



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
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March 23, 2018

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

**SUBJECT: PALISADES NUCLEAR PLANT—NRC PROBLEM IDENTIFICATION AND
RESOLUTION INSPECTION REPORT 05000255/2018010**

Dear Mr. Arnone:

On February 14, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed a biennial problem identification and resolution inspection at your Palisades Nuclear Plant. On that date, 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.

Based on the results of this inspection, no findings were identified. The inspectors documented a licensee-identified violation which was determined to be of very low safety significance in this report. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violation or significance of this NCV, 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 the 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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Eric Duncan, Chief
Branch 3
Division of Reactor Projects

Docket Nos. 50-255; 72-007
License No. DPR-20

Enclosure:
Inspection Report 05000255/2018010

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Letter to Charles Arnone from Eric Duncan dated March 23, 2018

SUBJECT: PALISADES NUCLEAR PLANT—NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000255/2018010

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-255
License No: DPR-20

Report No: 05000255/2018010

Enterprise Identifier: I-2018-010-0016

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Dates: January 22 through February 14, 2018

Inspectors: A. Nguyen, Senior Resident Inspector
N. Egan, Senior Security Inspector
E. Fernandez, Reactor Inspector
V. Meghani, Reactor Inspector
D. Sargis, Reactor Engineer

Approved by: E. Duncan, Chief
Branch 3
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Biennial Problem Identification and Resolution 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. A licensee-identified non-cited violation (NCV) is documented in the report section entitled, "Operating Experience and Self-Assessments and Audits."

List of Findings and Violations

No findings or violations were identified.

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.

REACTOR SAFETY

71152—Problem Identification and Resolution (1 Sample)

The inspectors performed a biennial assessment of the licensee's corrective action program, use of operating experience, self-assessments and audits, and safety conscious work environment. The assessment is documented below.

- (1) Corrective Action Program Effectiveness: Problem Identification, Problem Prioritization and Evaluation, and Corrective Actions—The inspection team reviewed the station's corrective action program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards for corrective action programs.
- (2) Operating Experience and Self-Assessments and Audits—The team evaluated the station's processes for the use of industry and NRC operating experience information and the effectiveness of the station's audits and self-assessments.
- (3) Safety Conscious Work Environment—The team reviewed the station's programs to establish and maintain a safety conscious work environment and interviewed station personnel to evaluate the effectiveness of these programs.

INSPECTION RESULTS

Corrective Action Program Effectiveness Observations	71152—Problem Identification and Resolution
<p>Based on the samples reviewed, the team determined that the licensee's corrective action program (CAP) complied with all regulatory requirements and self-imposed standards. The licensee's implementation of the CAP adequately supported nuclear safety.</p> <p>Effectiveness of Problem Identification: Overall, the station was effective at identifying issues at a low threshold and was properly entering them into the CAP as required by station procedures. The team determined that the station was generally effective at identifying negative trends that could potentially impact nuclear safety. Action plans to address these items were reviewed by station leadership to ensure appropriate corrective actions were issued and the items were being resolved effectively to improve performance.</p>	

One example the inspectors identified of a potentially missed trend was related to a number of condition reports (CRs) documenting broken, missing, or loose bolts on components and piping supports associated with the Emergency Diesel Generators (EDGs). The licensee had not assessed if there was a potential adverse trend related to these equipment deficiencies. The inspectors also questioned whether there was a common cause for the issues or if the issues had been assessed in aggregate to ensure there was not an operational concern for the EDGs.

Effectiveness of Prioritization and Evaluation of Issues: In general, the team determined that the station was effective at prioritizing and evaluating issues. Most issues were evaluated appropriately in accordance with station procedures and addressed at levels commensurate with their safety significance. Root, potential, and contributing causes were identified for issues as required and corrective actions to preclude repetition were taken for significant conditions adverse to quality. In most cases, the proper level of consideration was taken for extent of cause and condition, common causes, generic implications, and evaluation of previous occurrences. Overall, the inspectors noted improvement in the station's classification of CRs as adverse or non-adverse. This was identified as a weakness and an area for improvement following previous inspections.

The team identified a gap in complying with the CAP procedure related to the overreliance on using evaluation-type assignments as corrective actions (CAs). The inspectors noted that many CRs had assigned CAs to evaluate a condition without subsequently assigning actions to resolve the issue, as required. Procedure EN-LI-102, "Corrective Action Program," stated that, "corrective actions directing 'determine,' 'initiate,' or 'evaluate' to resolve conditions, issues, or causes should be avoided...if needed, these CAs must also include the expectation for follow-up actions to be issued depending on the outcome of the review." As an example, CR-PLP-2017-3175 was written for an air-operated valve with the wrong diaphragm installed. The CR included assigned actions to evaluate for rework, but did not include a subsequent CA to actually perform the work needed to fix the problem. Eventually, a licensee self-assessment identified that a CA to actually fix the problem had not been created, as required, and a CA and a work order were written and executed to address the deficiency.

In general, the team determined that issues were appropriately evaluated in a timely manner for operability and reportability. A few examples were identified that demonstrated a weakness in providing adequate technical rigor and appropriate justification for determinations of present and past operability. One such example was an operability determination for the failure to complete a visual (VT-3) examination as required by the American Society for Mechanical Engineers (ASME) Code Section XI for the Service Water (SW) and Component Cooling Water (CCW) pump supports. The original operability determination did not provide a sufficient justification that the pump supports were structurally adequate to perform their design basis functions. The inspectors discussed this issue with the licensee and a revision to the operability determination was completed with additional technical rigor that provided an adequate basis for the determination that the pump supports were operable.

The team also concluded that cause evaluations and corrective action plans for selected maintenance rule (a)(1) systems were generally appropriate; however, the licensee had been challenged by repetitive failures in the fire protection and liquid radioactive waste systems. Prior to the inspection, the licensee self-identified that previous CAs had not resolved the failures in those systems and an additional evaluation of the issues with new CAs were needed to improve system performance.

In-depth reviews of CRs, work orders, and cause evaluations were completed for a 5 year time period for the EDG system and the Instrument Air (IA) system. The team determined that the licensee had established a low threshold for entering deficiencies into the CAP for these systems, that the items were generally being appropriately prioritized and evaluated for resolution, and that CAs were taken to mitigate the future risk of issues occurring that could affect overall system operation and/or reliability.

One observation the team provided the licensee for the EDGs was related to repetitive failures of pipe clamps on one of the air start system trains for one of the EDGs (the design of the system piping is different for each train and EDG). In 2009, a modification was completed on the system which installed a new type of Unistrut clamp. Subsequent to the modification, the pipe experienced excessive vibrations, leading to failures of the four pipe clamps along the line (one in 2014, one in 2015, and two in 2017). Each incident was documented in a category "C" (broke/fix) CR, and after each failure the licensee replaced the broken clamp. After the most recent failure in 2017, the licensee created a preventive maintenance (PM) action to replace each pipe clamp every 5-years and also initiated an "enhancement item" to track a long-term CA for the review and potential modification to the air start system piping design. The inspectors noted that the design deficiency was well understood and that more timely and extensive CAs could have prevented some of the repeat failures.

Effectiveness of Corrective Actions: The team concluded that the licensee was generally effective in identifying CAs that were appropriately focused to correct the problem and to address the root and contributing causes for significant conditions adverse to quality to preclude repetition. The licensee generally completed CAs in a timely manner and in accordance with procedural requirements commensurate with the safety significance of the issue. For NRC-identified issues, it was determined that the licensee generally assigned CAs that were effective and timely. Issues that had the potential to challenge operator performance, including but not limited to control room deficiencies, operator burdens and workarounds, and degraded/non-conforming conditions, were addressed in a timely manner and actions were taken to mitigate the risk of the issues, as needed.

The team identified a few areas of weakness within this aspect of the CAP. Some gaps were found in how the licensee addressed and/or corrected the cause(s) of conditions adverse to quality.

For example, in November 2017, Waste Gas Surge Tank Inlet Vent Header valve CV-1102 failed to provide remote position indication when stroked, which resulted in the licensee declaring the position indication inoperable for its Post-Accident Monitoring function and entering the applicable Technical Specification (TS) Limiting Condition for Operation (LCO) action statement. This was a repeat event from 2012. In both instances, the licensee identified that the position indicator arm mounted on the valve stem had rotated out of alignment. To address the issue the arm was repositioned, restoring the position indication to operable. In 2012, an apparent cause evaluation (ACE) determined that the cause of the stem rotation was either external force from personnel or internal forces within the valve. A CA to address the apparent causes was created to modify the arm by installing an anti-rotation device. The licensee delayed implementation of the modification and eventually made the decision to cancel it in August 2017. No other actions were taken to correct the identified cause of the position indicator misalignment. Later in 2017, after the valve position indicator failed again in the same way, the licensee identified the same likely cause and wrote a CA to revive the previously cancelled Engineering Change (EC) to install an

anti-rotation device. The licensee missed the opportunity to mitigate future risk, correct an identified vulnerability, and increase reliability of plant components.

Another example was identified by the inspectors while reviewing an ACE for cathodic protection system deficiencies. Corrective Action CA-12 directed that training be provided to a design engineer on cathodic protection to address a knowledge gap identified in the ACE as a contributing cause. The inspectors identified that the CA was closed without the training being performed. The licensee captured this observation in CR-PLP-2018-00689 to assign new CAs going forward to address the contributing cause identified in the ACE.

The team also identified a gap in how the licensee developed CAs. Section 5.6[2](m) of licensee procedure EN-LI-102 described the criteria for developing a CA. There were multiple examples identified of CAs that were not specific, measurable, aligned, reasonable, or timely (SMART) or where a CA required training, a briefing, or a communication, but was not specific to the audience or material to be presented. For example, from the issue related to CV-1102 referenced above, the CA revived the EC and implemented the modification. This action did not contain the level of detail outlined in the SMART criteria. Another example identified by the inspectors was a CA which stated, “use site communication to inform personnel that any and all deviations from Quality Related procedures require the initiation of a condition report.” This CA directed a communication, but did not specify how to communicate it, who to communicate it to, or specify the timeframe in which it should be done.

Under this assessment area, the inspectors also completed a review of the remaining CAs and effectiveness reviews (EFRs) that were open at the time of the last biennial Problem Identification & Resolution (PI&R) inspection related to the White finding and associated Non-Cited Violation (NCV) for a compromised ability to assess dose for control rod drive mechanism housing replacement work during refueling outage 24 (reference NRC Inspection Reports 05000255/2014010, 05000255/2015007, 05000255/2015011, and 05000255/2016007). The team did not identify any issues during this review.

Operating Experience and Self-Assessments and Audits Observations	71152—Problem Identification and Resolution
<p>Based on the samples reviewed, the team determined that station’s processes for the use of industry and NRC operating experience information and for the performance of audits and self-assessments were effective and complied with all regulatory requirements and licensee standards. The implementation of these programs adequately supported nuclear safety.</p> <p>Overall, the team concluded that operating experience was adequately evaluated for applicability and that appropriate actions were implemented to address lessons learned as needed. In general, the inspectors determined that the licensee was effective at performing self-assessments and audits to identify issues at a low level, properly evaluated those issues, and resolved them commensurate with their safety significance.</p> <p>The team identified a few examples where comprehensive actions were not taken to address recommendations from benchmarking activities or audits; however these exclusions did not result in equipment reliability or plant operational issues. For example, the inspectors identified that actions taken to address a deficiency found during a Quality Assurance (QA) audit related to the commercial grade dedication of safety-related fuses did not resolve the problem. The QA audit identified conflicting criteria and referenced guidance documents for</p>	

why certain safety-related fuses were considered seismically insensitive. To address this issue, the licensee simply removed the conflicting reference guidance. The inspectors determined that in accordance with licensee procedure EN-DC-306, "Acceptance of Commercial Grade Items/Services in Safety Related Applications," a written evaluation was required to provide the basis for determining that these fuses were seismically insensitive, and that no such evaluation had been performed. A reference to a previous evaluation for similar fuses was the only documentation available. In response to the inspectors' questions, the licensee subsequently provided a like-for-like evaluation and appropriate documentation for the seismic classification of the fuses. The fuses were appropriately classified as seismically insensitive and the systems where they were used were always considered operable. Based on this information, the inspectors determined this issue to be of minor significance.

Licensee Identified Non-Cited Violation	71152—Problem Identification and Resolution
<p>This violation of very low safety significance was identified by the licensee, has been entered into the licensee's CAP, and is being treated as a NCV, consistent with Section 2.3.2 of the Enforcement Policy.</p>	
<p><u>Enforcement:</u></p> <p>Violation: Title 10 of the <i>Code of Federal Regulations</i> (CFR) Part 50.55a(g)(4), "Inservice Inspection Standards Requirement for Operating Plants," requires that, "throughout the service life of a boiling or pressurized water-cooled nuclear power facility, components (including supports) that are classified as ASME Code Class 1, Class 2, and Class 3 must meet the requirements set forth in Section XI of the 2006 edition through 2008 addenda of the ASME Boiler and Pressure Vessel Code." This edition of the AMSE Code requires that a VT-3 visual examination of supports other than piping supports be performed once every 10-year inservice inspection (ISI) interval.</p> <p>Contrary to the above, since the beginning of plant operation, the safety-related CCW and SW pump lateral supports (classified as ASME Code Section XI Class 3) had never been included in the ISI program and therefore had never had the required VT-3 examination performed during each 10-year ISI interval. Corrective actions included incorporating the supports into the ISI program, scheduling the inspections as required, and validating that the supports were still capable of performing their safety function and that the CCW and SW systems remained operable.</p>	
<p>Significance/Severity Level: The inspectors determined that the failure to perform ASME Code Section XI required inspections of the CCW and SW pump lateral supports was a performance deficiency. The inspectors determined the performance deficiency was more than minor because it adversely affected the Design Control attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to periodically inspect the pump lateral supports could result in the failure to identify a nonfunctional support that could increase the risk of a pump failure.</p> <p>The inspectors assessed the significance of the finding using Appendix A of the SDP. The finding was determined to be of very low safety significance (Green) because although it was a deficiency affecting the design or qualification of a mitigating structure, system, or component (SSC), the SSC remained operable.</p>	

Licensee Identified Non-Cited Violation	71152—Problem Identification and Resolution
Corrective Action Reference: CR–PLP–2017–05784, OE Review Identified Palisades Failure to Inspect ASME Class 3 Pump Supports for SW and CCW Pumps, 1/26/2018	

Safety Conscious Work Environment Observations	71152—Problem Identification and Resolution
<p>Based on interviews with plant staff and reviews of the latest safety culture survey results to assess the safety conscious work environment on site, the team determined that, in general, plant personnel appeared willing to raise nuclear safety concerns through at least one of the several means available. Most of those interviewed had an adequate knowledge of the CAP process and would initiate a CR, or work with someone who would do so on their behalf, if they knew of a safety concern. A weakness was identified in plant personnel knowledge of how to use the electronic CR system. Specifically, there were some personnel who were not familiar with how to generate a CR or how to track the resolution of a CR. Personnel also expressed an overall frustration with feedback provided on a CR; either with difficulties in being able to see how something was resolved or with not being able to understand the decision-making process for the resolution of issues.</p> <p>Most individuals expressed a willingness to raise safety concerns without fear of retaliation and all employees knew the importance of having a strong safety conscious work environment. There were some instances where the free flow of information or a willingness to raise concerns through an individual’s direct line of supervision were hampered due to the perception that supervision was not receptive to receiving the concern or addressing the issue. In some cases, this presented an uncomfortable work environment for the affected individuals. However, when presented with this situation, all individuals knew of other supervisors that they could bring their concerns to or other avenues to use to address an issue.</p> <p>All plant personnel were aware of the Employee Concerns Program (ECP), knew who the ECP coordinator was, and most were willing to use it as an avenue to raise concerns, if desired. However, some individuals believed that the ECP lacked the appropriate level of confidentiality to effectively address concerns.</p>	

EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled and protected from public disclosure. No proprietary information was documented in this report.

- On February 14, 2018, the inspectors presented the Biennial Problem Identification and Resolution inspection results to Mr. C. Arnone, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Condition Reports

- CR-PLP-2009-04412; EQ File E48-EMA-09 Revision Incorrectly States for Which Pumps the Westinghouse Motor Rewind is Qualified; 09/22/2009
- CR-PLP-2010-00514; The Current Main Steam Line Break Containment Response Analysis is Inconsistent with Limiting Condition for Operations Basis 3.6.6 Containment Cooling Train Description; 02/02/2010
- CR-PLP-2012-05580; 60 Year Normal Dose in the Vicinity of the Primary Coolant System Loop is Underestimated by a Factor of 100; 08/09/2012
- CR-PLP-2012-3439; CV-1102 Did Not Indicate Closed in Control Room; 04/30/2012
- CR-PLP-2013-04775; For Region II of the SFP, OE ICES-306499-20130720 – (4) “Spent Fuel Pool Criticality Analysis Not Updated for Extended Power Uprate” was Reviewed and it was Found that the Criticality Analysis was Not Reviewed for the 1.4% Uprate Implemented Essentially at BOC18; 11/05/2013
- CR-PLP-2014-00042; Additional K-Line Circuit Breakers Identified Subject to ABB Part 21; 01/03/2014
- CR-PLP-2014-04276; EDG Air Start Pipe Support JB24-H3.28 Missing Unistrut Clamp; 08/28/2014
- CR-PLP-2014-04816; Bolt Missing from Solenoid Mounting Plate on CV 3027; 10/02/2018
- CR-PLP-2014-04903; Issue Identified During 2014 Component Design Basis Inspection (CDBI); 10/09/2014
- CR-PLP-2015-05080; Reactor Vessel Level Monitoring System Sensors Not Working; 10/16/2015
- CR-PLP-2015-05095; Pin-Hole Leak in the Service Water System Inside Containment; 10/16/2015
- CR-PLP-2015-2465; 1-2 EDG, Pipe Hanger Broke on the West Side of the Engine Below PCV-1490; 06/15/2015
- CR-PLP-2015-3120; Found Broken Bolt on the Belly of the Tank of the 1-1 EDG; 07/27/2015
- CR-PLP-2016-00561; While Replacing the West Air Start Motor, the Old Motor Found Damaged; 02/01/2016
- CR-PLP-2016-00987; MV-SFP126 Identified with Dry Boric Acid Leak; 02/25/2016
- CR-PLP-2016-01029-01; ACE, Diesel Fuel Leak into K-10 Diesel Driver Crankcase; 02/29/2016
- CR-PLP-2016-01517; Nuclear Independent Oversight Identified; 03/29/2016
- CR-PLP-2016-01623; Part Used for RV-1476 (K-6A Fuel Oil Relief) Set at Range 40-45 psi; 04/04/2016
- CR-PLP-2016-01634; Part 21 Notice –Fisher Controls Type 3570 Mounting Bolt Dedication; 04/04/2016
- CR-PLP-2016-01821; Airline Tubing under 1-2 EDG is Worn in Some Spots; 04/17/2016
- CR-PLP-2016-01893; Trend in Quality of Engineering Products; 04/21/2016
- CR-PLP-2016-02415; ACE, Failure to Fully Correct Non-Cited Violation – Section 6.2.3.1 of the FSAR; 07/07/2016
- CR-PLP-2016-02426; Evaluate Whether Corrective Actions Associated with CR-PLP-2015-01181 Were Adequate; 05/26/2016
- CR-PLP-2016-02535; Palisades 2016-01 SRC Executive Summary Issue; 06/02/2016
- CR-PLP-2016-02535; Weaknesses in the Station’s Execution of Processes to Assess Technical Specification Operability; 05/26/2016

- CR-PLP-2016-02536; In Several Cases There has been a Decline in the Implementation of Some Elements of the Corrective Action Program; 05/26/2016
- CR-PLP-2016-02542; 2016-01 SRC Engineering Subcommittee Concern; 06/02/2016
- CR-PLP-2016-02650; Security Fire Tour & Patrol Discrepancies – Root Cause Evaluation Report; Date 08/09/2016
- CR-PLP-2016-02794; CR-PLP-2016-02660 Screened as Needing Maintenance Rule Evaluation Though the Tag Does Not Identify it as an MR Component; 06/17/2016
- CR-PLP-2016-02800; Fleet-Wide Issue with CRs Closed to the Work Management System; 06/17/2016
- CR-PLP-2016-02814; P-45A, Turbine Building Sump Pump Tripping on Thermal Overload; 06/18/2016
- CR-PLP-2016-02888; E-22B, EDG 1-2 Jacket Water Cooler may have Degradation; 06/23/2016
- CR-PLP-2016-02980; Tracking CR for Configuration Errors; 06/29/2016
- CR-PLP-2016-02985; Screen for LI-2141 (Spent Fuel Pool Level Indicator A) Issues; 06/29/2016
- CR-PLP-2016-03063; TI-0823, CCW Heat Exchanger E-54A Temperature Discrepancy; 07/01/2016
- CR-PLP-2016-03367; Failure to Meet ISFSI Search Requirements Not Met; Dated 07/29/2016
- CR-PLP-2016-03456; V27B, ESS Room Cooler Fan Breaker Found Tripped; 07/27/2016
- CR-PLP-2016-03611; Grease Leaking from Containment Tendons; 08/03/2016
- CR-PLP-2016-04077; E-22B EDG Jacket Water Cooler, Identified Degraded Areas on the Channel Cover; 08/30/2016
- CR-PLP-2016-04165; During MO-7A-1, 1-1 EDG Monthly Test Run, Bolt and Nut Found on the Floor; 09/06/2016
- CR-PLP-2016-04224; EDG 1-2 Exhaust Hanger JB-23-H3 Bolts Not Fully Engaged; 09/08/2016
- CR-PLP-2016-04226; Missing Bolt on JB23-H1 Pipe Support; 09/08/2016
- CR-PLP-2016-04250; Some Department Managers and Department Performance Improvement Coordinators Ineffectively Monitor Performance to Detect Shortfalls in Behaviors and Standards; 09/09/2016
- CR-PLP-2016-04252; 2016 WANO AFI, Cathodic Protection System Deficiencies; 09/09/2016
- CR-PLP-2016-04452; Inadequate Compensatory Measures on Unattended Openings; 09/20/2016
- CR-PLP-2016-04486; Training Requirements for Dry Fuel Activities Not Met or Documented; 09/22/2016
- CR-PLP-2016-04593; Tracking CR for Correcting Configuration Errors; 09/28/2016
- CR-PLP-2016-04709; Condition Analysis – G1-1/JWPR2 Malfunction; 10/03/2016
- CR-PLP-2016-04721; Emergency Diesel Generator Failed to Start; 10/03/2016
- CR-PLP-2016-05019; Security Radio Checks; Dated 10/20/2016
- CR-PLP-2016-05094; An Adverse Trend Exists in the Corrective Action Program Backlog of Total Open Condition Reports; 10/25/2016
- CR-PLP-2016-05498; Security Training Program; 11/16/2016
- CR-PLP-2016-05503; Security Safety Concern; 11/16/2016
- CR-PLP-2016-05589; Causal Evaluation, Broken Turbo Charger Support Mounting Bolt; 11/22/2016
- CR-PLP-2016-1194; Options to Close Out CR-PLP-2012-3439; 03/09/2016
- CR-PLP-2016-2060; Equipment ACE, Close/Open of 152-114 Containment Spray Pump P-54C Breaker; 09/13/2016

- CR-PLP-2016-2648; Incorrect EAL Determinations; 06/08/2016
- CR-PLP-2016-5652; Stroke Time for CV-0822 Greater Than Maximum Time; 11/30/2016
- CR-PLP-2017-00583; Regulatory Review - NRC Finding 4th QTR 2016 on Spent Fuel Cask; 02/16/2017
- CR-PLP-2017-00609; Condition Analysis, EDG 1-2 Failed to Sync to Bus 1D During MO-7A-2; 02/20/2017
- CR-PLP-2017-00671; Perform Calibration Check of Synchroscope SYN-0002; 02/24/2017
- CR-PLP-2017-01248; Route Cause Evaluation, Tornado Missile Non-Compliance; 04/20/2017
- CR-PLP-2017-01296; During EDG 1-2 Test, Found Hanger JB24-H3.14 Broke; 04/01/2017
- CR-PLP-2017-01358; Nuclear Independent Oversight Identified; 04/05/2017
- CR-PLP-2017-01626; The Following Risk Significant Operator Actions are Not Included in EOP TCA, EOP time Critical Operator Action Basis, and Not in the Time Critical Operator Action Program: 1) Trip Primary Coolant Pumps and Isolate Controlled Bleedoff Upon Loss of PCP Seal Cooling, 2) Open CV-0823/0826 to Restore CCW Cooling Pre-RAS Following a Spurious Failure Closing CV-0821/0822; 04/21/2017
- CR-PLP-2017-02218; Documenting the Need to Develop a Process for Conducting a Review of Each Department's Part 37 Training Program and Revise Training as Necessary to Include Applicable Elements List in 10 CFR Part 37.43(c)(3); 05/05/2017
- CR-PLP-2017-02522; A 10 CFR 21 "Reporting of Defects and Noncompliance" Condition Report (CR) was Closed Without Objective Evidence; 05/15/2017
- CR-PLP-2017-02601; Misinterpretation of Step 5.4.1 During Performance of PO-1; 05/19/2017
- CR-PLP-2017-02667; EDG 1-2 Level Switch LS-1453 Set Points; 05/24/2017
- CR-PLP-2017-02754; CV-3046 Failed the Required Closed Stroke Time During QO-5; 06/01/2017
- CR-PLP-2017-02758; Condition Reports were Not Initiated for Seven Adverse Condition Issues that were Documented in the Leadership Effective Log from April 23, 2017 through May 5, 2017; 06/01/2017
- CR-PLP-2017-02851; Discrepancy Found Between M-398 Sheet 13 and the Tank Calibration Sheet and ARP 8 for T-62; 06/07/2017
- CR-PLP-2017-02919; The Classification of "Adverse Condition" is Inconsistently Applied by the Performance Review Group; 06/13/2017
- CR-PLP-2017-03016; APRM Identified: During Cognitive Performance Discussion at the APRM, the PRG Identified an Adverse Trend in Placekeeping; 06/20/2017
- CR-PLP-2017-03039; P-55C, 'C' Charging Pump Tripped on Second Start During Post-Maintenance Testing; 06/21/2017
- CR-PLP-2017-03068; Significant Amount of Water Found in Manhole 4; 06/23/2017
- CR-PLP-2017-03187; High Oil Level in K-10 Fire Pump P-41 Diesel Driver; 07/01/2017
- CR-PLP-2017-03721; P-45A/B, South /North Turbine Building Sump Pumps Tripped Off on Thermal Overload; 08/08/2017
- CR-PLP-2017-03987; Operations Training Program Development Issues have been Seen Which have the Potential to Inhibit Improvement in Operations; 08/25/2017
- CR-PLP-2018-00536; An Adverse Trend Exists Within the Security Department Involving Officer Inattentiveness; 01/31/2018
- CR-PLP-2017-04042; Effectiveness Review for CR-PLP-2015-05234 Found to be Ineffective; 08/30/2017

- CR-PLP-2017-04106; System Engineering Identified Adverse Trend on Emergency Diesel Generator System; 09/05/2017
- CR-PLP-2017-04397; Tracking CR for Boric Acid Conditions; 09/26/2017
- CR-PLP-2017-04521; Trend Identified for Extended Length of Time Taken for Vendor Analyses to Support Apparent Cause Determinations; 10/05/2017
- CR-PLP-2017-04612; Since Mid-August 2017, 13 Condition Reports Written Identifying Incorrect Corrective Action Types Applied; 10/12/2017
- CR-PLP-2017-04668; Right Train Components P-66A and P-54A were Inoperable But Available; 10/16/2017
- CR-PLP-2017-04735; EDG Air Start System Piping Support Failure; 10/19/2017
- CR-PLP-2017-04748; Security Heightened State of Awareness; Dated 10/20/2017
- CR-PLP-2017-04787; Cause Evaluation Report for High Oil Level in K-10 Fire Pump P-41 Diesel Driver; 10/23/2017
- CR-PLP-2017-04951; Causes of Maintenance Rule Functional Failures are Not Always Identified; 10/30/2017
- CR-PLP-2017-04953; Some Opportunities to Improve Performance and Sustain High Levels of Performance are Being Missed Because of Weaknesses in Implementing Processes Designed to Promote Continuous Learning; 10/30/2017
- CR-PLP-2017-05016; Containment Dome Truss Original Analyses Not Available; 11/01/2017
- CR-PLP-2017-05280; Fleet FME Excellence Plan Actions for Palisades Operations Department have Not Been Completed by the Assigned Due Date; 11/06/2017
- CR-PLP-2017-05323; CR-PLP-2017-04938 was Closed Out with the Wrong Actions Taken Against the Issue Identified; 11/20/2017
- CR-PLP-2017-05392; A Potential Trend was Identified Involving Initial Task Performance Evaluations for Security officer Trainees; 11/28/2017
- CR-PLP-2017-05414; Standard Performance Deficiencies Identified During PI&R Readiness Assessment; 11/29/2017
- CR-PLP-2017-05414; The Review of Roll-Up Condition Reports Utilized Between January 1, 2016, and October 15, 2017 Found a Total of 243 Instances of Procedural Non-Compliance; 11/29/2017
- CR-PLP-2017-05416; Actions Not Taken to Correct Tube Plug Drawing or Repair Valves Leaking by Identified in CR-PLP-2013-00738; 11/29/2017
- CR-PLP-2017-05417; Seal Cooling was Not put Back into Service Correctly after Issue with Packing Blowing Out on P-55B; 11/29/2017
- CR-PLP-2017-05420; There Appears to be a Gap in the Process to Prompt an Evaluator to Perform an Aging Management Review; 11/29/2017
- CR-PLP-2017-05584; Actions Needed to Ensure Confidence in As-Left Containment Hydrogen Monitoring System Conditions; 12/07/2017
- CR-PLP-2017-05723; Security Pilgrim Compensatory Measures; Dated 12/14/2017
- CR-PLP-2017-05784; Operability Service Water (SW) System and Component Cooling Water (CCW) System; 1/26/2018
- CR-PLP-2017-2919; Adverse Condition Definition Inconsistently Applied; 06/13/2017
- CR-PLP-2017-3089; Instrument Air Compressor C-2B had a Maintenance Rule Functional Failure while in (A)(1); 06/26/2017
- CR-PLP-2017-3175; Wrong Diaphragm Installed in VOP-3025; 06/30/2017
- CR-PLP-2017-3777; Water Seen Seeping Through Containment Wall; 08/10/2017
- CR-PLP-2017-3821; WO 317328 Cancelled Out of Process; 08/15/2017
- CR-PLP-2017-5429; CV-1102 Closed Indication Did Not Light; 11/30/2017
- CR-PLP-2017-792; C-2A Failed to Unload; 03/05/2017
- CR-PLP-2018-00117; Security Loggable Issues; Dated 01/08/2018

- CR-PLP-2018-00186; CR-PLP-2017-5414 CA3 was an Interim Action Assigned to Monitor for Similar Procedural Non-Compliances and Conduct Periodic Meetings Between Engineering and Performance Improvement. The Periodic Meetings were Not Conducted as Required; 01/10/2018
- CR-PLP-2018-00200; Vital Area Door; Dated 01/11/2018
- CR-PLP-2018-00318; EB22, EDG 1-2 Jacket Water Cooler, Eddy Current Inspection Identified Tubes for Plugging; 01/17/2018
- CR-PLP-2018-00393; Sulfur Limit Discrepancy in The Diesel Fuel Oil Testing Program; 01/23/2018
- CR-PLP-2018-00394; E-22A D/G 1-1 Jacket Water Cooler Eddy Current Inspection Requirements; 01/23/2018
- CR-PLP-2018-00396; Entergy Nuclear Employee Training Implementation Issues; 01/23/2018
- CR-PLP-2018-00400; EG-20A, Diesel Generator 1-1 Annunciator Panel Alarm Tile Malfunction; 01/23/2018
- Cr-Plp-2018-00404; Work Order Closed Without Meeting Closure Requirements; 01/23/2018
- CR-PLP-2018-00433; NRC Identified Search Train Issue; Dated 01/24/2018
- CR-PLP-2018-00433; NRC Inspector Identified a Potentially Vulnerability to the Search Process; 1/24/2018
- CR-PLP-2018-00436; Compensatory Measures; Dated 01/24/2018
- CR-PLP-2018-00440; NRC Identified Oil on the Threaded Joint Below RV-1241; 1/25/2018
- CR-PLP-2018-00451; NRC Identified that Ladders in the Low Dose Waiting Area of WESG Were Not Stowed in Accordance with the Signage on the Wall; 1/25/2018
- CR-PLP-2018-00492; Oil Level for K-10 Fire Pump Went From Level 1 to 4; 01/28/2018
- CR-PLP-2018-00495; Security Compensatory Measure Issue; 01/29/2018
- CR-PLP-2018-00521; At Radiation Protection DPRM, it was Determined that Two Maintenance Observations were Only Coded to RP, Missing an Opportunity to Use this Observation in the Maintenance DPRM; 1/20/2018
- CR-PLP-2018-00586; Adverse Trend in Security; 01/31/2018
- CR-PLP-2018-00618; During January 2018 Department Performance Review Meetings (DPRM) Preparation and Meetings, Several Low Level Issues Relative to DPRM Quality and Noncompliance were Identified; 02/05/2018
- CR-PLP-2018-00662; Human Performance Behaviors have Declined since August 2017; 02/07/2018
- CR-PLP-2018-00664; Hanger JF22-H1.15 – Found Bolting to be 1/2” Rather Than 5/8” Shown on Drawing; 02/07/2018
- CR-PLP-2018-00673; JB22-H1.24 Hanger has 1/2” Bolts Instead of 5/8” Called Out on the Drawing; 02/07/2018
- CR-PLP-2018-00674; New Maintenance Rule Functional Failure Identified While Diesel Fire Pump in Maintenance Rule (a)(1); 02/07/2018
- CR-PLP-2018-00689; Identified Action Not Completed; 02/08/2018
- CR-PLP-2018-00689; NRC Inspector Identified that Action was Not Completed as Written Regarding CA-12 in CR-PLP-2016-04252; 02/08/2018
- CR-PLP-2018-00701; IAW EN-FAP-OM-024, Corporate Functional Area Managers and Peer Group Process, the Ops CFAM has Issued an Elevation to Palisades for Behaviors in Configuration Control; 02/08/2018
- CR-PLP-2018-00802; Additional Evaluation Required to Adequately Prove that UL 248 was Appropriately Classified; 2/14/2018

Procedures

- EN-LI-102; Corrective Action Program; Revision 30
- EN-WM-100; Work Request (WR) Generation, Screening and Classification; Revision 13
- EN-LI-118; Cause Evaluation Process; Revision 25
- EN-LI-121; Trending and Performance Review Process; Revision 24
- EN-OP-104; Operability Determination Process; Revision 13
- Entergy Trend Codes; Revision 1
- EN-DC-206; Maintenance Rule (a)(1) Process; Revision 3
- EN-LI-104; Department Performance Review Meeting (DPRM) Process; Revision 13
- EN-QV-136; Nuclear Safety Culture Monitoring; Revision 11
- EN-PL-190; Maintaining a Strong Safety Culture; Revision 4
- EN-PL-187; Safety Conscious Work Environment (SCWE) Policy; Revision 2
- EN-EC-100; Employee Concerns Program; Revision 10
- SIP 5; Search Requirements and Property Removal Requirements; Revision 43
- SIP 4; Personnel Access; Revision 37
- EN-DC-306; Acceptance of Commercial-Grade Items/Services in Safety-Related Applications; Revision 6
- EN-CS-S-010-L; Seismic Technical Evaluations; Revision 0

Self-Assessments/Benchmarks/Audits

- LO- PLPLO-2015-00124; NFPA-805 Program Implementation Focused Self-Assessment; 12/29/2015
- LO- PLPLO-2017-00036; Self-Assessment of Corrective Action Closure Since Announcement of Plant Closure; 03/14/2017
- LO-PLP-2015-00122; Pre NRC In Service Inspection Self-Assessment; 12/24/2016
- LO-PLPLO-2015-00124; NFPA-805 Program Implementation Focused Self-Assessment; 12/29/2015
- LO-PLPLO-2015-00160; 10CFR26 Implementation - Employment of Drug/Alcohol Testing and Fatigue Assessments; 01/30/2017
- LO-PLPLO-2015-00161; Vital Area Access Controls; 06/22/2016
- LO-PLPLO-2016-00026; Pre-NRC CDBI Self-Assessment; 04/21/2017
- LO-PLPLO-2016-00037; Effectiveness Review for Root Cause Evaluation, CR-PLP-2016-02650; 06/16/2016
- LO-PLPLO-2016-00063; Maintenance Procedure Use and Adherence Focused Self-Assessment; 11/14/2017
- LO-PLPLO-2017-00033; 2018 PI&R Readiness Assessment; 11/29/2017
- LO-PLPLO-2017-00036; Self-Assessment of Corrective Action Closure Since Announcement of Plant Closure; 03/14/2017
- LO-PLPLO-2017-00050; Observation Criticality Self-Assessment; 08/22/2017
- QA-11-2016-PLP-1; QA Audit Report, Security; 6/7/2016
- QA-3-2017-PLP-1; QA Audit Report, Corrective Action Program; 06/27/2017
- QA-4-2016-PLP-1; QA Audit Report, Engineering (Design Control); 03/07/2016
- QA-8-2017-PLP-1; QA Audit Report, Engineering Programs; 03/13/2017

Other

- DPRM/APRM Report; Palisades Maintenance; 4th Quarter 2017
- DPRM/APRM Report; Palisades Radiation Protection; 4th Quarter 2017
- DPRM/APRM Report; Palisades Security; 1st Quarter 2016
- DPRM/APRM Report; Palisades Security; 4th Quarter 2016
- DPRM/APRM Report; Palisades Security; 4th Quarter 2017

- DPRM/APRM Report; Palisades Station APRM; 3rd Quarter 2017
- DPRM/APRM Report; System and Component Engineering; 4th Quarter 2017
- EC 43996; Install Anti-Rotation Device; Revision 0
- EC 76027; Seismic Insensitivity of UL 248 Fuses; 02/15/2018
- Entergy 2017 Organizational Health Index, Nuclear Safety Culture Results
- Palisades Site Nuclear Safety Monitoring Report for August – November 2015; 02/01/2016
- Palisades Site Nuclear Safety Monitoring Report for January – April 2017; 08/15/2017
- Palisades Site Nuclear Safety Monitoring Report for January – April 2016; 10/18/2016
- Palisades Site Nuclear Safety Monitoring Report for May – August 2017; 11/27/2017
- Palisades Site Nuclear Safety Monitoring Report for May – August 2016; 10/31/2016
- Palisades Site Nuclear Safety Monitoring Report for November – December 2015; 03/18/2016
- Palisades Site Nuclear Safety Monitoring Report for September – December 2016; 04/23/2017
- Security Temporary Post Instruction; 09/16/2018
- System Health Report – Emergency Diesel Generators; 4th Quarter 2017
- System Health Report – Fire Protection Program; 4th Quarter 2017
- Temporary Modification 72570; SV-0927/CV-0927, SC Surge Tank, T-62, Make-Up; 06/08/2017
- Work Order 317328; Add Anti-Rotation Block Per EC 43996