced outage activities

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 6 samples)a. Inspection Scope

The inspectors observed performance of surveillance tests and/or reviewed test data of selected risk-significant structures, systems, and components to assess whether test results satisfied TSs, the FSAR, and Entergy procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- 'B' EDG quarterly surveillance test on January 13, 2016
- Post-accident sampling system and H<sub>2</sub>O<sub>2</sub> analyzer valve quarterly surveillance test on January 20, 2016
- Residual heat removal pump 'B' and loop 'B' valves quarterly surveillance tests on February 18, 2016 (in-service test)
- Station blackout diesel monthly surveillance test on February 23, 2016
- Thermal limits manual calculations surveillance test on March 1, 2016
- Logic system functional test of 'B' standby gas treatment system on March 15, 2016

b. Findings

No findings were identified.

**2. RADIATION SAFETY****Cornerstones: Occupational and Public Radiation Safety**2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01 – 4 samples)a. Inspection Scope

The inspectors reviewed Entergy's performance in assessing and controlling radiological hazards in the workplace. The inspectors used the requirements contained in 10 CFR 20, TSs, applicable regulatory guides, and the procedures required by TSs as criteria for determining compliance.

Inspection Planning

The inspectors reviewed the performance indicators for the occupational exposure cornerstone, radiation protection program audits, and reports of operational occurrences in occupational radiation safety since the last inspection.

### Radiological Hazard Assessment

The inspectors conducted independent radiation measurements during walkdowns of the facility and reviewed the air sampling and analysis, continuous air monitor use, and any changes to plant operations since the last inspection to verify survey adequacy any new radiological hazards for onsite workers or members of the public.

#### Instructions to Workers (1 sample)

The inspectors reviewed high radiation area work permit controls and use, observed containers of radioactive materials, and assessed whether the containers were labeled and controlled in accordance with requirements.

The inspectors reviewed several occurrences where a worker's electronic personal dosimeter alarmed. The inspectors reviewed Entergy's evaluation of the incidents, documentation in the CAP, and whether compensatory dose evaluations were conducted when appropriate. The inspectors verified follow-up investigations of actual radiological conditions for unexpected radiological hazards were performed.

#### Contamination and Radioactive Material Control

The inspectors observed the monitoring of potentially contaminated material leaving the radiological controlled area and inspected the methods and radiation monitoring instrumentation used for control, survey, and release of that material. The inspectors evaluated whether any recent transactions involving nationally tracked sources were reported in accordance with requirements.

#### Radiological Hazards Control and Work Coverage (1 sample)

The inspectors evaluated in-plant radiological conditions and performed independent radiation measurements during facility walk-downs and observation of radiological work activities. The inspectors assessed whether posted surveys; radiation work permits; worker radiological briefings and radiation protection job coverage; the use of continuous air monitoring, air sampling and engineering controls; and dosimetry monitoring were consistent with the present conditions. The inspectors examined the control of highly activated or contaminated materials stored within the spent fuel pools and the posting and physical controls for selected high radiation areas (HRAs), locked high radiation areas, and very high radiation areas (VHRA) to verify conformance with the occupational performance indicator.

#### Risk-Significant HRA and VHRA Controls (1 sample)

The inspectors reviewed the procedures and controls for HRAs, VHRAs, and radiological transient areas in the plant.

#### Problem Identification and Resolution (1 sample)

The inspectors evaluated whether problems associated with radiation monitoring and exposure control were identified at an appropriate threshold and properly addressed in the CAP.



b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

4OA1 Performance Indicator Verification (71151)

.1 Reactor Coolant System Specific Activity and Reactor Coolant System Leak Rate (2 samples)

a. Inspection Scope

The inspectors reviewed Entergy's submittal for the reactor coolant system (RCS) specific activity and RCS leak rate performance indicators for the period of January 1, 2015, through December 31, 2015. To determine the accuracy of the performance indicator data reported during those periods, the inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7. The inspectors also reviewed RCS sample analysis and control room logs of daily measurements of RCS leakage, and compared that information to the data reported by the performance indicator. Additionally, the inspectors observed surveillance activities that determined the RCS identified leakage rate, and chemistry personnel taking and analyzing a RCS sample.

b. Findings

No findings were identified.

.2 Safety System Functional Failures (1 sample)

a. Inspection Scope

The inspectors sampled Entergy's submittals for the Safety System Functional Failures performance indicator for the period of January 1, 2015, through December 31, 2015. To determine the accuracy of the performance indicator data reported during those periods, inspectors used definitions and guidance contained in NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 10 CFR 50.73." The inspectors reviewed Entergy's operator narrative logs, operability assessments, maintenance rule records, maintenance WOs, CRs, event reports and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

#### 4OA2 Problem Identification and Resolution (71152)

##### .1 Routine Review of Problem Identification and Resolution Activities

###### a. Inspection Scope

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify Entergy entered issues into the CAP at an appropriate threshold, gave adequate attention to timely corrective actions, and identified and addressed adverse trends. In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the CAP and periodically attended CR screening meetings. The inspectors also confirmed, on a sampling basis, that, as applicable, for identified defects and non-conformances, Entergy performed an evaluation in accordance with 10 CFR Part 21.

###### b. Findings

No findings were identified.

##### .2 Annual Sample: Corrective Actions from Security Related Findings

On March 3, 2016, inspectors completed a problem identification and resolution sample to review corrective actions taken in response to previous security-related NRC findings. The results of this inspection sample are documented in NRC Inspection Report 05000293/2016404 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16098A086), issued on April 7, 2016.

#### 4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153 – 1 sample)

##### Plant Events

###### a. Inspection Scope

For the plant events listed below, the inspectors reviewed and/or observed plant parameters, reviewed personnel performance, and evaluated performance of mitigating systems. The inspectors communicated the plant events to appropriate regional personnel, and compared the event details with criteria contained in Inspection Manual Chapter 0309, "Reactive Inspection Decision Basis for Reactors," for consideration of potential reactive inspection activities. As applicable, the inspectors verified that Entergy made appropriate emergency classification assessments and properly reported the event in accordance with 10 CFR Parts 50.72 and 50.73. The inspectors reviewed Entergy's follow-up actions related to the events to assure that Entergy implemented appropriate corrective actions commensurate with their safety significance.

- Down power to 48 percent power due to condenser tube leak on February 15, 2016

###### b. Findings

No findings were identified.

#### 4OA5 Other Activities

##### .1 Inspection Procedure 92723, "Follow-up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period"

###### a. Inspection Scope

The inspectors performed a follow-up inspection in accordance with Inspection Procedure (IP) 92723 for four Severity Level (SL) IV traditional enforcement violations in the area of potential for impacting the Regulatory Process that occurred between the fourth quarter of 2014 and the third quarter of 2015. Consistent with guidance in IP 92723, multiple traditional enforcement violations in the same area should result in the licensee examining the group of violations to identify any commonalities. This inspection reviewed Entergy's evaluation of the group of violations.

The following traditional enforcement violations were the subject of this inspection:

- A SL IV non-cited violation (NCV) of 10 CFR 50.59, "Changes, Tests, and Experiments," because Entergy made a modification to the spent fuel pool cask area without prior NRC approval. (NCV 2014003-01; December 31, 2014)
- A SL IV NCV of 10 CFR 50.72(b)(3)(xiii), "Eight Hour Reports," because Entergy did not notify the NRC within eight hours of a major loss of emergency assessment capability (sea water bay level instrumentation). (NCV 2015007-07; March 20, 2015)
- A SL IV NCV of 10 CFR 50.73, "Licensee Event Report [LER] System," because Entergy did not provide a written report of a violation of TS 3.5.E for the inoperability of the automatic depressurization system to the NRC within 60 days of discovery. (NCV 2015002-05; June 30, 2015)
- A SL IV NCV of 10 CFR 50.59, "Changes, Tests, and Experiments," because Entergy made a modification to the 23 kV line to the shutdown transformer without prior NRC approval. (NCV 2015003-04; September 30, 2015)

The objectives of the inspection were:

- To provide assurance that the cause(s) of multiple SL IV traditional enforcement violations are understood by Entergy
- To provide assurance that the extent of condition and extent of cause of multiple SL IV traditional enforcement violations are identified
- To provide assurance that Entergy corrective actions to traditional enforcement violations are sufficient to address the cause

The inspectors reviewed the cause evaluation associated with each of the four issues as well as the common cause analysis, CRs, procedures, and relevant references to the violations. The inspectors also discussed the evaluations with management and staff personnel who were familiar with the violations and participated in the evaluation or corrective actions.

###### b. Findings and Assessments

No findings were identified.

The inspectors determined that Entergy's apparent cause evaluation (CR 2015-07154), which collectively assessed the four violations to identify any common causes, met the inspection objectives of NRC IP 92723. Each of the CRs for the individual violations determined specific causes and corrective actions. Entergy decided to perform the common cause evaluation by determining the nuclear safety culture aspects associated with each of the issues to identify a collective common cause. Although no specific aspect was present in all four issues, Entergy determined the collective apparent cause to be Regulatory Assurance personnel failed to ensure accuracy in 10 CFR 50.59 screening and reportability reviews and failed to provide adequate oversight of operability determinations due to the lack of a right picture and ineffective challenges to the organization. Contributing causes were lack of a questioning attitude by Regulatory Assurance personnel and processes and procedures contained incorrect or lacked detailed guidance to perform some technical related activities. Corrective actions included training of affected personnel on the topics of 50.59 screening, reportability, and regulatory risk recognition, as well as specific procedure revisions. The inspectors determined that the corrective actions contained in CR 2015-07154 were reasonable. The inspectors identified two observations during this inspection:

- Failure to Document an Extent of Cause for the Common Cause Evaluation  
Entergy procedure EN-LI-123-03, "Pre-Inspection Assessments for IP 92723," Revision 1, Attachment 9.1, requires that the extent of causes for the performance issues are identified, but does not specify the type of cause evaluation to be performed. Per Entergy procedure EN-LI-118, "Cause Evaluation Process," Revision 22, only root cause evaluations require performance of extent of cause evaluations. Because Entergy performed an apparent cause evaluation to assess the four violations, an extent of cause was not required. The inspectors determined that this represented a gap in evaluation of the violations. Entergy entered this issue into the CAP as CR 2016-2236. This issue screened to minor in accordance with IMC 0612, Appendix B, because the corrective actions performed would have addressed the extent of cause, in that the actions covered all groups that perform regulatory reviews (Operations, Licensing, Engineering and Medical).
- Failure to Identify Internal Operating Experience for the Common Cause Evaluation  
Entergy did not identify internal operating experience relevant to traditional enforcement violations, as required by Entergy procedure EN-LI-118. Section 5.6 of EN-LI-118 states the purpose of the operating experience section of an evaluation is to determine if same or similar conditions have previously occurred and use the information to 1) assist in identifying the cause, 2) assist in identifying corrective actions and 3) identify potential barriers for use in causal analysis. Entergy performed an internal and external operating experience review as part of their collective cause determination. The inspectors identified that this review did not identify violations issued to Pilgrim in 2011 in the area of potential for impacting the regulatory process regarding licensed operator medical information. Entergy entered this observation into their CAP as CR 2016-2235. The issue screened to minor in accordance with IMC 0612, Appendix B, because the discrepant condition did not impact the scope of the corrective actions.

.2 Follow up Inspection for VIO 05000293/2015010-02 – Untimely Actions to Restore Station Meteorological Towers

a. Inspection Scope

During the week of March 28, 2016, the inspectors performed an onsite review of Entergy's records related to corrective actions taken in response to a Green Notice of Violation (NOV) issued to Pilgrim on October 1, 2015. The NOV involved Entergy's untimely action to restore the functionality of the Pilgrim meteorological (met) towers to meet the requirements of 10 CFR 50.54(q)(2) and 10 CFR 50.47(b)(8) and is described in NRC Inspection Report 05000293/2015010. The objectives of the inspection were to determine whether adequate corrective actions have been implemented for the Green NOV, root causes have been identified, generic implications have been addressed, and that Entergy's programs and practices have been appropriately enhanced to prevent recurrence. The inspectors reviewed CRs, procedures, and relevant references. The inspectors also walked down the newly installed 160' met tower, verified valid 160' met tower instrument indications were available on station computers and in the control room, and discussed the issue with responsible management and staff personnel.

b. Findings and Observations

No findings were identified.

Entergy's apparent cause (CR 2013-6829) and root cause (CR 2015-0375) evaluations appropriately identified the apparent and contributing causes that resulted in the untimely restoration of the Pilgrim 160' met tower to service. Entergy's corrective actions included the installation of a new 160' met tower which was placed in service on December 8, 2015, assigning overall met tower responsibility to the emergency preparedness department, and procedure changes to ensure appropriate met tower testing and preventive maintenance is performed. While 220' met tower equipment challenges continue, corrective actions to develop and implement a comprehensive instrument upgrade and maintenance plan are in progress. The inspectors determined that adequate corrective actions had been taken to restore 160' met tower functionality and preclude recurrence. VIO 05000293/2015010-02, Untimely Actions to Restore Station Meteorological Towers, is closed.

.3 Repetitive Degraded Cornerstone Column (Column 4) Follow-Up Activities

Background

As described in the annual assessment letter, dated March 2, 2016 (ADAMS Accession No. ML16061A419), PNPS remains in the Repetitive Degraded Cornerstone Column (Column 4).

Completed Activities

Regional NRC management conducted weekly teleconferences with PNPS's Recovery Manager to discuss the stations progress related to Column 4 recovery efforts. Regional management conducted multiple site visits to Pilgrim to meet with senior PNPS management, as well as provided oversight for various inspections conducted during the first quarter, including the IP 95003 Phase 'B' inspection.

Inspectors conducted the IP 95003 Phase 'B' inspection from April 4-8, 2016. The purpose of the inspection was to review overall CAP performance since the last problem identification and resolution inspection completed in August 2015, focusing on improvements made to the program as a result of Entergy's recovery efforts. The results of the inspection will be documented in a stand-alone report, which will be issued on or about May 23, 2016.

.4 Institute of Nuclear Power Operations/World Association of Nuclear Operators (INPO/WANO) Report Review

a. Inspection Scope

The inspectors reviewed the final report for the INPO/WANO plant assessment of PNPS conducted in late July 2015. The inspectors evaluated this report to ensure that NRC perspectives of Entergy performance were consistent with any issues identified during the assessments. The inspectors also reviewed this report to determine whether INPO/WANO identified any significant safety issues that required further NRC follow-up.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On April 28, 2016, the inspectors presented the inspection results to Mr. John Dent, Site Vice President, and other members of the PNPS staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

**ATTACHMENT: SUPPLEMENTARY INFORMATION**

**SUPPLEMENTARY INFORMATION**

**KEY POINTS OF CONTACT**

Licensee Personnel

J. Dent, Site Vice President  
S. Asplin, Senior Engineer  
P. Bracken, Operations Manager  
D. Calabrese, Emergency Protection Manager  
W. Carroll, Senior Engineer  
P. Doody, Senior Engineer  
J. Falconieri, Senior Engineer  
G. Flynn, Operations Manager  
K. Gracia, Shift Manager  
M. Green, Motor Operated Valve Engineer  
D. Grimes, Senior Engineer  
E. Hatzinikolaou, System Engineer  
G. James, Reactor Engineering Supervisor  
M. Landry, Senior Engineer  
M. Lynch, Engineering Supervisor  
J. MacDonald, General Manager, Plant Operations  
M. Mantenfel, Engineering Supervisor  
P. Miner, Regulatory Assurance  
J. Sabina, Senior Engineer  
B. Swanson, Mechanical Engineer  
J. Whalley, Shift Manager  
T. White, Engineering Supervisor  
K. Woods, Engineering Supervisor  
W. Wouti, Project Manager

**LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED**

Closed

05000293/2015010-02	VIO	Untimely Actions to Restore Station Meteorological Towers (Section 40A5)
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**LIST OF DOCUMENTS REVIEWED**

**Section 1R01: Adverse Weather Protection**

Procedures

2.1.42, Operation during Severe Weather, Revision 31  
2.1.37, Coastal Storm – Preparations and Actions, Revision 40

**Section 1R04: Equipment Alignment**

Procedures

2.2.20, Core Spray, Revision 84  
2.2.32, Salt Service Water System, Revision 92

Condition Reports

2015-03820 2015-03875 2015-04318 2015-05945 2015-07949 2015-08049  
2016-01388 2016-01569 2016-01584 2016-01585 2016-01586 2016-01589

Maintenance Orders/Work Orders

52611790

Drawings

M212 SH1, P&ID Service Water System, Revision 96  
M242 SH1, P&ID Core Spray System, Revision 53

**Section 1R05: Fire Protection**

Procedures

5.5.2, Special Fire Procedure, Revision 54  
EN-TQ-125, Fire Brigade Drills, Revision 3

Miscellaneous

89XM-1-ER-Q, Updated Fire Hazard Analysis, Revision 16

**Section 1R06: Flood Protection Measures**

Procedures

1.3.135, Control of Doors, Revision 8  
EN-DC-346, Cable Reliability Program, Revision 6  
PNPS-NE-07-00006, Pilgrim Probabilistic Safety Assessment, App C, Revision 3

Condition Reports

2007-02907 2011-00966 2011-02052 2013-00313

Drawings

A73, Intake Structure Floor Plan, Roof Plan and Exterior Elevations, Revision 8  
A74, Intake Structure Sections, Details, Revision 2  
C45, Intake Structure Floor Plan Elevation, Revision 18  
M27, Equipment Location Intake Structure Plan and Sections, Revision 16  
M163, Piping and Mechanical Penetrations and Blockouts, Revision 2  
M177, Piping and Mechanical Intake Structure Plan and Sections Elevation, Revision 6  
M178, Piping and Mechanical Intake Structure Plan and Sections, Revision 3  
M300, Specification for Piping, Revision 109

Miscellaneous

EC 40625  
FSAR, Revision 30  
TDBD-109, Topical Design Basis Document for Internal Flooding



**Section 1R11: Licensed Operator Requalification Program**Procedures

EN-OP-115, Conduct of Operations, Revision 16  
 9.9, Control Rod Scram Time Insertion Evaluation, Revision 77  
 2.1.4, Approach to Critical and Plant Heat up, Revision 1

**Section 1R12: Maintenance Effectiveness**Condition Reports

2014-5746	2015-5592	2015-6215	2015-6612	2015-6924	2015-7509
2015-7525	2015-8686	2015-9408	2015-9614	2015-9742	

Miscellaneous

EN-DC-206, Maintenance Rule (a)(1) Process, Revision 3  
 Maintenance Rule SSC Basis Document, Revision 2  
 PNPS Maintenance Rule (a)(1) System Status for December 2, 2015

**Section 1R13: Maintenance Risk Assessments and Emergent Work Control**Procedures

3.M.1-45, Outage Shutdown Risk Assessment, Revision 19  
 8.9.1.1, Diesel Oil Transfer System Skid Mounted Valve Operability and Supplemental Pump Testing, Revision 25  
 8.9.1.2, Diesel Air Start and Turbo Assist System Leak Test, Revision 16  
 8.M.2-2.6.4, RCIC Steam Line Low Pressure – Critical Maintenance, Revision 45  
 EN-WM-104, Online Risk Assessment, Revision 12  
 EN-DC-151, PSA Maintenance and Update, Revision 5

Maintenance Orders/Work Orders

408497

Miscellaneous

EOOS Risk Evaluation Work Week 1609, Matrix Week #1, 'A' Week  
 RG 1.182, Assessing and Managing Risk before Maintenance Activities at Nuclear Power Plants  
 NUMARC 93-01, Assessment of Risk Resulting from Performance of Maintenance Activities

**Section 1R15: Operability Determinations and Functionality Assessments**Procedures

2.3.37, Turbine Control System Malfunctions, Revision 24  
 2.2.8, Standby AC Power System (Diesel Generators), Revision 111  
 3.M.3-60, Infrared Thermography, Revision 9  
 EN-DC-310, Predictive Maintenance Program, Revision 7  
 EN-FAP-OP-012, Unplanned Shutdown AOTs Performance Indicator, Revision 1  
 EN-OP-104, Operability Determination Process, Revision 10

Condition Reports

2015-09475	2016-00474	2016-00492	2016-00523	2016-00707	2016-00708
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2016-00883	2016-01002	2016-01031	2016-01148	2016-01241	2016-01269
2016-01478	2016-01620	2016-01701	2016-01702	2016-01826	2016-02432

Drawing

M8-4, Vertical Pump, Revision 31

Miscellaneous

ECs 13625, 54453

FSAR, Section 10.7, Revision 30

ME251, Seismic Analysis of SSW Pumps, Revision 0

ME1476, Seismic Stress Analysis of Modified SSW Pump, Revision 0

Vendor Manual V-2139, Main Turbine Electric Pressure Regulator, Revision 0

**Section 1R18: Plant Modifications**Procedures

2.1.42, Operation During Severe Weather, Revision 28

3.M.3-51, Electrical Termination Procedure, Revision 31

8.C.40, Seasonal Weather Surveillance, Revision 33

EN-DC-115, Engineering Change Process, Revision 16

EN-DC-115, Engineering Change Process, Revision 17

EN-DC-136, Temporary Modifications, Revision 12

EN-LI-101, 10 CFR 50.59 Evaluations, Revision 12

Condition Reports

2015-9760	2015-9924	2016-0474	2016-0492	2016-0523	2016-0967
2016-0968	2016-0969	2016-0989	2016-1034	2016-1052	

Maintenance Orders/Work Orders

0042847      0401050

Miscellaneous

A16059-P-001, Procedure for Compressive Testing of Materials for Concrete Repair, Revision 3

ECs 54453, 61467, 62111, 62297, 62703

Fire Star Rapid Epoxy Grout dated 2011

Temporary Modification 62569, Provide Supplemental Heating to the EDG Building

**Section 1R19: Post-Maintenance Testing**Procedures

2.2.87.3, Control Rod Drive Venting, Timing, Flushing, and Adjustment, Revision 35

3.M.1-15, Vibration Monitoring for Preventative Maintenance and Balancing, Revision 51

3.M.2-23, HCU Solenoid Replacement, Revision 10

3.M.3-24.16, MOV Diagnostic Test Quiklook Operations Procedure, Revision 17

3.M.4-14, Rotating Equipment Inspection, Assembly and Disassembly, Revision 50

3.m.4-14.2, Salt Service Water Pumps: Runtime Maintenance, Revision 65

8.5.3.2.1, SSW Pump Quarterly and Biennial Operability and Valve Operability Tests,  
Revision 32

8.E.47.1, Control Room/Radwaste Filtration System Instrumentation Calibration/Logic  
Functional Test, Revision 40

9.9, Control Rod Scram Time Insertion Evaluation, Revision 77  
 EN-WM-105, Planning, Revision 16  
 EN-WM-107, Post Maintenance Testing, Revision 5

Condition Reports

2015-9742    2016-1027    2016-1139

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433324	434099	435244	435497	436069	436282
437445	437464				

Drawings

M231, Fuel Pool Cooling and Demineralizer System, Revision 46  
 M242, Core Spray System, Revision 53

Miscellaneous

ECs 54453, 62198, 36070  
 Equipment Apparent Cause Evaluation P-208B SSW Pump High Vibrations  
 Failure Rate Analysis for P-208B Exceeding IST Action Levels

**Section 1R20: Refueling and Other Outage Activities**

Procedures

2.1.1, Startup from Shutdown, Revision 193  
 2.1.4, Approach to Critical and Plant Heat up, Revision 1  
 2.1.5, Controlled Shutdown from Power, Revision 128  
 2.4.27, Turbine Control system Malfunctions, Revision 24

Condition Reports

2016-0825	2016-0839	2016-0840	2016-0881	2016-0883	2016-0885
2016-0893	2016-0903	2016-0904			

**Section 1R22: Surveillance Testing**

Procedures

8.5.2.2.2, LPCI System Loop B Operability - Pump Quarterly and Biennial (Comprehensive)  
 Flow Rate Tests and Valve Tests, Revision 52  
 8.5.2.3, LPCI and Containment Cooling Motor-Operated Valve Operability Test, Revision 52  
 8.7.2.10, Standby Gas Treatment System Dampers Quarterly Operability, Revision 12  
 8.7.4.1, Pass and H<sub>2</sub>O<sub>2</sub> Analyzer Valves Quarterly Operability, Revision 18  
 8.7.4.2, Primary Containment Atmospheric Control Valve Quarterly Operability, Revision 16  
 8.7.4.3, Misc. Containment Isolation Valve Quarterly Operability, Revision 46  
 8.7.4.9, Suppression Chamber to Reactor Building Vacuum Breaker Operability, Revision 21  
 8.9.1, Emergency Diesel Generator and Associated Emergency Bus Surveillance, Revision 130  
 8.9.16.1, Manually Start and Load Blackout Diesel via the Shutdown Transformer, Revision 50  
 8.M.2-1.5.8.4, Logic System Functional Test of System B Standby Gas Treatment Initiation,  
 Reactor Building Isolation, and Outboard Drywell Isolation Valves, Revision 44  
 EN-RE-213, 3D Monicore Manual Monitor-BWR, Revision 2  
 SEP-PNPS-IST-001, PNPS In-service Pump and Valve Testing Program, Revision 4

Condition Reports

2013-04509	2014-00998	2014-02838	2014-03969	2015-01152	2015-05352
2015-05353	2016-00264	2016-00265	2016-00336	2016-00863	2016-01130
2016-01147	2016-01149	2016-01150	2016-01162	2016-01844	2016-01847
2016-01869	2016-01886	2016-01887			

Miscellaneous

Control Room Narratives

**Section 2RS1: Access Control to Radiologically Significant Areas**Procedures

EN-RP-100, Radiation Worker Expectations, Revision 9  
 EN-RP-101, Access Controls for Radiologically Controlled Areas, Revision 11  
 EN-RP-102, Radiological Control, Revision 4  
 EN-RP-105, Radiological Work Permits, Revision 14  
 EN-RP-106, Radiological Survey Documentation, Revision 7  
 EN-RP-108, Radiation Protection Posting, Revision 17  
 EN-RP-109, Audit Process, Revision 28  
 EN-RP-121-01, Receipt of Radioactive Material, Revision 2  
 EN-RP-122, Alpha Monitoring, Revision 9  
 EN-RP-131, Air Sampling, Revision 15  
 EN-RP-143, Radioactive Source Control, Revision 11  
 EN-RP-204, Special Monitoring Requirements, Revision 6  
 EN-RP-404, HEPA and Vacuum Operation and Testing, Revision 6  
 PNPS 6.1-220, Radiological Controls for High Risk Evolutions, Revision 15  
 PNPS 6.3-064, Routine Radiological Surveillance Program, Revision 18

Condition Reports

2015-01016	2015-05745	2015-07147	2016-00037	2016-00475	2016-00658
2016-01005	2016-01026	2016-01806	2016-02017	2016-02043	

Self-Assessments and Audit Reports

O2C-PNPS-2016-0004, Oversight Observation Checklist, Dose Reduction/ALARA B Reactor Water Cleanup Pump Repair, 01-05-16  
 O2C-PNPS-2016-0033, Oversight Observation Checklist, Post Job Review for Scaffolding work during Refuel Outage, 01-20-16  
 O2C-PNPS-2016-0045, Oversight Observation Checklist, Dose Reduction/ALARA Condenser Leak Repair, 01-28-16  
 O2C-PNPS-2016-00083, Oversight Observation Checklist, Dose Reduction/ALARA Dewatering the "A-C" Condensate Demineralizers, 02-18-16  
 O2C-PNPS-2016-00080, Oversight Observation Checklist, Dose Reduction/ALARA Radwaste Resin Liner Prep, 02-17-16  
 Focused Area Self-assessment LO-PNPLO-2015-00197, IP 71124.01 Rad Hazard Assessment and IP 71124.05 Radiation Monitoring Instrument, 03-23-16  
 Quality Assurance Audit Report QA-14-15-2015-PNP-1 Radiation Protection and Rad Waste, 10-27-15

Miscellaneous Documents

AMS-4 Weekly Operability Check Matrix, 03-26-16  
 Current PNPS In-plant Area Alpha Level Classifications, 02-29-16  
 EN-RP-101 Attachment 9.6 LHRA/VHRA Key Log, 03-23-16  
 EN-RP-121 Attachment 9.1 Quarterly Packaging Inspection, 12-15-15  
 EN-RP-131 Attachment 9.2 – Air Sampling, 2015-084, RW -13 EI Foyer after Draining Spill and Initial Decontamination/Squeegee, 02-17-15  
 EN-RP-131 Attachment 9.2 - Air Sampling, 2016-001 Hot Shop, 01-01-16  
 EN-RP-131 Attachment 9.2 - Air Sampling, 2016-005 Breach B RWCU Pump and Remove from Area, 01-05-16  
 EN-RP-131 Attachment 9.2 - Air Sampling, 2016-023 AOG Pre-filter Room Ops Blowdown, 02-04-16  
 EN-RP-131 Attachment 9.2 - Air Sampling, 2016-025 HPCI Sump Pump Motor Repair, 02-05-16  
 EN-RP-131 Attachment 9.2 - Air Sampling, 2016-042 AOG Pre-filter Room Filter Purge, 03-03-16  
 EN-RP-143 Attachment 9.4 Sealed Source Leak Test Worksheet, 09-08-16  
 EN-RP-143 Attachment 9.5 Radioactive Source List, 08-03-16  
 PNP-1603-0111, Radiation Survey 2016-0123 RW EI -13 Filtrate Sump Room, 03-17-16  
 PNPS List of High Radiation Areas and Locked High Radiation Areas, 03-23-16  
 RWP 2016-0077, RB, TB and RW Sump Pumps Repair Replace, 01-01-16  
 RWP 2016-0070, Setup Transfer, Cap, Weigh Survey, Store & Prep Resin Shipments, 01-01-16  
 Radiological Survey Form, 2016-0500 Radwaste Truck Lock, 03-08-16  
 Rad Survey PNP-1501-0252, HPCI Turbine Pump Room (Floor Drained of Spill Water 250K dpm/100cm<sup>2</sup> max smearable), 01-30-15  
 USNRC Letter to F. G. Burford dated October 2, 2006, Arkansas Nuclear One, Pilgrim Station - Application to Use Effective Dose Equivalent Weighting Factors for External Exposure  
 USNRC Letter No. 2.16.005, NSTS Confirmation Form 2016 Annual Inventory Reconciliation, 01-27-16  
 WT-WTPNP-2016-00071, 3 Year Radwaste Tank Room Remediation Action Plan, March 18, 2016

**Section 4OA1: Performance Indicator Verification**Procedures

1.3.34.7, Operations Performance Indicators, Revision 20  
 2.1.15, Daily Surveillance Log, Revision 225  
 7.3.11, Reactor and Hotwell Water Analyses Preparation, Revision 37  
 EN-LI-114, Regulatory Performance Indicator Process, Revision 7

Maintenance Orders/Work Orders

5264851      52645718      52645718      52650135      52653782      52661817

Miscellaneous

NEI 99-02  
 PNPS daily logs

**Section 4OA3: Follow-up of Events and Notices of Enforcement Discretion**Procedures

2.3.33, Condenser Chloride Intrusion, Revision 27

**Section 4OA5: Other Activities**Procedures

2.1.26, Inventory of Alternate Shutdown and EOP Support Tools and Materials, Revision 49  
 5.3.8, Loss of Instrument Air, Revision 43  
 8.E.71, Surveillance, Maintenance, and Calibration of 160' MET Tower MeDap Equipment, Revision 16  
 8.E.72, Surveillance, Maintenance, and Calibration of 220' MET Tower MeDap Equipment, completed 7/23/15  
 8.E.73, 220' Meteorological Tower Inspection Guide, completed 6/10/15  
 EN-LI-100, Process Applicability Determination, Revision 18  
 EN-LI-102, Corrective Action Program, Revision 26  
 EN-LI-108, Event Notification and Reporting, Revision 12  
 EN-LI-118, Cause Evaluation Process, Revision 22  
 EN-LI-121, Trending and Performance Review Process, Revision 18  
 EP-AD-270, Equipment Important to Emergency Response (EITER), Revision 1  
 EP-AD-302, Facilities and Equipment Surveillances, Revision 7

Condition Reports

2013-6829	2014-4109	2015-0375	2015-05745	2015-07147	2015-0948
2015-7149	2015-7154	2015-7787	2015-9031	2015-9545	2015-9585
2015-9698	2016-0065	2016-0106	2016-00658	2016-0956	2016-1156
2016-1239					

Maintenance Orders/Work Orders

00401865

Miscellaneous

ECs 56170, 59550

EN-LI-123-03 Pre-Inspection Assessment for IP 92723, dated 3/22/16

Letter 2.15.077 – Entergy Reply to a Notice of Violation, dated October 30, 2015

LO-PNPLO-2015-00001 CA-3

WT-WTPNP-2014-0268 CA-5

**LIST OF ACRONYMS**

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
ADAMS	Agencywide Documents Access and Management System
CAP	corrective action program
CR	condition report
CS	core spray
EDG	emergency diesel generator
FSAR	Final Safety Analysis Report
HRA	high radiation area
INPO	Institute of Nuclear Power Operations
IP	inspection procedure
NCV	non-cited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission, U.S.
NOV	Notice of Violation
PNPS	Pilgrim Nuclear Power Station
RCIC	reactor core isolation cooling
RCS	reactor coolant system
OWA	operator workaround
SL	Severity Level
SSW	salt service water
TS	technical specification
VHRA	very high radiation area
WANO	World Association of Nuclear Operators
WO	work order