



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

February 7, 2022

EA-21-159

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  
05000255/2021004 AND EXERCISE OF ENFORCEMENT DISCRETION

Dear Mr. Corbin:

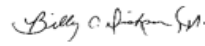
On December 31, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Palisades Nuclear Plant. On January 19, 2022, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding did not involve a violation of NRC requirements.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement 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 Nuclear Plant.

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,



Signed by Dickson, Billy  
on 02/07/22

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 7, 2022.

SUBJECT: PALISADES NUCLEAR PLANT – INTEGRATED INSPECTION REPORT  
05000255/2021004 AND EXERCISE OF ENFORCEMENT DISCRETION

DISTRIBUTION:

Jessie Quichocho  
Linda Howell  
RidsNrrPMPalisades Resource  
RidsNrrDorlLpl3  
RidsNrrDrolrib Resource  
John Giessner  
Mohammed Shuaibi  
Shelbie Lewman  
Kenneth Lambert  
Allan Barker  
DRPIII  
DRSIII

ADAMS ACCESSION NUMBER: ML22031A283

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RIII	RIII	RIII		
NAME	RRuiz:ve	SLewman	BDickson		
DATE	2/1/2022	2/7/2022	2/7/2022		

OFFICIAL RECORD COPY

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

Docket Number: 05000255

License Number: DPR-20

Report Number: 05000255/2021004

Enterprise Identifier: I-2021-004-0113

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Inspection Dates: October 01, 2021 to December 31, 2021

Inspectors: J. Cassidy, Senior Health Physicist  
J. Corujo-Sandin, Senior Reactor Inspector  
G. Hansen, Sr. Emergency Preparedness Inspector  
J. Havertape, Reliability and Risk Analyst  
P. Laflamme, Senior Resident Inspector  
J. Mancuso, Resident Inspector, Donald C. Cook Nuclear Plant  
C. St. Peters, Resident Inspector  
R. Trelka, Reactor 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

Failure to Follow Preventative Maintenance Change Request Process Results in a Failure of Condensate Pump (P-2B) Oil Cooler and Subsequent Rapid Downpower			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000255/2021004-01 Open/Closed	[P.5] - Operating Experience	71152
A finding of green significance was self-revealed on July 28, 2021, for the licensee's failure to follow their preventative maintenance change request (PMCR) process. Specifically, a preventative maintenance activity scope was changed without processing a PMCR, resulting in a failure to perform the preventative maintenance on the condensate pump (P-2B) oil cooler. As a result, a pin hole leak developed in the P-2B oil cooler leading to an oil/water mixture discharging from the P-2B motor's upper bearing housing sight glass vent, and the subsequent need to perform a rapid downpower of the reactor to secure P-2B.			

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
EDG	EA-21-159	Failure to Comply with 10 CFR Part 37	71124.08	Closed

## PLANT STATUS

The plant began the inspection period at full power and remained at or near full power for the entire 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 activities described in IMC 2515, Appendix D, "Plant Status," conducted routine reviews using IP 71152, "Problem Identification and Resolution," observed risk significant activities, and completed on-site portions of IPs. 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 03.01) (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 November 4, 2020:
  - Service water system
  - Auxiliary feedwater (AFW) system

#### Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of the overall preparations to protect risk significant systems from impending severe weather during a Geomagnetic Storm Watch on October 30, 2021.

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (4 Samples)

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

- (1) Left train low pressure safety injection on October 6, 2021
- (2) Right train high pressure safety injection on October 1, 2021
- (3) Left train AFW on October 26, 2021
- (4) Right train containment spray on December 4, 2021

#### 71111.05 - Fire Protection

##### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (8 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) Fire Area 1: Control Room/Elev. 625' and Fire Area 33: Technical Support Center/ Elev. 625' on October 1, 2021
- (2) Fire Area 22: Turbine Lube Oil Room/ Elev. 590' on October 7, 2021
- (3) Fire Area 29-31: Mechanical Equipment Room/ Elev. 629'-2" & 639' on October 13, 2021
- (4) Fire Area 13G: Spent Fuel Pool Heat Exchanger Room/ Elev. 590' on October 16, 2021
- (5) Fire Area 6 & 8: Diesel Generator 1-2 and Fuel Oil Day Tank Room/ Elev. 590' on November 13, 2021
- (6) Fire Area 59: Auxiliary Feedwater Pump P-8D Room/ Elev. 590' on November 17, 2021
- (7) Fire Area 15: Engineering Safeguards Panel and Stairway/ Elev. 570'-664' on December 2, 2021
- (8) Fire Area 21: Electrical Equipment Room/ Elev. 607'-6" on December 13, 2021

#### 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) Emergency Diesel Generator (EDG) rooms on October 18, 2021

#### 71111.07T - Heat Sink Performance

##### Heat Exchanger (Service Water Cooled) (IP Section 03.02) (2 Samples)

The inspectors evaluated heat exchanger/sink performance on the following:

- (1) Control Room Heating, Ventilation, and Air Conditioning (HVAC) Refrigerant Condensing Units (VC-10)
- (2) Control Room HVAC Refrigerant Condensing Units (VC-11)

##### Ultimate Heat Sink (IP Section 03.04) (1 Sample)

- (1) The Ultimate Heat Sink, Specifically Sections 03.04.d and 03.04.e were completed

## 71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (2 Samples)

- (1) The inspectors observed and evaluated licensed operator performance in the Control Room during a downpower to support QO-21C (P-8C AFW pump testing) on October 25, 2021.
- (2) The inspectors observed and evaluated licensed operator performance in the Control Room during QO-1 SI Actuation Test (elevated risk evolution) - right train on November 30, 2021.

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

- (1) The inspectors observed and evaluated PLSEG-LOR-21E-04, EOP 5.0, and PLSEG-LOR-21E-02, EP Static, on November 10, 2021

## 71111.12 - Maintenance Effectiveness

### Maintenance Effectiveness (IP Section 03.01) (2 Samples)

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

- (1) Reactor protection system on October 27, 2021
- (2) Primary coolant system on December 1, 2021

## 71111.13 - Maintenance Risk Assessments and Emergent Work Control

### Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

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) Emergent issues associated with EDG 1-2 monthly surveillance, on October 6, 2021
- (2) Yellow risk due to left train of service water out of service for planned maintenance and testing, on October 14, 2021
- (3) Emergent work activities associated with P-55A charging pump following speed oscillations, on November 12, 2021
- (4) Emergent work activities on 1-2 EDG jacket water temperature switch, on December 1, 2021



#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 03.01) (3 Samples)

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

- (1) Service water system evaluation on October 4, 2021
- (2) Station Battery No. 1 and 2 system evaluation on December 13, 2021
- (3) Pressurizer spray valve evaluation on December 15, 2021

#### 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)-90291; T-2 Return Line Heat Exchanger Modification on December 6, 2021.

#### 71111.19 - Post-Maintenance Testing

##### Post-Maintenance Test Sample (IP Section 03.01) (2 Samples)

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

- (1) EDG 1-2 timed start following check valve replacement, on October 28, 2021
- (2) CVCO-4 performed on the P-55A charging pump following flow drive replacement, on December 2, 2021

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

- (1) QO-15A, Inservice Test Procedure- Component Cooling Water Pump P-52A, on October 5, 2021
- (2) QO-16C, Inservice test procedure- Containment Spray Pump P-54C, on October 13, 2021
- (3) QO-1, SI Actuation Test (left train), on November 30, 2021

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

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

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes.
  - The licensee did not make any changes to the site's Emergency Action Level procedures or Emergency Plan during the period of this inspection (July 1, 2020 through June 30, 2021). The NRC inspectors independently reviewed the revisions of the site's Emergency Action Level procedures and Emergency Plan that were current for the inspection period to verify no changes were made.

This evaluation does not constitute NRC approval.

#### **RADIATION SAFETY**

#### 71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

##### Permanent Ventilation Systems (IP Section 03.01) (1 Sample)

The inspectors evaluated the configuration of the following permanently installed ventilation systems:

- (1) Spent Fuel Pool Ventilation - Unit 1

#### 71124.05 - Radiation Monitoring Instrumentation

##### Walkdowns and Observations (IP Section 03.01) (9 Samples)

The inspectors evaluated the following radiation detection instrumentation during plant walkdowns:

- (1) Portable Ion Chamber Dose Rate Instruments "Ready for Use" at the entrance to the radiologically controlled area
- (2) Extendable Geiger-Mueller Dose Rate Instruments "Ready for Use" at the entrance to the radiologically controlled area
- (3) Personnel Contamination Monitors used at the exit of the radiologically controlled area
- (4) Small Article Contamination Monitor used at the exit of the radiologically controlled area
- (5) Shepherd Model 89 Box Calibrator used to perform functional checks of portable dose rate instruments
- (6) Portable Geiger-Mueller Frisker "Ready for Use" at the Main Access Facility
- (7) Personnel Gamma Portal Monitor used to exit the Main Access Facility
- (8) Personnel Contamination Monitors used at the exit of East Radwaste radiologically controlled area
- (9) Personnel Gamma Portal Monitor used to exit East Radwaste radiologically controlled area

#### Calibration and Testing Program (IP Section 03.02) (13 Samples)

The inspectors evaluated the calibration and testing of the following radiation detection instruments:

- (1) Model 3030 Scaler Serial Number 334592
- (2) DMC-3000 Electronic Dosimeter Serial Number A168801
- (3) Telepole Serial Number 6605-002
- (4) RO-20 Serial Number 1445
- (5) Shepherd Model 89 Box Calibrator Serial Number 91-1134
- (6) Model 3 Frisker Instrument # 238945
- (7) GEM-5 Monitor 1803-091
- (8) ARGOS Monitor ID 1712-184
- (9) PCM-2 ID 457
- (10) SAM12 Serial Number 202
- (11) RADECO Model HD-29A Air Sampler UTC No 17379
- (12) Protean Model WPC-1050 Serial Number 11171115
- (13) FASTSCAN Whole Body Counter

#### Effluent Monitoring Calibration and Testing Program Sample (IP Sample 03.03) (2 Samples)

The inspectors evaluated the calibration and maintenance of the following radioactive effluent monitoring and measurement instrumentation:

- (1) Unit 1, Liquid Radwaste Discharge Monitor, RIA-1049
- (2) Unit 1, High Range Noble Gas Effluent Monitor, RIA-2327

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

##### Radioactive Material Storage (IP Section 03.01) (2 Samples)

- (1) Inspectors evaluated the licensee's performance in controlling, labeling, and securing radioactive materials.
- (2) Inspectors evaluated the licensee's performance in accounting and verification that sealed sources have been verified to be intact.

##### Radioactive Waste System Walkdown (IP Section 03.02) (1 Sample)

- (1) Inspectors walked down accessible portions of the solid radioactive waste systems on 590' auxiliary building and evaluated system configuration and functionality.

## **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) October 1, 2020 – September 30, 2021

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

- (1) October 1, 2020 – September 30, 2021

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

- (1) October 2020 - September 2021

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

- (1) October 2020 - September 2021

#### 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) October 2020 - September 2021

### 71152 - Problem Identification and Resolution (PI&R)

#### 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 during the period of July 1, 2021, to December 31, 2021.

#### 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) Causal evaluation for 2B condensate pump oil cooler water intrusion and subsequent reactor power reduction as documented in CR-PLP-2021-01984 on November 29, 2021.
- (2) 1-2 EDG cylinder 7L crack and subsequent online maintenance and liner replacement causal evaluation as documented in CR-PLP-2021-02180 on December 16, 2021.

## OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

### 71003 - Post-Approval Site Inspection for License Renewal

The team conducted a partial Phase IV license renewal inspection (Section 02.02.d). Specifically, with a focus on verifying the management of aging effects in accordance with the aging management program(s).

### Post-Approval Site Inspection for License Renewal (1 Sample)

(1) The following aging management program was evaluated by the team:

- Open Cycle Cooling Water Program

## INSPECTION RESULTS

Enforcement Discretion	Enforcement Action EA-21-159: Failure to Comply with 10 CFR Part 37	71124.08
<u>Description:</u> <p>On August 2, 2016, the licensee was issued NRC Inspection Report No. 05000255/2016407, which documented a licensee identified violation of 10 CFR Part 37, Physical Protection of Category 1 and Category 2, Quantities of Radioactive Material at Facilities with a 10 CFR Part 73, Physical Protection Program. The violation met the criteria for Enforcement Discretion as described in Enforcement Guidance Memorandum (EGM) 14-001, "Interim Guidance for Dispositioning 10 CFR Part 37 Violations with Respect to Large Components or Robust Structures Containing Category 1 or Category 2 Quantities of Material at Power Reactor Facilities Licensed Under 10 CFR Parts 50 and 52."</p> <p>Subsequently, the inspectors re-evaluated this activity and found that while a violation of regulatory requirements continues to exist, the conditions remain within the criteria for enforcement discretion established within EGM 14-001.</p> <p>Corrective Actions: As specified in EGM 14-001, the application of discretion is authorized until the underlying technical issue is dispositioned through rulemaking or other regulatory action. Additional corrective actions are not required.</p> <p>Corrective Action References: Not Applicable.</p>		
<u>Enforcement:</u> <p>Violation: On August 2, 2016, a violation of 10 CFR Part 37 was documented in Palisades Inspection Report No.05000255/2016407. The inspectors determined that the previously identified violation remains.</p> <p>Basis for Discretion: This violation met the criteria for Enforcement Discretion as described in Enforcement Guidance Memorandum (EGM) 14-001, "Interim Guidance for Dispositioning 10 CFR Part 37 Violations with Respect to Large Components or Robust Structures Containing Category 1 or Category 2 Quantities of Material at Power Reactor Facilities Licensed Under 10 CFR Parts 50 and 52."</p>		

Failure to Follow Preventative Maintenance Change Request Process Results in a Failure of Condensate Pump (P-2B) Oil Cooler and Subsequent Rapid Downpower			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000255/2021004-01 Open/Closed	[P.5] - Operating Experience	71152
<p>A finding of green significance was self-revealed on July 28, 2021, for the licensee's failure to follow their preventative maintenance change request (PMCR) process. Specifically, a preventative maintenance activity scope was changed without processing a PMCR, resulting in a failure to perform the preventative maintenance on the condensate pump (P-2B) oil cooler. As a result, a pin hole leak developed in the P-2B oil cooler leading to an oil/water mixture discharging from the P-2B motor's upper bearing housing sight glass vent, and the subsequent need to perform a rapid downpower of the reactor to secure P-2B.</p> <p><u>Description:</u></p> <p>On July 28, 2021, the control room received an unexpected alarm, EK-0162 (Condensate Pump P-2B High Temp or Overload), with the unit at full power. The licensee locally inspected condensate pump P-2B and found an oil/water mixture discharging from the motor's upper bearing housing sight glass vent. Shortly after discovering the oil/water mixture condition, the site entered Abnormal Operating Procedure (AOP) 7, "Rapid Downpower." The operators reduced power to approximately 25 percent and then secured pump P-2B. The licensee performed work order (WO) 565778. During the work, the licensee confirmed that the upper bearing oil cooler had developed a service water leak at one of the brass fittings used to connect to the service water inlet/outlet piping. The licensee cleaned and dried the upper bearing housing, then flushed the housing and bearing and installed a new bearing oil cooler. Pump P-2B was returned to service on July 29, 2021.</p> <p>The licensee performed an apparent cause analysis (ACA). The ACA determined that sand entrained in the service water eroded the copper/brass cooler at a bend in the brass inlet/outlet connection, causing a pinhole leak at the brass fitting of the upper bearing oil cooler. The ACA identified that a preventative maintenance (PM) activity existed to replace the oil cooler periodically. In the ACA, the licensee noted their staff had deferred the PM activity several times, and the replacement did not occur as scheduled during the Fall 2018 refueling outage, 1R26. Instead, the PM activity was re-planned to use the 1R26 motor refurbishment work order to complete the oil cooler replacement. The licensee determined that their staff did not revise the 1R26 motor refurbishment work order to include oil cooler replacement. The ACA also noted incorrect interpretation of EN-WM-102, "Work Implementation and Closeout," and EN-DC-324, "Preventative Maintenance Program" by licensee staff. The wrong interpretation of EN-DC-324 resulted in the licensee staff changing the scope of the oil cooler replacement PM from replacement to cleaning and testing, which resulted in the oil cooler not being replaced. On the contrary, when the scope was changed, the licensee staff should have processed a PMCR per step 5.5.3 of EN-DC-324. The site also noted in the ACA that a previous leak in the P-2B motor upper oil cooler occurred on July 22, 2004, and also required a rapid downpower to remove the P-2B condensate pump.</p> <p>The inspectors evaluated the licensee's emergent work, rapid downpower, post-maintenance testing, and ACA associated with this event. The inspectors determined the licensee failed to follow the PMCR process when changing the PM's scope, which resulted in the site failing to perform preventative maintenance.</p>			

**Corrective Actions:** The site wrote a condition report (CR) and performed an ACA. The licensee replaced the P-2B motor's upper bearing oil cooler. The site also added pre-outage refresher training to reinforce expectations. The site revised PMIDs and associated work orders to include a statement that the bearing oil cooler replacement is not to be delayed beyond the established PM due date. In addition, the licensee reinforced with staff that they cannot make changes to a work order without work order feedback or an approved PMCR.

**Corrective Action References:** CR-PLP-2021-1984

**Performance Assessment:**

**Performance Deficiency:** The licensee failed to follow fleet procedure EN-DC-324, "Preventative Maintenance Program," step 5.5.3. Specifically, the licensee changed the scope of the associated P-2B condensate pump oil cooler PM and failed to process a PMCR. This led to the licensee crediting cleaning and testing by the motor vendor versus periodic replacement of the oil cooler, resulting in the P-2B oil cooler failing and the site performing a rapid downpower.

**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. Specifically, the licensee changed the scope of the planned PM on the condensate pump P-2B oil cooler without processing a PMCR due to incorrect interpretation of EN-DC-324. The oil cooler eventually failed due to a pinhole leak from entrained sand, and the licensee had to perform a rapid downpower in order to take the P-2B condensate pump out of service.

**Significance:** The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors screened the finding against the Initiating Events screening questions in Exhibit 1 and answered "No" to the Transient Initiators question. This resulted in the finding screening to green.

**Cross-Cutting Aspect:** P.5 - Operating Experience: The organization systematically and effectively collects, evaluates, and implements relevant internal and external operating experience in a timely manner. Specifically, the licensee had previous operating experience with the same event happening in 2004. This operating experience, at the site, was not captured in the preventative maintenance activity to provide background as to why the PM activity existed.

**Enforcement:** Inspectors did not identify a violation of regulatory requirements associated with this finding.

**Observation:** 1-2 EDG Cylinder 7L Crack Evaluation

71152

The inspectors reviewed the associated causal evaluation, "Why Staircase" analysis, equipment failure evaluation, the extent of condition, subsequent vendor analysis, and corrective actions taken for a crack in the liner of cylinder 7L on EDG 1-2 that the licensee discovered during a monthly surveillance test. Specifically, licensee personnel identified exhaust coming out of the associated crack on August 16, 2021, rendering the 1-2 EDG inoperable. After declaring the diesel generator inoperable, the licensee proceeded with a visual inspection of all cylinders on both diesel generators and subsequent liner replacement

and verified that no additional cracks or exhaust leaks were present. In parallel, the inspectors performed an extent of condition walkdown of both EDGs, discussed the condition with operations, monitored liner replacement activities, and reviewed subsequent post-maintenance testing. The inspectors noted that the direct cause of the cylinder 7L liner crack was due to low-cycle fatigue. Specifically, the low-cycle fatigue resulted from preloading stress, thermal cycling, and non-uniform seating surface conditions going back to the original liner installation in 1996. The inspectors noted that both licensee and vendor review concluded the standards for seating surface conditions had been met at the time of original liner installation. Therefore, the inspectors determined that the identified crack was not within the licensee's ability to foresee or prevent before identification during planned monthly testing on August 16, 2021. For corrective actions, the licensee successfully replaced the 7L liner and initiated measures to develop and implement a preventative maintenance strategy to ensure adequate seating surface conditions to lower fatigue stresses. The inspectors identified no issues of significance.

Observation: Semiannual Trend Review

71152

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 2021 through December 2021, 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 the steam dump control relay exceeding the vendor recommended service life, overheating, and rendering the atmospheric dump valves inoperable. The inspectors also observed and reviewed activities associated with other potential challenges to equipment reliability such as the station batteries having multiple cells with cracks, elevated control rod drive (CRD) temperatures, continued "B" primary coolant pump (PCP) seal degradation, and oil cooler replacement for the 2B condensate pump.

The inspectors noted that the licensee identified and monitored the station batteries cell cracks, including developing an adverse condition monitoring plan (ACMP) and performing more frequent inspections of the battery rooms. Also, the inspectors noted that the licensee monitored the increase in CRD 23 elevated temperatures, performed a weekly trend analysis of the seal pressures, and implemented ACMPs for the CRD temperature and for the PCP seal degradation. Regarding the oil cooler replacement, the licensee identified an unexpected alarm, recognized the potential cause, performed a rapid downpower to replace the oil cooler and reduce the potential for a transient to the plant, and completed an ACA to determine the cause of the oil cooler failure. Although these issues illustrated a challenge to equipment reliability, the inspectors reviewed the identified causes and 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 19, 2022, the inspectors presented the integrated inspection results to Mr. D. Corbin, Vice President, Operations, and other members of the licensee staff.
- On December 8, 2021, the inspectors presented the radiation protection inspection results to Mr. D. Nestle, Radiation Protection Manager, and other members of the licensee staff.
- On December 8, 2021, the inspectors presented the emergency plan and emergency action level changes review inspection results to Mr. D. Malone, Emergency Planning Manager, and other members of the licensee staff.
- On December 14, 2021, the inspectors presented the triennial heat sink and license renewal phase 4 inspection results to Mr. D. Corbin, Vice President, Operations, and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71003	Corrective Action Documents	CR-PLP-2020-03380	Framatone Indication Notification, Change in Material Condition Reactor Head - Aging Example	09/11/2020
		CR-PLP-2020-04799	QI-5 Found Terminal Block Link #2 in Poor Condition - Aging Example	12/03/2020
		CR-PLP-2021-00733	PIC-1656 Failure - Aging Example	03/17/2021
	Corrective Action Documents Resulting from Inspection	CR-PLP-2021-03130	SEP-RLP-PLP-001 Requirements are Difficult to Implement	12/10/2021
	Miscellaneous	LR-AM R-OCC	Open Cycle Cooling Water System	3
		LR-AMPBD-19-OCCW	Open Cycle Cooling Water Program	2
	NDE Reports	WDLC200316029	Coupon Analysis Report	03/25/2020
	Procedures	SEP-AMP-PLP-002	Palisades Aging Management Program Assessment for Failed or Degraded Equipment Program Section	4
71111.01	Corrective Action Documents Resulting from Inspection	CR-PLP-2021-03171	NRC Identified: V-21F (Intake Structure Fresh Air Fan) is Missing a Fastener on the Bottom Right Corner of the Ventilator as Viewed from the Outside	12/15/2021
	Procedures	AOP-38	Acts of Nature	20
		EN-CY-122	Diesel Fuel Oil Program	004
		SOP-23, Attachment 8	Cold Weather Checklist	67
		SOP-23, Attachment 9	Cold Weather Checklist - Electrical	67
71111.04	Miscellaneous	DBD-2.03	Design Basis Document for Containment Spray System	10
	Procedures	SOP-12, Attachment 14	Auxiliary Feedwater System Checklist (Except K-8 Steam Supply)	88
		SOP-3, Attachment 18	Engineered Safeguards Administrative Control Verification	18
71111.05	Fire Plans	Pre-Fire Plan 1	Control Room, Elevation 625', Room 325 and Various	6

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Rooms	
		Pre-Fire Plan 13G	Spent Fuel Pool Heat Exchanger Room, Elevation 590', Rooms 113, 113A, 114, & 115	6
		Pre-Fire Plan 15	Auxiliary Building, Rooms 2, 16, and 121, Elevation 570' to 664'	6
		Pre-Fire Plan 21	Electrical Equipment Room, Elevation 607'-6"; Room 725	6
		Pre-Fire Plan 22	Turbine Lube Oil Room, Elevation 590', Room 132	6
		Pre-Fire Plan 29, 30, & 31	Mechanical Equipment Rooms, Elevation 629'-2" & 639', Various Rooms	6
		Pre-Fire Plan 33	Technical Support Center, Elevation 625', Room 320A	6
		Pre-Fire Plan 59	Auxiliary Feedwater Pump P-8D Room, Elevation 590'	6
		Pre-Fire Plans 6 & 8	Diesel Generator 1-2 and Fuel Oil Day Tank Room, Elevation 590', Rooms 116B & 147	6
71111.06	Corrective Action Documents Resulting from Inspection	CR-PLP-2021-02879	Steam Leak in the 1-2 Diesel Generator Room on Condensate Return Line in the Overhead	11/09/2021
	Engineering Changes	13055	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
		29653	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
		43483	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
		43604	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
		43605	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
		64658	EA-C-PAL-95-1526-01: Internal Flooding Evaluation for Plant Areas Outside Containment	4
	Miscellaneous	DBD-7.08	Design Basis Document for Plant Protection Against Flooding	6
	Procedures	AOP-39	Internal Plant Flooding	2
71111.07T	Calculations	022-M-001	Control Room Required Cooling Load	1
		RT-202 Basis	Palisades Nuclear Plant Technical Specification Surveillance	4/30/2009

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Procedure Basis Document for RT-202: Control Room HVAC Heat Removal Capability	
	Corrective Action Documents	CR-PLP-2015-05765	UHS Triennial Inspection (2015) Minor Violation	11/19/2015
	Miscellaneous	Appendix C, Specification 12447/054-M-91(Q)	Heat Exchanger Data Sheet	06/01/1983
		Attachment B, MR 12447/054-M-91(Q)	Design Specification for Water-Cooled Condensers	5
		DBD-1.06	Design Basis Document for Control Room HVAC System	9
		Fall 2020	Fall Cleaning Intake Structure Inspection:	11/12/2020
		Spec M-91	Technical Specification for Condensing Units	7
		Spring 2021	Spring Cleaning Intake Structure Inspection 2021	04/28/2021
		SW Bay Fall 2015	Palisades Inspection Report for all Activities August 2015 through November 2015 UCC Project Number - 02-07-203.81	11/30/2015
		SW Bay Fall 2018	2018 Mixing Basin 2018 Service Water Bay UCC Project Number 02-07-203.101	11/17/2018
		Vendor Manual M0091-SH-0093	Operation, Maintenance, and Service Manual for Condensing Units VC-10 & VC-11	10
	Procedures	DWO-1	Operator's Daily/Weekly Items Modes 1, 2, 3, and 4	112
		EN-DC-184	NRC Generic Letter 89-13 Service Water Program	6
		RO-216	Service Water Flow Verification	24
		SEP-SW-PLP-001	Raw Water Corrosion Program	2
		SOP 15	Service Water System	72
		SOP-24	Ventilation and Air Conditioning System	84
	Work Orders	00393862	P-7A Preservice Test (Vibration Data)	09/12/2020
		00397938 01	BS-1319; Bolt That Holds Swing Washer is Broken Off - MDM	04/14/2016
		00443415 01	F-2A; Remove Cover & Inspect Basket Strainer	10/23/2019
		51629058	Diver Inspection/Cleaning of Intake Bay (Fall)	12/10/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		52774007	Divers to Clean/Inspect Service Water Pump Bay	11/15/2018
		52788631	VC-10 Condenser Overhaul PM	04/17/2019
		52803545	VC-11, Condenser Overhaul PM	05/09/2019
		52834811	RT-202B, VC-10 CR HVAC "B" Train Heat Removal Capability	08/28/2019
		52836067	RT-202A, VC-11 CR HVAC "A" Train Heat Removal Capability	01/30/2020
		52871596	P-7B & P-7C Vibration Data RO-144	09/14/2020
		52876336	Diver Inspection/Cleaning of Intake Bay (Spring)	05/04/2020
		52896339	RT-202A, VC-11 CR HVAC "A" Train Heat Removal Capability	08/06/2020
		52898372	RT-202B, VC-10 CR HVAC "B" Train Heat Removal Capability	07/29/2020
71111.11Q	Miscellaneous	PLSEG-LOR-21E-02	Emergency Planning Static	1
		PLSEG-LOR-21E-04	Emergency Operating Procedure 5.0	3
	Procedures	QO-21	Inservice Test Procedure — Auxiliary Feedwater Pumps	57
71111.12	Corrective Action Documents	CR-PLP-2018-01523	PCP P-50A DC Oil Lift Pump did not Satisfy the Oil Pressure Interlock	03/27/2018
		CR-PLP-2019-00130	PCS Leak Rates Since Start Up from the Refuel Outage Have Been Elevated	01/09/2019
		CR-PLP-2020-04494	The Lower Stage of the Seal has a Lowering Trend	11/03/2020
		CR-PLP-2021-00080	Change to the P-50B, Primary Coolant Pump, Middle and Upper Seal Pressures	01/13/2021
		CR-PLP-2021-02596	NI-6-RM10, Remote Power and VHPT Setpoint Meters, has Lower than Expected Indication	10/09/2021
		CR-PLP-2021-02605	Primary Coolant Pumps	10/11/2021
		CR-PLP-2021-02642	Received EK-0926 Primary Coolant Pump P-50B Oil Level Hi-Lo Unexpectedly	10/14/2021
		CR-PLP-2021-02644	PY-0102B, B Channel Thermal Margin Monitor	10/14/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CR-PLP-2021-02662	The Display Screen for the 'B' Thermal Margin Monitor Went Black for About 4 Seconds	10/17/2021
		CR-PLP-2021-02671	"B" TMM Screen Briefly Goes Blank and then Displays Normal	10/18/2021
	Miscellaneous		System Health Report — PCS - Primary Coolant System	04/01/2019 – 06/30/2019
			System Health Report — PCS - Primary Coolant System	04/01/2020 – 06/30/2020
			System Health Report — PCS - Primary Coolant System	04/01/2021 – 06/30/2021
			System Health Report — PCS - Primary Coolant System	10/01/2019 – 12/31/2019
			System Health Report — PCS - Primary Coolant System	10/01/2020 – 12/31/2020
			System Health Report — RPS - Reactor Protection System	04/01/2019 - 06/30/2019
			System Health Report — RPS - Reactor Protection System	10/01/2019 - 12/31/2019
			System Health Report — RPS - Reactor Protection System	04/01/2020 - 06/30/2020
			System Health Report — RPS - Reactor Protection System	10/01/2020 - 12/31/2020
			System Health Report — RPS - Reactor Protection System	04/01/2021 - 06/30/2021
			Maintenance Rule Performance Indicators — Reactor Protection System	02/08/2021
		PLP-RPT-12-00025, Attachment 2	Maintenance Rule Scoping Document — Primary Coolant System	4
		PLP-RPT-12-00026	Maintenance Rule Scoping Document — Reactor Protection System	4
	Procedures	EN-MA-156	Compression Fitting Installation, Disassembly, Inspection and Reassembly	7
		EN-MA-158	Maintenance Configuration Control	03/26/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	MI-43	Reactor Vessel Level Monitoring System Channel Check	03/26/2020
		5277252-01	P-50D Oil Level Transmitters	11/16/2018
		528935-04	LT-0146B P/S Replacement	09/12/2020
		541946-02	CV-1911; Ops PMT	02/24/2021
71111.13	Procedures	EN-MW-104	On-Line Risk Assessment	23
	Work Orders	565744-06	P-55A; Repair Sticking Poppet Valves (Contingency)	11/03/2021
		568221-01	ASM-2B (K-6B); Replace CK-DE401, CK-DE423, RV-1485, RV-1486	10/04/2021
		568221-06	CK-DE401, Test Removed Check Valve	10/04/2021
		568221-07	CK-DE421/CK-DE423 Test Removed Valve	10/04/2021
		568221-08	RV-1485 Test Removed Valve	10/04/2021
		568221-09	RV-1486 Test Removed Valve	10/04/2021
		568221-13	RV-1486, Adjust Fuel Oil Relief Valve	10/04/2021
		570079-01	P-55A; Adjust Crosshead Bearings	11/03/2021
		571166-01	TS-1471 Replacement	11/30/2021
		571166-02	TS-1471 Replacement (Prep Work)	11/29/2021
		571166-03	TS-1471 Replacement	12/01/2021
71111.15	Corrective Action Documents	CR-PLP-2021-02433	Service Water Leak Between Mechanical NPT Fitting and Outlet of MV-SW602	09/21/2021
		CR-PLP-2021-03174	CV-1059, Pressurizer Spray Valve from Loop 2A	12/15/2021
	Drawings	M-201	Piping & Instrument Diagram — Primary Coolant System	90
		VEN-M-107	Stress Isometric Pressurizer Spray	3
	Engineering Changes	91126	Operability Input for Service Water Leak Near Threaded Fitting Downstream of MV-SW602	0
		EC-34881	Pressurizer Spray Valve CV-1057 and CV-1059 Revised Packing Arrangement with Live Load Set	1
	Miscellaneous	DBD-2.04	Primary Coolant System	8
		DBD-2.11	Pressurizer Pressure Control	4
		ODM Implementation Plan Template	Packing Leakage on Pressurizer Spray Valve, CV-1059	12/02/2021
71111.18	Corrective Action	CR-PLP-2021-	Inboard Pump Bearing Oil Bubbler for P-52B Component	12/06/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents	03087	Cooling Water Pump Nearly Empty	
	Corrective Action Documents Resulting from Inspection	CR-PLP-2021-02879	Steam Leak in the 1-2 Diesel Generator Room on Condensate Return Line in the Overhead	11/09/2021
		CR-PLP-2021-03082	NRC Resident Found a Puddle of Water Surrounding E-924	12/06/2021
	Drawings	M-208	Piping & Instrument Diagram — Non-Critical Service Water System	108
	Miscellaneous	Emergent Issue Update Template	Service Water Supply Line to T-2 Return Line Heat Exchanger	11/11/2021
		Failure Modes and Effects Worksheet	T-2 Return Line Heat Exchanger / EC-90291	09/20/2021
	Work Orders	563541-26	E-924, Condensate Return Heat Exchanger Bypass Hex	10/15/2021
		563541-43	E-924; Install New SWS Tie-In D/S of MV-SW939	11/18/2021
71111.19	Procedures	CVCO-4	Periodic Test Procedure - Charging Pumps	12
	Work Orders	568221-10	ASM-2B (K-6B); Started Outside of Acceptable Start Time of 9.5	10/06/2021
71111.22	Work Orders	52977575-01	QO-15A-P52A ISI Test Procedure, Component Cooling Pump	09/16/2021
		52978204-01	QO-16C-P54C, ISI Test Containment Spray Pump	09/27/2021
		52983287-01	QO-1 Safety Injection Actuation System Test	11/30/2021
71114.04	Procedures	EAL Basis	Emergency Action Level Technical Bases	8
		EN-EP-305	Emergency Planning 10CFR50.54(q) Review Program	8
		SEP	Palisades Nuclear Plant Site Emergency Plan	32
71124.03	Work Orders	52810325 01	RT-85C SFP Ventilation HEPA & Charcoal Testing	08/21/2019
71124.05	Calibration Records		2021 Recalibration of The Mirion ABACOS -2000 Fastscan Counting System at the Entergy - Palisades Power Plant	06/16/2021
		2021-B2.28-CALDAT-00645	Model 3030 Scaler Calibration Serial Number 334592	01/27/2021
		2021-B2.28-CALDAT-00747	DMC-3000 Calibration Sheet S/N A168801	01/28/2021
		2021-B2.28-CALDAT-00920	WR Telepole S/N 6605-002 Calibration Data Sheet	02/05/2021
		2021-B2.28-	RO-20 S/N 1445 Calibration Data Sheet	02/10/2021



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CALDAT-00965		
		Inst Serial #91-1134	130 Milli Curie Source Data Sheet	10/08/2020
		Inst Serial# 91-1134	400 Curie Source Data Sheet	10/08/2020
		Instrument # 238945	Ludlum Model 3	07/28/2021
		Monitor 1803-091	GEM-5 Calibration Data Sheet	06/08/2021
		Monitor ID 1712-184	ARGOS Calibration Data Sheet	07/19/2021
		PCM-2 ID#457	PCM-2 Calibration Data Sheet	01/08/2021
		SAM12 Serial Number 202	SAM12 Calibration Data Sheet	12/25/2020
		UTC No 17379	RADECO Model HD-29A Certificate of Calibration	02/11/2021
		WPC-1050 Serial Number 11171115	Protean Model WPC-1050 Calibration Coversheet	05/10/2021
	Procedures	EN-RP-313	Operation and Calibration of the ARGOS-5AB Personnel Contamination Monitor	3
	Self-Assessments	LO-PLPLO-2021-00054	RP Radiation Monitoring Instrumentation Pre-NRC Self-Assessment	08/12/2021
	Work Orders	52907495 01	RR-9B Radwaste Discharge Monitor RIA-1049 Calibration	05/10/2021
		52925326 01	RR-84C - Hi Range Noble Gas Effluent Mon RIA-2327 Cal	09/15/2021
71124.08	Miscellaneous		Part 37 Security Plan for the Protection of Category 1 and Category 2 Quantities of Radioactive Material	2
			Training - 10 CFR Part 37 The Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material	0
		PLLP-RPCT-152-07	10CFR37	0
	Procedures	SIP 39	Protection of Category 1 and Category 2 Quantities of Radioactive Material	5
	Self-Assessments	LO-PLPLO-2021-00031	10CFR Part 37 Transportation, Security Review, and Self-Assessment	06/02/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	52867088 01	Perform Annual Rad Source Inventory	01/15/2020
		52916544 01	Perform Annual Rad Source Inventory	01/14/2021
		52958379 01	Semiannual Sealed Source Leak Test	07/19/2021
71151	Miscellaneous		Occupational Exposure Control Effectiveness Performance Indicator Validation Package	Various
			Reactor Coolant System Specific Activity Performance Indicator Validation Package	Various
			RETS/ODCM Radiological Effluent Occurrence Performance Indicator Validation Package	Various
			NRC Performance Indicators — Mitigating Systems Performance Indicator — Cooling Water Support (MS10 CWS-2)	10/01/2020 – 09/30/2021
			NRC Performance Indicators — Mitigating Systems Performance Indicator — Emergency AC Power (EDG) (MS06)	10/01/2020 – 09/30/2021
71152	Corrective Action Documents	CR-PLP-2021-01984	Received EK-0162, Condensate Pump P-2B High Temp or Overload, Unexpectedly	07/28/2021
		CR-PLP-2021-02180	Emergency Diesel Generator 1-2 Cylinder Liner 7L Cracked	10/15/2021
	Miscellaneous		Apparent Cause Analysis — Equipment Issues Over the Cycle	0
			Nuclear Independent Oversight Functional Area Performance Report — June 2021 – September 2021	3
	Procedures	EN-DC-324	Preventative Maintenance Program	22
		EN-DC-324	Preventative Maintenance Program	21
		EN-DC-324-DP	Decommissioning Plant Preventive Maintenance Program	008
		EN-WM-102	Work Implementation and Closeout	13
	Work Orders	52436159-06	P-2B; Pump Motor (EMA-2205) Removal	10/10/2018
		565778-01	EMA-2205/P-2B; Replace Upper Oil Cooler - E-908B	07/28/2021
		565778-02	EMA-2205/P-2B; Stancion Installation/Grating Removal	07/28/2021
		565778-04	Bench Test New Bearing Oil Cooler Coil	07/28/2021
		565778-05	EMA-2205/P-2B; Instrument Interference Removal	07/28/2021
		565778-06	EMA-2205/P2B; Drain Cooler Reservoir	07/28/2021
		565778-07	EMA-2205/P2B; Ops PMT	08/11/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		565778-08	EMA-2205/P-2B; Instrument Interference Reinstall	07/29/2021
		565778-10	EMA-2205/P-2B; Vibration Measurement	07/29/2021
		565778-11	EMA-2205 (P-2B) Perform Megger Testing	07/29/2021