



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

January 28, 2020

Mr. Darrell Corbin  
Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT – INTEGRATED INSPECTION REPORT  
05000255/2019004 AND 07200007/2019001

Dear Mr. Corbin:

On December 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Palisades Nuclear Plant. On January 15, 2020, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Billy C. Dickson, Jr, Chief  
Branch 2  
Division of Reactor Projects

Docket No. 05000255; 07200007  
License No. DPR-20

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to Darrell Corbin from Billy Dickson dated January 28, 2020.

SUBJECT: PALISADES NUCLEAR PLANT – INTEGRATED INSPECTION REPORT  
05000255/2019004 AND 07200007/2019001

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000255; 07200007

License Number: DPR-20

Report Number: 05000255/2019004; 07200007

Enterprise Identifier: I-2019-004-0054; I-2019-001-0115

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, Michigan

Inspection Dates: October 01, 2019 to December 31, 2019

Inspectors: J. Cassidy, Senior Health Physicist  
J. Dalzell, Health Physicist  
R. Edwards, Senior Health Physicist  
E. Fernandez, Reactor Inspector  
G. Hansen, Sr. Emergency Preparedness Inspector  
P. Laflamme, Senior Resident Inspector  
V. Myers, Senior Health Physicist  
J. Winslow, Resident Inspector

Approved By: Billy C. Dickson, Jr, Chief  
Branch 2  
Division of Reactor Projects

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Palisades Nuclear Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### List of Findings and Violations

No findings or violations of more than minor significance were identified.

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000255/2018-003-01	LER 2018-003-01 for Palisades Nuclear Plant, Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations	71153	Closed

## PLANT STATUS

The plant began the inspection period at rated thermal power, and remained at or near rated thermal power for the remainder of the inspection period.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## REACTOR SAFETY

### 71111.01 - Adverse Weather Protection

#### Seasonal Extreme Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures for the following systems during the week of November 11, 2019:

Auxiliary Feedwater (AFW) and Service Water

#### Impending Severe Weather Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated readiness for impending adverse weather conditions for a high wind warning on November 27, 2019

### 71111.04Q - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Right Train Component Cooling Water (CCW) during maintenance and testing of P-52A on October 9, 2019
- (2) Left and Right Train Emergency Diesel Generators (EDGs) during P-7A Service Water Pump replacement on October 24 and 25, 2019
- (3) P-8 Motor Driven AFW system during P-8C AFW scheduled maintenance on October 30, 2019

71111.05A - Fire Protection (Annual)

Annual Inspection (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated fire brigade performance during a drill on November 8, 2019

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (3 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

- (1) Fire Area 23; Turbine Building - South Area on October 24, 2019
- (2) Fire Area 9; Screen House/Intake Structure during P-7A replacement on October 25, 2019
- (3) Fire Area 10; East Engineered Safeguards Room on November 29, 2019

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 02.02a.) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) 1D Switchgear Room, Cable Spreading Room, and Battery Rooms on December 30 and 31, 2019

71111.07A - Heat Sink Performance

Annual Review (IP Section 02.01) (1 Sample)

The inspectors evaluated readiness and performance of:

- (1) 1-2 EDG Jacket Water Heat Exchanger on December 23, 2019

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification biennial written examinations and annual operating tests administered from February 18 through March 22, 2019.

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated Licensed Operator Requalification Training PLSEG-LOR-19E-01 on November 25, 2019

### 71111.12 - Maintenance Effectiveness

#### Routine Maintenance Effectiveness Inspection (IP Section 02.01) (2 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Power supplies associated with the AFW actuation system during the week of December 16, 2019
- (2) Reactor Protection System during the week of December 16, 2019

### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

#### Risk Assessment and Management Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) Emergent troubleshooting and repairs following Source Range Neutron Flux Instrument Channel 1/3 Power Supply failure during the week of October 1, 2019
- (2) Elevated risk during scheduled 7A Service Water Pump replacement and testing during the week of October 21, 2019
- (3) Emergent troubleshooting and repairs following trip of VC-10 Control Room Heating, Ventilation, and Air Conditioning (HVAC) Condensing Unit and unplanned Limiting Condition for Operations (LCO) during the week of November 4, 2019

### 71111.15 - Operability Determinations and Functionality Assessments

#### Operability Determination or Functionality Assessment (IP Section 02.02) (4 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Evaluation of NI-1/3A Failure during the week of October 7, 2019
- (2) 1-1 EDG Turbocharger Operability as documented in CR-PLP-2019-004060 on October 17, 2019
- (3) Evaluation of acceptability for carbon steel nuts on P-7A Service Water Pump as documented in CR-PLP-2019-04275 on October 24, 2019.
- (4) Evaluation of loose shim packs on discharge head to floor connection of P-7A Service Water Pump as documented in CR-PLP-2019-04832 on December 9, 2019

### 71111.18 - Plant Modifications

#### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Engineering Change (EC) 83228, Removal of Service Water Pump Lateral Restraints on November 22, 2019

### 71111.19 - Post-Maintenance Testing

#### Post-Maintenance Test Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) RI-99 after replacement of Source Range Neutron Flux Power Supply on October 2, 2019
- (2) MO-7A1 following A1 starting air pressure controller (PCV-1479) on October 7, 2019
- (3) QO-19 after P-66B motor testing on October 16, 2019
- (4) QO-14 after P-7A motor replacement on October 24, 2019

### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

#### Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) QO-21C; P-8C AFW System Test on October 30, 2019
- (2) QO-16B; P-54B Containment Spray Test on November 5, 2019
- (3) RT-71M; Class 2 Inservice Test for Safety Injection and Refueling Water Tank on November 20, 2019

### 71114.04 - Emergency Action Level and Emergency Plan Changes

#### Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspector completed the evaluation of submitted Emergency Action Level and Emergency Plan changes on November 25, 2019. This evaluation does not constitute NRC approval.

## **RADIATION SAFETY**

### 71124.01 - Radiological Hazard Assessment and Exposure Controls

#### Radiological Hazard Assessment (IP Section 02.01) (1 Sample)

The inspectors evaluated radiological hazards assessments and controls.

- (1) The inspectors reviewed the following:

##### Radiological Surveys

- 649' Spent Fuel Pool Area
- East Safeguards Area
- 590' Primary System Drain Tank Pump Room

##### Risk Significant Radiological Work Activities

- Dry Fuel Storage Campaign - Loading Cask
- Offline Electrical Motor Testing
- Semi-Annual Locked High Radiation Area Verification



#### Air Sample Survey Records

- PLP-AS-100819-0689
- PLP-AS-101119-0707
- PLP-AS-101119-0708

#### Instructions to Workers (IP Section 02.02) (1 Sample)

The inspectors evaluated instructions to workers including radiation work permits used to access high radiation areas.

- (1) The inspectors reviewed the following:

##### Radiation Work Packages

- 20190107 - Decontamination and Housekeeping Activities in Locked High Radiation/High Radiation Areas/High Contamination Areas
- 20190209 - Activities Requiring Access to Locked High Radiation Areas
- 20190240 - Dry Fuel Storage Campaign - Preparation, Loading, and Demobilization

##### Electronic Alarming Dosimeter Alarms

- Error 70111 11/25/2018 04:55

##### Labeling of Containers

- Hose Storage Box 649' Spent Fuel Pool
- Areva Camera Equipment 649' Spent Fuel Pool
- Crane Control Tool Box 649' Spent Fuel Pool
- Contaminated Drum 625' Track Alley
- High Efficiency Particulate Air Vacuum Cleaners 625' Storage Area

#### Contamination and Radioactive Material Control (IP Section 02.03) (1 Sample)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material.

- (1) The inspectors verified the following sealed sources are accounted for and are intact:
- CE-9848
  - 87-CS-S-18

#### Radiological Hazards Control and Work Coverage (IP Section 02.04) (1 Sample)

The inspectors evaluated in-plant radiological conditions during facility walkdowns and observation of radiological work activities.

- (1) The inspectors also reviewed the following radiological work package for areas with airborne radioactivity:
- No work packages were available for review during this inspection.

High Radiation Area and Very High Radiation Area Controls (IP Section 02.05) (1 Sample)

- (1) The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 02.06) (1 Sample)

- (1) The inspectors evaluated radiation worker performance and radiation protection technician proficiency.

71124.02 - Occupational ALARA Planning and Controls

Radiological Work Planning (IP Section 02.01) (1 Sample)

The inspectors evaluated the licensee's radiological work planning.

- (1) The inspectors reviewed the following activities:
  - 2018-0434; Reassembly of the Reactor Head and Associated Work Activities
  - 2018-0444; Removal/Installation of Control Rod Drive Seal Housing Packages and Removal/Installation of Drive Motors
  - 2018-0450; Under Head Repair
  - 2018-0454; Steam Generator Primary Side Activities

Verification of Dose Estimates and Exposure Tracking Systems (IP Section 02.02) (1 Sample)

The inspectors evaluated dose estimates and exposure tracking.

- (1) The inspectors reviewed the following as low as reasonably achievable planning documents:
  - 2018-0434; Reassembly of the Reactor Head and Associated Work Activities
  - 2018-0444; Removal/Installation of Control Rod Drive Seal Housing Packages and Removal/Installation of Drive Motors
  - 2018-0450; Under Head Repair
  - 2018-0454; Steam Generator Primary Side Activities

71124.05 - Radiation Monitoring Instrumentation

Calibration and Testing Program (IP Section 02.02) (1 Sample)

The inspectors evaluated the calibration and testing program implementation.

- (1) The inspectors evaluated the calibration program for the containment high range radiation monitors. These activities supplement those in inspection report 05000255/2019002 and constitute a complete sample.

71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

Radioactive Material Storage (IP Section 02.01) (1 Sample)

The inspectors evaluated radioactive material storage.

- (1) The inspectors toured the following areas:
- East Radioactive Waste Building
  - South Storage Building
  - Refueling Outage Materials Pole Barn

The inspectors performed a container check (e.g., swelling, leakage and deformation) on the following containers:

- 4 Boxes outside East Radioactive Waste Building
- 3 Boxes inside East Radioactive Waste Building
- 2 Boxes Inside South Storage Building
- 3 Boxes Inside Refueling Outage Materials Pole Barn
- 1 High Integrity Container Outside the Steam Generator Blowdown Resin Vessels

Radioactive Waste System Walkdown (IP Section 02.02) (1 Sample)

The inspectors evaluated the following radioactive waste processing systems [and processes] during plant walkdowns:

- (1) Liquid or Solid Radioactive Waste Processing Systems
- Advanced Liquid Processing System
  - Steam Generator Secondary Blowdown Resins
  - M-18 Sludge and Waste Oil Collection

Radioactive Waste Resin and/or Sludge Discharges Processes

- Advanced Liquid Processing System
- Steam Generator Secondary Blowdown Resins

Waste Characterization and Classification (IP Section 02.03) (1 Sample)

The inspectors evaluated the radioactive waste characterization and classification for the following waste streams:

- (1)
- Dry Active Waste
  - Advanced Liquid Processing System Resins
  - Tank 100 Resins

Shipment Preparation (IP Section 02.04) (1 Sample)

The inspectors evaluated the following radioactive material shipment preparation processes:

- (1) The inspectors evaluated training and qualification records for selected individuals due to limited observation of the radioactive material shipment preparation process.

Shipping Records (IP Section 02.05) (1 Sample)

The inspectors evaluated the following non-excepted package shipment records:

- (1)
  - 2017-RW-017
  - 2018-RW-004
  - 2018-RW-007
  - 2018-RW-011

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS06: Emergency AC Power Systems (IP Section 02.05) (1 Sample)

- (1) Unit 1 (October 1, 2018 - September 30, 2019)

MS10: Cooling Water Support Systems (IP Section 02.09) (1 Sample)

- (1) Unit 1 (October 1, 2018 - September 30, 2019)

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in critical component failures that might be indicative of a more significant safety issue.

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Human performance issues associated with the failure to block the main steam isolation valve (MSIV) closure interlock within the required band on July 28, 2019, as documented in CR-PLP-2019-02920 and the unplanned transfer of water to the safety injection and refueling water tank (SIRWT) on September 4, 2019, as documented in CR-PLP-2019-03474.

71153 - Followup of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

- (1) LER 05000255/2018-003-01, Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations (ADAMS accession: ML19210D347)

The inspectors reviewed the updated LER submittal. The previous LER submittal was reviewed in Inspection Report 05000255/2019002 Sections 71111.08 and 71153. The inspectors concluded that no additional violations of NRC requirements occurred.

**OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL**

60855.1 - Operation of an Independent Spent Fuel Storage Installation at Operating Plants

Operation of an Independent Spent Fuel Storage Installation at Operating Plants (1 Sample)

- (1) The inspectors evaluated the licensee’s independent spent fuel storage installation cask loading activities on September 30th through October 4th. Specifically, the inspectors observed the following activities;
- Installation of the transfer cask (HI-TRAC) lid
  - Alternate cooling operations
  - Hydrostatic testing and non-destructive weld evaluations
  - Canister processing including bulk water removal (blowdown) and forced helium dehydration
  - Vent and drain port cover welding and non-destructive weld evaluations
  - Helium leak testing
  - Radiological field surveys

The inspectors performed walkdowns of the East and North ISFSI pads, including independent radiation surveys, and walkdowns of the ISFSI haul path and vertical cask transporter (VCT).

The inspectors evaluated the following:

- Spent fuel selection for the three casks for this loading campaign
- Selected corrective action program action requests
- Selected 72.48 screenings and evaluations

**INSPECTION RESULTS**

Assessment	71152
<p>The inspectors reviewed evaluations associated with two human performance errors documented in the corrective action program (CAP), including completed and planned corrective actions and effectiveness reviews. On July 28, 2019, during plant cooldown from Mode 3 to Mode 5, the licensee failed to block the main steam isolation valve (MSIV) closure interlock within the required band per procedure. No valve actuations occurred as a result of the failure to block the interlock because previous operator actions closed both MSIVs. The licensee's investigation of the issue revealed that Operations personnel were aware of the procedure step, but prioritized a required step to block the safety injection signal (SIS) prior to blocking the MSIV closure interlock because they believed there was enough time to block SIS then block the MSIV closure interlock. Following completion of blocking the SIS, the operators identified that steam generator pressures were below the required band for blocking the MSIV closure interlock. The operators verified system logic and blocked the MSIV closure interlock.</p> <p>On September 4, 2019, the licensee identified that a valve was not closed as required per</p>	

procedure SOP-27, "Fuel Pool System" during a change in system configuration. This resulted in the unplanned transfer of water from the spent fuel pool to the safety injection and refueling water tank (SIRWT). The operators verified all valve positions associated with the evolution and identified that MV-SFP127, spent fuel pool (SFP) demineralizer T-50 outlet to SIRWT, was partially open when it should have been closed. The operators then closed MV-SFP127 to establish the appropriate system configuration. The inspectors reviewed the licensee's final adverse condition analysis, and discussed the results of the analysis with the licensee.

Additional corrective actions from the evaluations included communicating lessons learned from these events with all operating crews. The inspectors determined that the corrective actions were appropriate and timely based on the safety significance of the issues.

Minor Violation	71152
<p>Minor Violation: The inspectors reviewed CR-PLP-2019-03474 associated with the unplanned transfer of water to the SIRWT. The licensee identified that standard operating procedure SOP-27, "Fuel Pool System," was not implemented as written. Specifically, on September 4, 2019, operators did not implement step 7.3.4(e)(2), which states to "close and lock MV-SFP127," as written. This resulted in the inadvertent transfer of water from the spent fuel pool to the SIRWT. Standard operating procedure SOP-27 provides instructions for operation of the spent fuel pool system as discussed in Regulatory Guide 1.33, Revision 2, Appendix A, Section 3.h. The inspectors identified this as a minor violation of Technical Specification (TS) 5.4.1.a. Licensee staff documented this issue in their CAP as CR-PLP-2019-03474.</p> <p>Screening: The inspectors determined the performance deficiency was minor. Consistent with the guidance in IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," the inspectors determined that the performance deficiency was not a finding of more than minor significance based on answering 'No' to all of the more-than-minor screening questions. The inspectors also reviewed the examples of minor issues in IMC 0612, Appendix E, "Examples of Minor Issues," and determined that this issue was most closely related to Example 4.b in that that this was a procedural error that had no safety consequences.</p> <p>Enforcement: This failure to comply with TS 5.4.1.a constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.</p>	

Minor Violation	71152
<p>Minor Violation: The inspectors reviewed CR-PLP-2019-02920 associated with the failure to block the MSIV closure interlock in the required band. The licensee identified that general operating procedure GOP-9, "Mode 3 &gt; 525F to Mode 4 or Mode 5," was not implemented as written. Specifically, on July 28, 2019, operators did not implement step 3.7, which states "When 3 of 4 associated Steam Generator pressure sigmas indicate between 510 and 550 psia and the indicator is between alarm flags, then depress the associated pushbutton to bypass MSIV closure: HS/LPE-50A, bypass of MSIV closure pushbutton; and HS/LPE-50B, bypass of MSIV closure pushbutton," as written when they did not depress HS/LPE-50A and HS/LPE-50B when 3 of 4 associated Steam Generator pressure sigmas indicated between 510 and 550 psia. General operating procedure GOP-9 provides instructions for general plant operating procedures from hot standby to cold shutdown as discussed in Regulatory Guide 1.33, Revision 2, Appendix A, Section 2.j. The inspectors identified this as a minor</p>	

violation of TS 5.4.1.a. This issue was documented in the licensee's CAP as CR-PLP-2019-02920.

Screening: The inspectors determined the performance deficiency was minor. Consistent with the guidance in Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," the inspectors determined that the performance deficiency was not a finding of more than minor significance based on answering 'No' to all of the more-than-minor screening questions. The inspectors also reviewed the examples of minor issues in IMC 0612, Appendix E, "Examples of Minor Issues," and determined that this issue was most closely related to Example 4.b in that that this was a procedural error that had no safety consequences.

Enforcement: This failure to comply with TS 5.4.1.a constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy.

Observation: Semi-Annual Trend Review

71152

The inspectors' review focused on critical component failures/ degradation and subsequent challenges to online and equipment reliability, but also considered the results of daily inspector CAP item screening and licensee trending efforts. The inspectors' review nominally considered the 6-month period of July 2019 through December 2019, although some examples expanded beyond those dates when warranted by the scope of the trend.

The inspectors reviewed condition reports, trend reports, maintenance rule evaluations, and causal evaluations addressing human performance and equipment reliability at the site. During the inspection period, the NRC inspectors noted a few challenges to equipment reliability. Specifically, the inspectors observed and reviewed activities associated with thermal margin monitor (TMM) channel C and D screen failures and subsequent inoperabilities, a failed source range power supply to NI Channels 1 & 3 and resultant inoperability, the loss of V-49A, CRDM cooling fan (1 of 2) resulting in slightly higher CRDM seal temperatures, multiple momentary losses of group 2 pressurizer backup heaters, and CRDM #14 & #23 seal degradation coupled with the digital electro-hydraulic system power supply failure and resultant maintenance outage.

For the latter two instances, the inspectors noted that the licensee identified, monitored, and then repaired both equipment issues during a planned maintenance outage July 27-31, 2019. Regarding the multiple TMM screen failures and subsequent screen replacement, the inspectors noted that the licensee identified their lack of sufficient long-term planning to ensure TMM reliability as a contributing cause. For corrective action, the licensee plans to install new LCD replacement screens of higher quality. The licensee concluded that this will also address the reliability concerns. Although these issues illustrated a challenge to online and equipment reliability, the inspectors did not identify an adverse trend during this assessment period.

## EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On January 15, 2020, the inspectors presented the integrated inspection results to Mr. D. Corbin, Vice President, Operations, and other members of the licensee staff.

- On October 4, 2019, the inspectors presented the Radiation Protection Program inspection results to Mr. D. Corbin, Vice President, Operations, and other members of the licensee staff.
- On October 21, 2019, the inspectors presented the Independent Spent Fuel Storage Installation inspection results to Mr. D. Lucy, Acting Site Vice President and other members of the licensee staff.
- On November 15, 2019, the inspectors presented the Radiation Protection Program inspection results to Mr. D. Corbin, Vice President, Operations, and other members of the licensee staff.
- On November 25, 2019, the inspectors presented the Emergency Action Level and Emergency Plan Changes inspection results to Mr. D. Malone and other members of the licensee staff.
- On December 17, 2019, the inspectors presented the Licensed Operator Requalification program annual examination results review inspection results to Mr. F. Korfias, Operations Exams Superintendent and other members of the licensee staff.



**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60855.1	ALARA Plans	EN-RP-105	Radiological Work Permits	18
	Corrective Action Documents		Review of Selected Corrective Action Reports Since January 2017	
		CR-PLP-2016-05475	HI-STORM FW Combustible Controls	11/16/2016
	Engineering Changes	EC-71123	Perform Modification to Change the East Trolley Limit Switch on L-3 per CR 2016-4562	0
	Miscellaneous		Certificate of Compliance No. 1032, Amendment No. 1	1
			Final Safety Analysis Report on the HI-STORM FW MPC Storage System	4
			Selected 10 CFR 72.48 and 50.59 ISFSI Related Screenings and Evaluations Since January 2017	
			Response to Palisades NRC Inspection Question on HI-TRAC Lift Bracket Bolt Inspection per HSP-366	10/02/2019
			Certificates of Conformance for Purchase Order 107236	08/12/2015
		DOC-103-007R2	Leased HI-TRAC VW for Use at Palisades (Entergy) Documentation Package	09/26/2019
		DOC-104-107-016R1	Leased MPC-37 Lift Bracket for HI-STORM FW Documentation Package	06/25/2019
		DOC-104-209-018R1	Leased MPC-37 Lift Cleat Documentation Package	06/25/2019
		DOC-104-702-023R1	Leased HI-TRAC VW Lift Yoke to Palisades Documentation Package	06/25/2019
		DOC-104-731-019R1	Leased MPC Lid Lift Adapter and MPC Lid Lift Rigging Documentation Package	06/25/2019
		DOC-2251-004R1	Lower Fuel Shims for Palisades Nuclear Plant Documentation Package	08/09/2019
DTF-3005-015B		Palisades Training Records	09/24/2019	
EN-DC-223		MPC Loading Plan for MPC 123, 124 and 125	Revision 4	
PROC No. FSHO-17A Attachment 1	MPC-37 Fuel Verification	10/01/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Report No. PLP 721032	Palisades 10 CFR 72.212 Evaluation Report	09/09/2019
	NDE Reports	Report No. 915741-123-01	Report of Visual Non-Destructive Examination	10/04/2010
		WO 52844949-01	Annual Crane Liquid Penetrant Examination	08/08/2019
	Procedures	AT-36	ISFSI Pad Monitoring Program	5
		AT-9	Examination of Ventilated Concrete Cask Assembly Exterior	7
		GQP - 9.2	High Temperature Liquid Penetrant Examination and Acceptance Standards for Welds, Base Materials and Cladding (50° - 350°F)	10
		GQP - 9.6	Visual Examination of Welds	18
		Procedure No. FHS-M-41B	HI-STORM FW Dry Fuel Loading Operations - MPC Loading	5
		Procedure No. FHS-M-41C	HI-STORM FW Dry Fuel Loading Operations - MPC Sealing and Drying	8
		Procedure No. FHS-M041D	HI-STORM FW Dry Fuel Loading Operations - MPC Transfer to HI-STORM	9
		Radiation Surveys		Periodic Radiological Surveys Performed Since January 2017
	Self-Assessments		2019 Readiness Assessment	09/05/2019
		QA-20-2018-PLP-1	Audit Report: Independent Spent Fuel Storage Installation	07/08/2019
	Work Orders	HSP-169	HI-STORM Offloading and Preparation for Site Fabrication Completion	36
		WO 00517524-04	Limits on Crane are Not Working Properly - Investigate	07/25/2019
		WO 52832037	AT-9 Dry Fuel Storage Cask Exterior Inspection	06/04/2019
		WO 52832038	AT-36 ISFSI Pad Monitoring Program	07/25/2019
71111.01	Corrective Action Documents Resulting from Inspection	CR-PLP-2019-04653	NRC Identified Gaps in Insulation	11/21/2019
		CR-PLP-2019-04723	NRC Resident Identified a Cable/Extension Cord Hanging Over the Edge of the Roof on the North Side of the Turbine Building	11/27/2019
		CR-PLP-2019-04807	Unsecure Items Identified by the NRC	12/06/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous		Certificate of Analysis for T-10A	07/29/2019
			Site Certification Letter for Winter Readiness	2019/2020
			2019-2020 Winter Weather Contingency Plan	6
	Procedures	AOP-38	Acts of Nature	18
		EN-CY-122	Diesel Fuel Oil Program	2
		EN-FAP-EP-010	Attachment 7.14, Severe Weather Missile Hazard Reduction Guidance	7
		SOP-15	Service Water System	69
		SOP-23	Plant Heating System	62
Work Orders	WO 52848891	Perform Cold Weather Checksheets	10/23/2019	
71111.04Q	Corrective Action Documents	CR-PLP-2019-01047	A Small Puddle of Fuel Oil was Noticed on the Floor Below MV-FO705, P-18A/B Discharge to FO Day Tank T-40	03/13/2019
		CR-PLP-2019-02813	HP Air Compressor in West Safeguards was Found to Have a Minor Leak	07/19/2019
		CR-PLP-2019-04084	MV-CC942, Component Cooling Water (CCW) P-52B Discharge, has Evidence of Past Leakage on the East Side of the Upper Flange	10/10/2019
		CR-PLP-2019-04344	Observed Roof Leak of ~60-80 Drops per Minute on West Side of 625' Elevation of Turbine Deck	10/30/2019
		CR-PLP-2019-04369	CK-FW743, Auxiliary Feedwater Pump P-8B has a Body to Bonnet Leak of 5 Drops per Minute	10/31/2019
	Corrective Action Documents Resulting from Inspection	CR-PLP-2019-04101	NRC Identified a Large Amount of Carbon Build Up on the Southwest Portion of the Turbocharger	10/11/2019
	Drawings	M-214, Sheet 1	Piping & Instrument Diagram, Lube Oil, Fuel Oil, & Diesel Generator Systems	82
	Miscellaneous	DBD-1.03	Design Basis Document for Auxiliary Feedwater System	10
	Procedures	SOP-12, Attachment 14	Auxiliary Feedwater System Checklist	81
		SOP-22	Emergency Diesel Generators	77
71111.05A	Procedures	EN-TQ-125	PLDRL-FBT-FIREDRILL (19-018)	11/08/2019
		EN-TQ-125, Attachment 3	Fire Drill Report	11/15/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.05Q	Fire Plans	Pre Fire Plan Area 10	East Engineered Safeguards Room/ Elevation 570'	5
		Pre Fire Plan Area 23	Turbine Building - South / Elevation 590'	5
		Pre Fire Plan Area 9	Screen House / Intake Structure / Elevation 590'	5
	Procedures	EN-DC-161	Control of Combustibles	20
71111.06	Calculations	EA-C-PAL-95-1526-01	Internal Flooding Evaluation for Plant Areas Outside Containment	3a
	Corrective Action Documents	CR-PLP-2019-04899	PMID 50083994-02 May Not be Effective	12/13/2019
		CR-PLP-2019-04945	Two of Three Drains in Cable Spreading are Plugged	12/17/2019
71111.07A	Corrective Action Documents	CR-PLP-2019-01138	Eddy Current Testing of the E-31B "EDG 1-2 Lube Oil Cooler"	03/19/2019
	Procedures	EPS-M-14A	Diesel Generator Every Cycle Maintenance	03/18/2019
		SEP-HX-PLP-001	Supplemental HX Visual Inspection Checklist - Jacket Water Cooler	03/18/2019
	Work Orders	52771367-01	K-6B 1-2 D/G 24 Month PM	03/18/2019
71111.11A	Miscellaneous		Palisades Annual Licensed Operator Requalification Summary Results for 2019	3/29/2019
71111.11Q	Corrective Action Documents	CR-PLP-2019-04224	The CRT Screen for PY-0102A 'A' Channel Thermal Margin Monitor is Growing Dim	10/21/2019
		CR-PLP-2019-04476	During Training, Instructor Identified that the InForm Program was Configured to the "Palisades" Jurisdiction	11/07/2019
71111.12	Corrective Action Documents	CR-PLP-2018-05433	EC-187D, AFAS Sensor Channel Cabinet, has No 12 Volt DC Power	11/02/2018
		CR-PLP-2019-01213	Received EK-0137, Auxiliary Feedwater AFAS-FOGG Subsystem Trip	03/23/2019
		CR-PLP-2019-01222	P/S-0712 from CR-PLP-2018-05433 was Not Sent to the Vendor for Failure Analysis	03/25/2019
		CR-PLP-2019-03549	Maintenance Rule (a)(1) Action Plan, Thermal Margin Monitor (TMM) Displays	12/04/2019
		CR-PLP-2019-	PY-0102C: Thermal Margin Monitor Channel 'C' Display has	09/14/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		03687	Dimmed in is now Unreadable	
		CR-PLP-2019-04016	Two Maintenance Rule Repeat Functional Failures Associated with the Thermal Margin Monitors (TMM)	10/07/2019
		CR-PLP-2019-04540	Documented Failures of TMM Circuit Cards	11/14/2019
		CR-PLP-2019-04603	NI-07 Power Range Instrumentation	11/19/2019
		CR-PLP-2019-04739	PY-0102C: Thermal Margin Monitor Channel 'C' Display is Very Dim	12/02/2019
		CR-PLP-2019-04747	PY-1020D, Thermal Margin Monitor Channel 'D', Varies more than the Other Channels	12/03/2019
	Miscellaneous	System Health Report	Engineered Safety Features Actuation System	Q2 2019
		System Health Report	Reactor System Protection	Q2 2019
	Procedures	EN-DC-205	Maintenance Rule Monitoring	7
		EN-DC-206	Maintenance Rule (a)(1) Process	3
	Work Orders	WO 512169	P/S-0712, Replace AFAS (SCD) Power Supply	12/01/2018
		WO 521490	AFAS Trip Alarm Due to P/S-0706 De-Energizing	03/25/2019
		WO 521968	P/S-0704, Replace AFAS Power Supply	10/08/2019
		WO 521972	P/S-0708, Replace AFAS Power Supply	06/11/2019
71111.13	Corrective Action Documents	CR-PLP-2019-03973	NI 1/3A Wide Range Power Display was Found Reading Approximately 10% Power	10/03/2019
		CR-PLP-2019-04406	VC-10, Control Room HVAC Refrig Condensing Unit Trouble Light on Panel C-11A	11/02/2019
		CR-PLP-2019-04417	Received Alarm EK-0547, 125V DC Bus Ground Unexpectedly	11/04/2019
		CR-PLP-2019-04420	VC-10 (Control Room HVAC Refrigeration Condensing Unit) Bearing was Damaged	11/04/2019
		CR-PLP-2019-04421	VC-10 (Control Room H-VAC Compressor) Under Work Order #533966 has Non-Conforming Parts	11/04/2019
		CR-PLP-2019-04430	Main Exhaust Fan V6A Tripped on Overcurrent	11/04/2019
	Procedures	EN-MA-157	Maintenance Configuration Control	10/02/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		RI-99	Left Channel Nuclear Instrumentation Calibrations	10/22/2019
		SOP-35	Neutron Monitoring System	17
	Work Orders	WO 531972	NI-1/3A Failed Low	10/1/2019
71111.15	Corrective Action Documents	CR-PLP-2019-03911	NI-1/3A, Source & Wide Range Neutron Monitor Ch 1/3, Appeared to Fail Low	09/30/2019
		CR-PLP-2019-03973	NI-1/3A Wide Range Power Display was Found Reading Approximately 10% Power	10/03/2019
		CR-PLP-2019-04275	Carbon Steel Nuts had been Installed on the Stainless Steel Studs Between the Pump and the First Column	10/24/2019
		CR-PLP-2019-04832	P-7A Service Water Pump Shim Packs are Loose on Discharge Head to Floor Connection	12/09/2019
	Drawings	E-61, Sheet 2A	Schematic Diagram Source & Wide Range #1/3 Nuclear Instrumentation	6
		VEN-MI-RA, Sheet 857	Neutron Flux Monitoring System Source & Wide Range Channels	76
	Engineering Changes	EC 27090	Palisades EDG Turbo Support Cracking Report by MPR Associates	0
		EC 37737	Approval of Spare Service Water Pump Bowl from Hydroaire and Other Associated Components Not Previously Approved by Other ECs	0
		EC 84410	Operability Basis Input for Left Train Source/Wide Range Nuclear Instrumentation, NI-1/3A	0
		EC 84509	Operability Basis Input for EDG 1-1 (Emergency Diesel Generator) Turbo Mount Cracks	0
		EC 84714	Acceptability for Carbon Steel Nuts between P-7A Pump and the First Column	0
		EC 85226	Loose Shim on P-7A	0
	Work Orders	WO 506696	P-7A; Replace/Rebuild	10/23/2019
		WO 52874649-1	K-6A Turbocharger Support Inspection	10/09/2019
	71111.18	Calculations	A13499-C-001	Evaluation of Service Water Pumps P-7A, 7B & 7C to determine Feasibility of Removing the Lateral Bracket Support at Elevation 583'
Corrective Action Documents		CR-PLP-2019-04287	During performance of QO-14A Inservice Test Procedure- Service Water Pumps (WO-520027), Motor Outboard	10/25/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Bearing vibration M1Z was measured in the "Alert Range"	
		CR-PLP-2019-04705	P-7A, Service Water Pump Outboard Motor Radial M1Z was recorded in "Alert Range" during QO-14A	11/26/2018
	Engineering Changes	EC 83228	Optional Removal of SW Pump Restraints Below Floor/Above Water	0
71111.19	Corrective Action Documents	CR-PLP-2019-03990	Adjust A10-R30 in NI-1/3A to Adjust for Present Reactor Power	10/04/2019
	Procedures	QO-14	Inservice Test Procedure - Service Water Pumps	43
		QO-19	Inservice Test Procedure - HPSI Pumps and ESS Check Valve Operability Test	43
	Work Orders	WO 506696	P-7A; Replace/Rebuild	10/23/2019
		WO 520027	QO-14A - P-7A, IST Service Water Pump	10/25/2019
		WO 52819026	EEQ - EMA-1113 HPSI Pump P-66B Motor	10/16/2019
		WO 52889284	QO-19B - High Pressure Safety Injection Pump & ESS Check Valve Operation	10/16/2019
WO 531972-05	NI-1/3 Failed Low - Replace Drawer, (RTS)	10/14/2019		
71111.22	Corrective Action Documents	CR-PLP-2019-04359	Overvoltage Protection for P/S 0737A Work Instructions are not Adequate for the Task	10/30/2019
		CR-PLP-2019-04367	The PMID has not been Updated to Credit the Installation of a New Calibrated Gauge as Due 1/22/2020	10/30/2019
		CR-PLP-2019-04428	Temporary Installed Gauges Interfered with the Operation of DPI-0319B Bypass Valve (IB) Which Caused Delays During the Test to Adjust the Installed Gauges	11/04/2019
	Drawings	M-204	Piping & Instrument Diagram Safety Injection Containment Spray	41
		VEN-M-107, Sheet 4	SIRW Tank to Charging Pumps, Stress Isometric 03323	5
		VEN-M107, Sheet 2278	Stress Isometric Safety Injection, Containment Spray & Shutdown Cooling System	10
	Operability Evaluations	QO-21	Inservice Test Procedure - Auxiliary Feedwater Pumps	52
	Procedures	CEP-NDE-0902	VT-2 Examination Checklist for SIRW Tank	11/20/2019
		QO-16	Inservice Test Procedure - Containment Spray Pumps	11/04/2019
		QO-21	Inservice Test Procedure - Auxiliary Feedwater Pumps	52

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		RT-71M	Class 2 System Inservice Test for Safety Injection and Refueling Water Tank	11/20/2019
		SOP-12	System Operating Procedure: Feedwater System	10/2/2019
		SOP-4	Containment Spray System	27
	Work Orders	WO 52895070	QO-16B-P-54B, I&C Install Test Gauges	11/04/2019
71114.04	Miscellaneous		10 CFR50.54(Q) Training Documentation Record - McKinney	03/15/2018
			10 CFR50.54(Q) Training Documentation Record - Howard	11/15/2017
			10 CFR50.54(Q) Training Documentation - Exemption Approval Form - D. Malone	02/24/2012
			10 CFR 50.54(Q)(3) Screening - Site Emergency Plan Revision 31	09/18/18
			10 CFR 50.54(Q)(3) Evaluation - Site Emergency Plan Revision 31	09/18/18
		SEP	Site Emergency Plan	30
	Procedures	EN-EP-305	Emergency Planning 10CFR50.54(q) Review Program	6
		SEP	Site Emergency Plan	31
71124.01	Corrective Action Documents	CR-PLP-2018-03839	Gate to T-69 Found Open	0/8/22/20018
		CR-PLP-2019-04491	Increased Dose Rates in Primary System Drain Tank Room	11/09/2019
	Procedures	EN-RP-106	Radiological Survey Documentation	7
		EN-RP-121	Radioactive Material Control	16
		EN-RP-131	Air Sampling	17
		EN-RP-143	Source Control	14
	Radiation Surveys	PLP-1910-00005	590 Primary System Drain Tank Room	10/01/2019
		PLP-1910-00074	649 Spent Fuel Pool Area	10/09/2019
		PLP-1910-00100	649 Spent Fuel Pool Area	10/12/2019
		PLP-1910-00104	East Engineered Safeguards	10/13/2019
		PLP-1910-00216	East Engineered Safeguards	10/30/2019
		PLP-2011-00028	590 Primary System Drain Tank Room	11/09/2019
		PLP-2011-00033	590 Primary System Drain Tank Room	11/11/2019
		PLP-2011-00034	590 Primary System Drain Tank Room	11/11/2019



Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
	Radiation Work Permits (RWPs)	20190107	Decontamination and Housekeeping Activities in Locked High Radiation/High Radiation Areas/High Contamination Areas	01	
		20190209	Activities Requiring Access to LHRAs	00	
		20190240	Dry Fuel Storage Campaign - Loading (MPC-37-05) (MPC-37-06) (MPC-37-07) and Prep/Demob Activities	02	
	Self-Assessments	LO-PLPLO-2019-00011	2019 Radiological Hazard Assessment and Exposure Controls Self-Assessment	09/18/2019	
	Work Orders	52738305 01	Perform Annual Rad Source Inventory	02/08/2018	
		52802850 01	Perform Annual Rad Source Inventory	02/14/2019	
		52823888 01	Offline Motor Electrical Testing	09/16/2019	
	71124.02	ALARA Plans		ALARA Plan for RWP 2018-0444	10/17/2018
				ALARA Plan for RWP 2018-0454	10/16/2018
			ALARA Plan for RWP 2018-0450	11/20/2018	
			ALARA Plan for RWP 2018-0450	11/23/2018	
			ALARA Plan for RWP 2018-0434	10/16/2018	
Miscellaneous			Post Job ALARA Review for RWP 2018-0434	03/08/2019	
			40% Job In Progress Review for RWP 2018-0454	11/06/2018	
			Post Job ALARA Review for RWP 2018-0454	02/06/2019	
			80% Job In Progress Review for RWP 2018-0444	12/18/2018	
			40% Job In Progress Review for RWP 2018-0444	11/06/2018	
			Post Job ALARA Review for RWP 2018-0444	02/07/2019	
			Post Job ALARA Review for RWP 2018-0450	02/28/2019	
			40% Job In Progress Review for RWP 2018-0450	12/01/2018	
			80% Job In Progress Review for RWP 2018-0450	12/13/2018	
			40% Job In Progress Review for RWP 2018-0434	12/18/2018	
		80% Job In Progress Review for RWP 2018-0434	12/19/2018		
Procedures		EN-RP-105	Radiological Work Permits	18	
Radiation Work Permits (RWPs)		2018-0434	Refuel Project: Reassembly of the Reactor Head and Associated Work Activities	00	
		2018-0444	Reactor Head Inspection: Removal/Installation of Control Rod Drive Seal Housing Packages and Removal/Installation of Control Rod Drive Mechanism Drive Motors.	00	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		2018-0450	1R26 Emergent Reactor Head Nozzle Repair and Support Activities	06
		2018-0454	Steam Generator Primary Side Activities	00
71124.05	Work Orders	52770033	RI-86G-2 High Range Containment Monitor Calibration	01/17/2019
		52777256	RI-86G-1 - High Range Containment Monitor Calibration - Source Test	11/04/2018
71124.08	Corrective Action Documents	CR-PLP-2018-00297	Radiation Monitor is East Rad Waste Removed from Service Due to Spurious Auto-Dialer Alarms in the Control Room	01/18/2018
		CR-PLP-2018-01215	Troubleshoot and Repair Nuisance Auto-Dialer Alarms at East Rad Waste	03/15/2018
		CR-PLP-2018-04820	Auto-Dialer Alarm Function Found Unplugged from Radiation Monitor in East Radwaste Building	10/17/2018
		CR-PLP-2019-00247	Prioritize Repair of the Auto-Dial Control Room Alarm Function for the East Rad Waste Radiation Monitor	01/24/2019
	Miscellaneous	Memo To From JLSmith	Palisades Plant - Shippers Qualifications 2018 REvision	05/30/2018
	Procedures	DM-OP-046-161046	Operation of the Energy Solutions ALPS System at Palisades Nuclear Power Station	11
		EN-RW-102	Radioactive Waste Shipping	17
		EN-RW-104	Scaling Facators	13
		EN-RW-106	Integrated Transportation Security Plan	6
	Self-Assessments	LO-PLPLO-2019-00010	Pre-NRC Inspection Radioactive Solid Waste Processing and Radioactive Material Handling, Storage and Transportation Self-Assessment	07/10/2019
	Shipping Records	2017-RW-017	8-120-B Metal Cask with Poly HIC Liner Containing T-100 Resins	10/30/2017
		2018-RW-004	3-60B-1 Metal Cask with 3-60 Steel Liner containing Irradiated Hardware	03/06/2019
		2018-RW-007	14-170-32 Metal Cask containing High Rad Metal Waste in Liner	09/13/2018
		2018-RW-011	(2) 20' Sea Lands containing Dry Active Waste & Metal Waste for Processing	11/07/2018
	Work Orders	00486643	East Radwaste Auto-Dialer Bringing in Nuisance Alarms	10/17/2017
71151	Corrective Action	CR-PLP-2019-	Diesel Generator 1-1 Service Water Flow was Reading	10/07/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents	04023	Elevated at 710 gpm	
	Miscellaneous	MSPI Derivation Documents	MSPI Derivation Documents for October 1, 2018 through September 30, 2019	10/01/2018 - 09/30/2019
71152	Corrective Action Documents	CR-PLP-2019-02920	Operating Crew Missed the Window to Block MSIV Closure	07/28/2019
		CR-PLP-2019-03229	Three-Year Trend of Power Supply Failures	08/15/2019
		CR-PLP-2019-03474	Unplanned Transfer of Water to SIRWT	09/04/2019
		CR-PLP-2019-04024	Emergency Diesel Generator 1-1 Test, TI-1481, K-6A Jacket Water Temperature Indicator was Reading 140 Degrees Fahrenheit	10/07/2019
		CR-PLP-2019-04292	CRDM Cooling Fan Tripped	10/25/2019
		CR-PLP-2019-04583	Aggregate Performance Issue (AP) Associated with Rework Performance Rated	11/18/2019
		CR-PLP-2019-04674	Large Amounts of Boric Acid under P-54C, Containment Spray Pump	11/23/2019
		CR-PLP-2019-04824	CRDM Cooling Fan V-49A Failure	12/07/2019
		CR-PLP-2019-04935	Create a Contingency Work Order with Four Tasks to Replace any Thermo Margin Monitor CRT Display Screens	12/17/2019
		CR-PLP-2019-05001	NIOS Identified: Problem Identified During Review of CR-PLP-2019-03474	12/19/2019
	Miscellaneous	APRM Report	Palisades Performance Improvement	08/2019
	Procedures	Admin 4.02	Control of Equipment	82
		EN-HU-102	Human Performance Traps and Tools	16
		GOP-9	Mode 3 > 525F to Mode 4 or Mode 5	37
SOP-27		Fuel Pool System	72	
71153	Miscellaneous	05000255	Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations	01