



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

February 11, 2021

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
05000255/2020004

Dear Mr. Corbin:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Palisades Nuclear Plant. On January 21, 2021, 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.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement; and the NRC Resident Inspector at Palisades.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC Resident Inspector at Palisades.

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
License No. DPR-20

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

Letter to Darrell Corbin from Billy C. Dickson, Jr., dated February 11, 2021.

SUBJECT: PALISADES NUCLEAR PLANT – INTEGRATED INSPECTION REPORT
05000255/2020004

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

Docket Number: 05000255

License Number: DPR-20

Report Number: 05000255/2020004

Enterprise Identifier: I-2020-004-0030

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Inspection Dates: October 01, 2020 to December 31, 2020

Inspectors: E. Fernandez, Reactor Inspector
G. Hansen, Senior Emergency Preparedness Inspector
P. Laflamme, Senior Resident Inspector
V. Myers, Senior Health Physicist
C. St. Peters, 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, 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

Failure to Follow Procedure Results in an Arc to Ground and Entry into Abnormal Operating Procedure (AOP) 36 "Loss of Component Cooling Water (CCW)"			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green NCV 05000255/2020004-01 Open/Closed	[H.11] - Challenge the Unknown	71152
A self-revealed Green finding and associated non-cited violation (NCV) of Technical Specification 5.4.1a occurred on September 9, 2020, when the licensee failed to follow plant procedure EN-MA-101, "Conduct of Maintenance." Specifically, the licensee's failure to correctly implement step 5.3.2c of procedure EN-MA-101 resulted in the supervisor getting involved in the hands-on work. This resulted in an arc to ground of safety-related DC breaker 72-118, subsequent unanticipated opening of valve CV-0910 "CCW Supply to Containment" and valve CV-0911 "CCW from Containment" due to a loss of power, standby CCW pump start, and consequential tank T-3, "Component Cooling Water Surge Tank," level drop requiring entry into AOP-36, "Loss of Component Cooling Water (CCW)."			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000255/2020-002-00	LER 2020-002-00 for Palisades Nuclear Plant, Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations	71153	Closed

PLANT STATUS

The plant began the inspection period shutdown in mode 6 for a refueling outage. On October 20, 2020, the plant was taken critical and successfully synced to the grid on October 21, 2020. The plant achieved rated thermal power on October 27, 2020, 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 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.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the Coronavirus Disease 2019 (COVID-19), resident inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status"; observed risk-significant activities; and completed onsite portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portions of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and onsite. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures for the following systems on December 1, 2020
 - Emergency diesel generators (EDGs)
 - Spent fuel pool

71111.04 - 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) Component cooling water (CCW) on November 9, 2020

- (2) Left train auxiliary feedwater (AFW) on November 17, 2020
- (3) 7B service water pump system on November 24, 2020

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the 1D 2.4KV electrical bus system on December 11, 2020.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Station Battery Room, Fire Area 11, on November 16, 2020
- (2) Station Battery Room, Fire Area 12, on November 16, 2020
- (3) Mechanical Equipment Rooms, Fire Area 30, on November 23, 2020
- (4) Mechanical Equipment Rooms, Fire Area 31, on November 23, 2020

Fire Brigade Drill Performance Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the onsite fire brigade training and performance during an annual fire drill on December 3, 2020.

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) 1C Switchgear Room on December 22, 2020

71111.07A - Heat Sink Performance

Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

- (1) VHX027A Engineering Safeguards Room cooling coil on December 4, 2020

71111.08P - Inservice Inspection Activities (PWR)

PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors documented a partial completion of this inspection procedure in inspection report 05000255/2020003. During this inspection period, the inspectors reviewed the licensee's actions to address a flaw which was below recordable threshold during the last outage. The licensee reexamined the nozzle, identified the flaw had grown, and repaired the nozzle.

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01)
(1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the Control Room during vacuum fill on October 15, 2020.

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

- (1) The inspectors observed and evaluated SER-406, Revision 2 on November 23, 2020.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (1 Sample)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Radiation monitoring system during the week of December 14, 2020

Quality Control (IP Section 03.02) (1 Sample)

The inspectors evaluated the effectiveness of maintenance and quality control activities to ensure the following SSC remains capable of performing its intended function:

- (1) 125 VDC vital power system during the week of November 23, 2020

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Elevated risk during planned maintenance on battery charger #2 and right train AFW flow control valve testing on October 26, 2020.

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (4 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Technical specification sodium tetraborate basket weight evaluation on October 7, 2020
- (2) CV-0826 past operability evaluation on October 9, 2020
- (3) Core exit thermocouple cabling evaluation on October 21, 2020

- (4) Service water to containment air cooling system evaluation on November 20, 2020

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) 84697: Thermal margin monitor system channel D display replacement modification on December 17, 2020.

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Control rod testing on October 28, 2020
- (2) Control rod number 2 maintenance and testing on October 29, 2020
- (3) Battery charger number 2 testing on November 18, 2020
- (4) P-52C CCW pump maintenance and testing on December 16, 2020
- (5) P-55C charging pump maintenance and testing on December 22, 2020

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated refueling outage 1R27 activities from August 30 to October 27, 2020.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Quarterly 7C service water pump test on November 19, 2020

Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

- (1) Local leak rate testing on November 12, 2020

71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors completed an evaluation of submitted Emergency Action Level and Emergency Plan changes on December 10, 2020. This evaluation does not constitute NRC approval.

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01)
(1 Sample)

- (1) Evaluated exercise on October 27, 2020

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) Tabletop exercise on November 10, 2020

RADIATION SAFETY

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

Waste Characterization and Classification (IP Section 03.03) (3 Samples)

The inspectors evaluated the licensee's characterization of the following radioactive waste shipments:

- (1) 2020-RW-003; Clean Radwaste Filters
- (2) 2020-RW-004; Primary Purification Filter
- (3) 2020-RW-006; Primary Purification Resin

Shipping Records (IP Section 03.05) (3 Samples)

The inspectors evaluated the following non-excepted radioactive material shipments through a record review:

- (1) 2020-RW-003; Clean Radwaste Filters Shipped as LSA-II
- (2) 2020-RW-004; Primary Purification Filter Shipped as Type B
- (3) 2020-RW-006; Primary Purification Resin Shipped as Type B

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, 2019–September 30, 2020)

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

- (1) Unit 1 (October 1, 2019–September 30, 2020)

BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (1 Sample)

- (1) Unit 1 (April 1, 2019–September 30, 2020)

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

- (1) April 1, 2019–September 30, 2020

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual
Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample
(IP Section 02.16) (1 Sample)

- (1) April 1, 2019–September 30, 2020

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 equipment reliability that might be indicative of a more significant safety issue on December 10, 2020.

Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

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

- (1) 1-2 EDG starting air system leak evaluation as documented in CR-PLP-2020-00239 on December 21, 2020
- (2) Electrical maintenance near miss arc fault evaluation as documented in CR-PLP-2020-3261 on November 24, 2020

71153 – Follow-up 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 05000255/2020-002-00, Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations (ADAMS Accession No. ML20314A143). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER and therefore no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements.

INSPECTION RESULTS

Failure to Follow Procedure Results in an Arc to Ground and Entry into Abnormal Operating Procedure (AOP) 36 "Loss of Component Cooling Water (CCW)"			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green NCV 05000255/2020004-01 Open/Closed	[H.11] - Challenge the Unknown	71152
<p>A self-revealed Green finding and associated non-cited violation (NCV) of Technical Specification 5.4.1a occurred on September 9, 2020, when the licensee failed to follow plant procedure EN-MA-101, "Conduct of Maintenance." Specifically, the licensee's failure to correctly implement step 5.3.2c of procedure EN-MA-101 resulted in the supervisor getting involved in the hands-on work. This resulted in an arc to ground of safety-related DC breaker 72-118, subsequent unanticipated opening of valve CV-0910 "CCW Supply to Containment" and valve CV-0911 "CCW from Containment" due to a loss of power, standby CCW pump start, and consequential tank T-3, "Component Cooling Water Surge Tank," level drop requiring entry into AOP-36, "Loss of Component Cooling Water (CCW)."</p>			
<p><u>Description:</u></p> <p>On September 9, 2020, with the unit shutdown in mode 6, the site attempted to remove a temporary modification that powered up selected ED-11-2, 125 VDC Panel, breaker loads. In preparation to remove the jumper on 13-TV4 terminal 120 from a lug, a supervisor observing the work asked to take a closer look to help gather more information. As the supervisor looked, he accidentally touched a wire which contacted an energized component and caused an arc to ground. In their review, the inspectors noted that the supervisor helping to gather more information by getting involved in the hands-on work was contrary to step 5.3.2c of procedure EN-MA-101, which states, "ensure that the oversight role of the supervisor is maintained and not compromised by getting involved with the hands-on work." As a result, the arc to ground resulted in safety-related direct current (DC) breaker 72-118 tripping open. The breaker opening resulted in the loss of the 125V DC power supplied to CCW containment isolation valves CV-0910 and CV-0911, which immediately opened per design. This configuration change allowed the CCW system to fill a previously drained portion of CCW piping inside containment. The unanticipated CCW inventory movement resulted in CCW standby pump autostart, subsequent tank T-3 level drop to 2 percent, resultant low-level alarm in Control Room, and actuation of the autofill system per design. In response, the site entered AOP-36, "Loss of CCW," for tank T-3 low-level alarm and verified autofill system restored T-3 inventory to the normal level.</p> <p>The inspectors reviewed the associated apparent cause analysis for the event, maintenance rule evaluation, control room logs, and interviewed operations, engineering, and maintenance personnel. In their review, the inspectors noted that CCW supply header pressure and temperature remained constant during the CCW system inventory movement and the autofill system functioned as designed. The inspectors also noted that the licensee determined the movement of CCW inventory to be a maintenance rule functional failure because the autofill system is not safety-related and could not be relied upon to mitigate the unanticipated movement of inventory. Specifically, the T-3 inventory capacity was significantly less than the volume of drained CCW piping inside containment, and the autofill system was not a credited makeup source. As a result, if the autofill system had failed to actuate, a loss of CCW net</p>			

positive suction head to the CCW pumps would have likely occurred. Therefore, the inspectors concluded, the loss of DC and resultant movement of CCW inventory presented a potential challenge to the CCW system operability that could upset plant stability and challenge critical safety functions during shutdown operations.

Corrective Actions: The licensee entered AOP-36 "Loss of CCW," ensured water level was restored to tank T-3, and performed an apparent cause analysis (ACA) for the event. In addition, the licensee conducted a stand down with all electrical maintenance supervisors to discuss and reinforce supervisor roles and responsibilities.

Corrective Action References: CR-PLP-2020-3261, CR-PLP-2020-3262

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee's failure to ensure a supervisor stay in role and not get involved in the hands-on work of gathering information on a jumper the workers were attempting to remove in accordance with EN-MA-101 step 5.3.2c was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations.

Significance: The inspectors assessed the significance of the finding using Appendix G, "Shutdown Safety SDP." Using IMC 0609, Appendix G, Attachment 1, Exhibit 2, the inspectors screened the finding as Green because it did not increase the likelihood of a shutdown initiating event, did not result in a loss of coolant or inventory, did not involve a loss of offsite power, did not involve a loss of residual heat removal or level control, and did not increase the likelihood of a fire, flood, or other external event.

Cross-Cutting Aspect: H.11 - Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding. Specifically, the licensee did not stop work when they were unable to remove the jumper from the temporary modification. This resulted in the licensee supervisor performing hands-on data gathering which caused an energized component to make contact with a grounded component and the DC breaker tripping open.

Enforcement:

Violation: Technical Specification Section 5.4.1a requires, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February, 1978. NRC Regulatory Guide 1.33, Revision 2, Appendix A, Section 1 addresses "Administrative Procedures." The licensee established Procedure EN-MA-101, Revision 33 to address conduct of maintenance while performing work on safety-related equipment, including jumpers.

Contrary to the above, on September 9, 2020, the licensee failed to implement step 5.3.2c of EN-MA-101. Specifically, the licensee supervisor got involved in hands-on work which resulted in an arc to ground and DC breaker 72-118 tripping open. DC breaker 72-118 tripping open then opened two containment isolation valves, CV-0910 and CV-0911, which

allowed water to fill a previously drained portion of CCW, T-3 low-level alarm, and entry into AOP-36.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Observation: 1-2 Emergency Diesel Generator Starting Air System Leak Causal Evaluation Review	71152
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The inspectors reviewed the associated causal evaluation, extent of condition review, and corrective actions taken associated with an air leak identified on PCV-1490, "1-2 EDG 'B' Starting Air Pressure Control Valve." The inspectors noted the direct cause was improper diaphragm seating resulting from improper manufacturing/assembly at the manufacturer. In their review, the inspectors concluded that the air leak identification, causal evaluation, extent of condition, and subsequent valve replacement were all completed in a timely and effective manner commensurate with safety significance. No issues of significance were identified.

Observation: Semiannual Trend Review	71152
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The inspectors' review focused on equipment reliability and considered the results of daily inspector Corrective Action Program (CAP) item screening and licensee trending efforts. The inspectors' review nominally considered the six months of July 2020 through December 2020, although some examples expanded beyond those dates when warranted by the trend's scope.

The inspectors reviewed condition reports, trend reports, and engineering calculations 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 the "B" primary coolant pump (PCP) seal degradation, elevated control rod drive (CRD) leakage trends and temperatures leading into the refueling outage, and "B" main feed pump (MFP) thrust bearing spurious elevated vibration alarms.

The inspectors noted that the licensee identified and monitored the PCP seal degradation. Also, the inspectors noted that the licensee performed a weekly trend analysis of the seal pressures. Regarding the CRD leakage trends and temperatures leading into the refueling outage, the licensee monitored the parameters and then performed maintenance during the outage on the CRDs. The inspectors also noted for the B MFP thrust bearing vibration alarms that the licensee performed an engineering calculation and then a temporary modification to address the issue. Although these issues illustrated a challenge to 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 21, 2021, the inspectors presented the integrated inspection results to Mr. D. Corbin, Site Vice President Operations, and other members of the licensee staff.
- On November 19, 2020, the inspectors presented the radiation protection inspection results to Mr. D. Lucy, General Manager Plant Operations, and other members of the licensee staff.
- On December 10, 2020, the inspectors presented the emergency action level and emergency plan changes inspection results to Mr. D. Malone, Emergency Planning Manager, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents	CR-PLP-2020-04621	Notification from the National Weather Service of a High Wind Warning for Van Buren County	11/14/2020
		CR-PLP-2020-04749	Cold Weather Checklist-1 (SOP-23, Attachment 8) was Submitted for the Official Record with Missing Signatures	11/30/2020
		CR-PLP-2020-04851	During Rounds, NPO noticed V-32B, Screen House Roof Vent Fan, Making Excessive Noise	12/11/2020
	Procedures	SOP-23	Plant Heating System	64
71111.04	Corrective Action Documents	CR-PLP-2020-03646	EX-02, Station Power Transformer No. 1-2	09/19/2020
		CR-PLP-2020-03981	Received Alarm EK-0547, 125 Volt DC Bus Ground, Unexpectedly	10/04/2020
		CR-PLP-2020-03983	South End Ball of E-54A Surface Corrosion	10/04/2020
		CR-PLP-2020-04389	CRD-18 (Control Rod Drive Mechanism) Seal Leak Off Temperature	10/27/2020
		CR-PLP-2020-04390	Primary Coolant Gas Vent System	10/27/2020
		CR-PLP-2020-04430	V-24D, Diesel Generator Room Supply Fan	10/29/2020
	Corrective Action Documents Resulting from Inspection	CR-PLP-2020-04912	NRC Identified Some Wads of Insulation on Top of a Cable Tray in "C" Switchgear Room	12/17/2020
	Procedures	SOP-12	Auxiliary Feedwater System Checklist	84
		SOP-15	Service Water System Checklist	71
		SOP-16	Component Cooling System Checklist	48
71111.05	Corrective Action Documents	CR-PLP-2020-04801	During the Combined Fire and EP Medical Drill on December 3rd, Objective Element L.2.1 was Rated Not Observed	12/03/2020
		CR-PLP-2020-04861	P-9B, Diesel Driven Fire Pump	12/11/2020
	Fire Plans	Pre-Fire Plan Fire	Battery Rooms Elevation 607' 6"	5

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Area 11 & 12		
		Pre-Fire Plan Fire Area 30 & 31	Mechanical Equipment Rooms	5
	Miscellaneous	PLDRL-FBT-Fire drill	4th Quarter 2020 Fire Brigade Drill (Unannounced) Shift #1	12/03/2020
		PLDRL-FBT-Fire drill	4th Quarter 2020 Fire Brigade Drill (Announced) Shift #2	11/29/2020
71111.06	Engineering Evaluations	EA-C-PAL-95-1526-01	Palisades Nuclear Plant Analysis Continuation Sheet	3a
		EA-C-PAL-95-1526-01	Palisades Nuclear Plant Analysis Continuation Sheet	4
	Miscellaneous	DBD-7.08	Plant Protection Against Flooding	6
	Procedures	SOP-17C	Non-Radioactive Waste	13
	Work Orders	52856590 01	Bus 1C; Inspection and Pump Out of Manholes	04/08/2020
71111.07A	Corrective Action Documents	CR-PLP-2020-03509	Unable to Isolate Service Water to VHX-27A	09/15/2020
	Work Orders	52860413	VHX027A Engineering Safeguards Room Cooling Coil	09/15/2020
71111.08P	Corrective Action Documents	CR-PLP-2020-03380	Ultrasonic Data Analysis of a Relevant Indication on Penetration 34 on the Reactor Vessel Head	09/11/2020
		CR-PLP-2020-03427	Ultrasonic Data Analysis of a Relevant Indication on Penetration 17 on the Reactor Vessel Head	09/13/2020
	Miscellaneous	51-9318377-000	Palisades Steam Generator Condition Monitoring for 1R27 and Preliminary Operational Assessment for Cycle 28	0
		PAL1R27 ETSS #1	Examination Technique Specification Sheet	0
		PAL1R27 ETSS #2	Examination Technique Specification Sheet	0
		PAL1R27 ETSS #3	Examination Technique Specification Sheet	0
		PAL1R27 ETSS #4	Examination Technique Specification Sheet	0
		PLP-RPT-18-00027	1R26 Palisades Steam Generator Degradation Assessment	1
PLP-RPT-19-	Palisades Steam Generator Condition Monitoring for 1R26	0		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	00020	and Final Operational Assessment for Cycle 27	
		54-ISI-400-023	Multi-Frequency Eddy Current Examination of Tubing	23
		54-ISI-400-023	NONDESTRUCTIVE EXAMINATION PROCEDURE Multi-Frequency Eddy Current Examination of SG Tubing	12/12/2018
		54-ISI-619-000	Automated Ultrasonic Examination of Open Tube RPV Closure Head Penetrations-Palisades Specific	07/30/2020
		CEP-NDE-0955	Visual Examination (VE) of Bare-Metal Surfaces	307
		LMT-10-PAUT-007	Fully Encoded Phased Array Ultrasonic Examination of Dissimilar Metal Piping Welds	3
		SEP-BAC-PLP-001	Boric Acid Corrosion Control Program Engineering Nuclear Programs Applicable Sites	4
71111.11Q	Procedures	SES-406	As Found Scenario	2
		SOP-1C	Primary Coolant System - Heatup	25
71111.12	Corrective Action Documents	CR-PLP-2020-04092	The Main Feedwater System in Maintenance Rule Near (a)(1)	10/10/2020
		CR-PLP-2020-04185	125V DC Bus Ground, Unexpectedly on DC Bus #1	10/16/2020
		CR-PLP-2020-04224	DC Bus #1	10/18/2020
		CR-PLP-2020-04232	CRD-41 (Control Rod Drive Mechanism) Seal Leakoff Temperature Indication	10/18/2020
		CR-PLP-2020-04455	Exceeded Maintenance Rule Performance Criteria on PCS/PZR for Reliability Events	10/30/2020
		CR-PLP-2020-04697	125 Volt DC Bus Ground, #1 DC Bus	11/20/2020
	Engineering Changes	EC# 0000081574	ED-01 and ED-02: Evaluate Station Battery Remaining Life Capacity Relative to Ambient Temperature	02/21/2019
	Miscellaneous	Q1-2020 System Health Report	RIA - Radiation Monitoring System	12/29/2020
		Q2-2020 System Health Report	RIA - Radiation Monitoring System	12/29/2020
		Q2-2020 System Health Report	EDC - 125V Vital DC Power	11/20/2020
		Q4-2020 System	RIA - Radiation Monitoring System	12/29/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Health Report		
	Procedures	PLP-1-2020-0024	Risk Assessment, Station Battery Debris, Cracks	1
		QE-35B	ED-02 Battery Checks - Quarterly	18
Work Orders	5411188 01	72-15A ED-15 Charger Outlet Breaker Adjustable Trip Setting	03/18/2020	
71111.13	Procedures	4.11	Safety Function Determination Program	7
		RE-134	Performance Test - Battery Charger No 2 (ED-16)	10
71111.15	Calculations	1R27 NaTB-Analysis	Sodium Tetraborate Basket Weight Calculation Analysis	0
	Corrective Action Documents	CR-PLP-2020-03608	While Installing Incore Detectors Under Work Order 5287985-28 Three Incore Detectors were Unable to be Installed	09/18/2020
		CR-PLP-2020-03882	Crack in the Outer Sheathing of the Cable for CET #32	09/29/2020
		CR-PLP-2020-03895	Sodium Tetraborate Basket Weights	09/30/2020
		CR-PLP-2020-04060	Breaker 52-187, Boric Acid Gravity Feed MO-2170	10/08/2020
		CR-PLP-2020-04076	Engineering Safeguards Room Cooling System	10/09/2020
		CR-PLP-2020-04505	Traveling Screen's Falk Drive a Severity Level 2 Oil Leak was Noted	11/04/2020
		CR-PLP-2020-04746	P-50B Lower (First) Seal Stage has a Lowering Trend	11/30/2020
	Engineering Changes	EC 88139	1R27 Results from RM-124 Sodium Tetraborate Basket Weights	0
		EC-88128	Evaluation of Leakage Past E-50A Feed Reg Bypass Valve CV-0735	0
Miscellaneous	Adverse Condition Monitoring and Contingency Plan	Primary Coolant Pump, P-50B, Rising Seal Pressure	11/04/2020	
Procedures	RC-123	Sodium Tetraborate Decahydrate Buffering Tests	17	
	RM-124	Sodium Tetraborate Basket Weights	8	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	52871120 01	RC-123 - Sodium Tetraborate Decahydrate Buffering Test	09/08/2020
71111.18	Corrective Action Documents	CR-PLP-2020-00017	Thermal Margin Monitor (TMM) PY-0102C Repeat Functional Failure	01/10/2020
		CR-PLP-2020-00716	B Thermal Margin Monitor (TMM) Screen has Gone Blank	03/31/2020
		CR-PLP-2020-00752	TMM Channel 'A' Screen Degraded	03/09/2020
		CR-PLP-2020-01320	Thermal Margin Monitor (TMM) PY-0102C Repeat Functional Failure	04/30/2020
		CR-PLP-2020-04892	PY-0102B, B Channel Thermal Margin Monitor/Flux Delta T Power Comparator	12/15/2020
		CR-PLP-2020-04898	Isolate MV-CD146, T-2 Cond Return from Boilers & B/D Demins	12/16/2020
		CR-PLP-2020-04973	EK-0604D Nuclear-OT Power Deviation/T-Inlet Off-Normal/Calculator Trouble Channel B Unexpectedly	12/30/2020
	Engineering Changes	EC-84697	PY-0102D: TMM D Channel - Change Drawer CRT Video Display Monitor to a New LCD Video Display Monitor	12/03/2019
Procedures	RI-23D	Functional Testing of Thermal Margin Monitor - Channel D	02/14/2018	
71111.19	Corrective Action Documents	CR-PLP-2020-02795	Rod Deviation Alarms Were Received	08/30/2020
		CR-PLP-2020-04151	Inspection and Testing of RSPT 40 Cable	10/14/2020
		CR-PLP-2020-04172	Received Alarm EK-0918, PIP Trouble, Unexpectedly	10/16/2020
		CR-PLP-2020-04174	Secondary Position Indication (SPI) on the PPC is Not Indicating Properly	10/16/2020
		CR-PLP-2020-04178	CRD-32, Control Rod Drive Mechanism, Primary Indication Processor (PIP)	10/16/2020
		CR-PLP-2020-04248	Control Rod Drive (CRD) #29	10/19/2020
		CR-PLP-2020-04275	Rod #2 Withdrew to 6" and Back to the Lower Electrical Limit	10/19/2020
		CR-PLP-2020-04290	Matrix Light on EC-12 Associated with CRD-17 was Not Illuminated When Expected	10/20/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CR-PLP-2020-04394	Found Green Corrosion on Right Positive Post of Cell #9	10/27/2020
		CR-PLP-2020-04890	Door-142 (Turbine Building Access to the 1-C Switchgear Room)	12/15/2020
		CR-PLP-2020-04942	PMT for RV-0915, Component Cooling Surge Tank T-3 Relief	12/23/2020
	Procedures	CVCO-4	Periodic Test Procedure - Charging Pumps	12
		EN-MA-105	Control of Measuring and Test Equipment (MT&E)	17
		MSI-I-16	Permanent Maintenance Procedure; Nonintrusive Diagnostic Check Valve Test Procedure	12/15/2020
		QO-15	Inservice Test Procedure - Component Cooling Water Pumps	12/15/2020
		RO-19	Control Rod Position Verification	10/17/2020
	Work Orders	52876642 01	RO-19 - Control Rod Position Verification	10/14/2020
		52890314 01	RV-0915, Component Cooling Surge Tank T-3 Relief	12/23/2020
		52927113 01	CK-CC944, Nonintrusive Check Valve Test: I&C Support	12/15/2020
71111.20	Corrective Action Documents	CR-PLP-2020-02795	Rod Deviation Alarms were Received	08/30/2020
		CR-PLP-2020-03847	Unexpected Rising Trend on the "A" Steam Generator after Preparing to Start Condensate P-2B	09/27/2020
		CR-PLP-2020-04026	Liquid Penetrant (PT) Examination of the Reactor Vessel CROM Penetration #34 Nozzle Repair Weld	10/06/2020
		CR-PLP-2020-04104	2 NPOs had to be Removed from Covered Work to Perform Decontamination Activities in the Reactor Cavity	10/12/2020
		CR-PLP-2020-04124	CCW hose for CRD Position 42 on the Reactor Head was Found Frayed and Needs to be Replaced	10/13/2020
		CR-PLP-2020-04137	CRD-45, Control Rod Drive Mechanism	10/14/2020
		CR-PLP-2020-04180	CRD-28, Control Rod Drive Mechanism	10/16/2020
		CR-PLP-2020-04195	Validation Confirmed CET 27 is Failed	10/17/2020
		CR-PLP-2020-04204	Identified Exposed Insulation on "A" SIG Cold Leg	10/17/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CR-PLP-2020-04205	P-80B AC Lift Pump Start Permissive was Erratic	10/17/2020
		CR-PLP-2020-04210	P-50B, Primary Coolant Pump, has Evidence of Prior Oil Leakage in its Drip Trays	10/17/2020
		CR-PLP-2020-04232	CRD-41 (Control Rod Drive Mechanism) Seal Leakoff Temperature Indication	10/18/2020
		CR-PLP-2020-04243	During Containment Walkdown Identified P-50D Primary Coolant Pump Motor Upper Oil Reservoir Line Leaking	10/19/2020
	Corrective Action Documents Resulting from Inspection	CR-PLP-2020-04285	NRC Walked Down Containment	10/20/2020
	Procedures	GOP-3	Mode 3 = 525°F to Mode 2	36
	GOP-4	Mode 2 to Mode 1	10/21/2020	
71111.22	Corrective Action Documents	CR-PLP-2020-03987	CV-0847, SW Supply to Cont (MZ-12), the Open Stroke Time was Outside of the Acceptable Stroke Time	10/04/2020
		CR-PLP-2020-04583	P-8C Initial Vibrations Taken on the Pump Inboard Bearing Were High Out of Specifications	11/11/2020
		CR-PLP-2020-04613	P-8B, Steam Driven Auxiliary Feedwater Pump	11/13/2020
		CR-PLP-2020-04840	QO-14C Performance	12/10/2020
	Procedures	QO-14	Inservice Test Procedure - Service Water Pumps	11/18/2020
		RO-145	Comprehensive Pump Test Procedure Auxiliary Feedwater Pumps P-8A, P-8B, and P-8C	11/11/2020
		RO-32	LLRT - Local Leak Rate Test	11/04/2020
	Work Orders	00506694 01	P-7C; Replace Packing Shaft	11/18/2020
52878522 03		RO-145C -P-8C, AFW Comprehensive Pump Test	10/21/2020	
71114.04	Miscellaneous		10 CFR 50.54(Q)(2) Screening – EI-1, Emergency Classification and Actions Revision 60	09/23/2019
			10 CFR 50.54(Q)(2) Screening – EI-1, Emergency Classification and Actions Revision 61	06/11/2020
			10 CFR 50.54(Q)(2) Screening – EI-2.2, Emergency Staff Augmentation Revision 22	10/07/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			10 CFR 50.54(Q)(2) Screening – EI-2.2, Emergency Staff Augmentation Revision 23	03/20/2020
			10 CFR 50.54(Q)(2) Screening – EI-3, Communications and Notifications Revision 36	09/23/2019
			10 CFR 50.54(Q)(2) Screening – EI-3, Communications and Notifications Revision 37	01/23/2020
			10 CFR 50.54(Q)(2) Screening – EI-4.1, Technical Support Center Activation Revision 26	10/21/2019
			10 CFR 50.54(Q)(2) Screening – EI-4.1, Technical Support Center Activation Revision 27	01/27/2020
			10 CFR 50.54(Q)(2) Screening – EI-4.2, Operations Support Center Activation Revision 27	10/21/2019
			10 CFR 50.54(Q)(2) Screening – EI-4.3, Emergency Operations Facility Activation Revision 30	01/19/2019
			10 CFR 50.54(Q)(2) Screening – EI-4.3, Emergency Operations Facility Activation Revision 31	05/14/2020
			10 CFR 50.54(Q)(2) Screening – EI-5.0, Reentry Revision 11	07/29/2019
			10 CFR 50.54(Q)(2) Screening – EI-6.0, Rapid Dose Calculation Revision 19	12/05/2019
			10 CFR 50.54(Q)(2) Screening – EI-6.0, Rapid Dose Calculation Revision 20	04/22/2020
			10 CFR 50.54(Q)(2) Screening – EI-6.1, Release Rate Determination from Stack Gas Monitors Revision 10	12/05/2019
			10 CFR 50.54(Q)(2) Screening – EI-6.9, Automated Dose Assessment Program Revision 14	04/22/2020
			10 CFR 50.54(Q)(2) Screening – EI-6.13, Protective Action Recommendations for Offsite Populations Revision 26	12/17/2019
			10 CFR 50.54(Q)(2) Screening – EI-16.1, Maintenance of Emergency Equipment Revision 34	11/26/2019
			10 CFR 50.54(Q)(2) Screening – EN-EP-604, Emergency Classifications Revision 0	06/08/2020
			10 CFR 50.54(Q)(2) Screening – EN-EP-609 Emergency Operations Facility (EOF) Operations Revision 6	02/18/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			10 CFR 50.54(Q)(2) Screening – EN-EP-801, Emergency Response Organization Revision 17	10/29/2019
			10 CFR 50.54(Q)(3) Screening – PAL PWS, Public Warning System Operating Procedures Revision 23	08/28/2019
			10 CFR 50.54(Q)(3) Evaluation – PAL PWS, Public Warning System Operating Procedures Revision 23	08/29/2019
			10 CFR 50.54(Q)(3) Screening –PWS Design Report, Public Warning System Design Report Changes	08/28/2019
			10 CFR 50.54(Q)(3) Evaluation – PWS Design Report, Public Warning System Design Report Changes	08/28/2019
			10 CFR 50.54(Q)(3) Screening –SEP, Site Emergency Plan Revision 32	09/18/2019
			10 CFR 50.54(Q)(3) Evaluation –SEP, Site Emergency Plan Revision 32	09/18/2019
	Procedures	EN-EP-305	Emergency Planning 10CFR50.54(q) Review Program	8
		SEP	Site Emergency Plan	31
		SEP	Site Emergency Plan	32
71124.08	Corrective Action Documents	CR-PLP-2020-03997	EN-RW-102 Attachment 20 Incorrect Radiological Data	10/05/2020
	Miscellaneous		Filter Characterization Report for F-57 Filters	06/05/2019
			GEL Laboratories Part 61 Report for Primary Resin	07/13/2020
			GEL Laboratories Part 61 Report for Filter 54A	11/25/2019
	Shipping Records	2020-RW-003	Clean Radwaste F-57 Filters	02/11/2020
		2020-RW-004	Primary Purification Filter F54A	05/05/2020
2020-RW-006		Primary Purification Resin	07/20/2020	
71151	Miscellaneous		NRC Performance Indicator Data; Mitigating Systems - Mitigating Systems Performance Indicator for Cooling Water Support Systems	10/01/2019 - 09/30/2020
			NRC Performance Indicator Data; Mitigating Systems - Mitigating Systems Performance Index for Emergency AC Power Systems	10/01/2019 - 09/30/2020
71152	Corrective Action Documents	CR-PLP-2020-3261	Ground Fault Experienced During Removal of Jumper	09/10/2020
		CR-PLP-2020-	Control Room Entered AOP-36, "Loss of Component	09/10/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		3262	Cooling Water"	
	Engineering Changes	84321	K-7A, K-7B, Eliminate MFW PP Trip on Turbine Axial Thrust Position (Base EC)	0
	Miscellaneous		ACA Arc Fault Event	10/14/2020
			DPRM/APRM Report	08/2020
			Primary Coolant Pump Trends	12/16/2020
	Procedures	AOP-36	Loss of Component Cooling Water	2