



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
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July 25, 2016

EA-15-171

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

SUBJECT: PALISADES NUCLEAR PLANT—NRC INTEGRATED INSPECTION REPORT
05000255/2016002

Dear Mr. Vitale:

On June 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Palisades Nuclear Plant. On July 7, 2016, the NRC inspectors discussed the results of this inspection with yourself and other members of your staff. The enclosed report documents the results of this inspection.

Based on the results of this inspection, no findings of significance were identified.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records System (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA James Cameron Acting for/

Eric Duncan, Chief
Branch 3
Division of Reactor Projects

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

Enclosure:
IR 05000255/2016002

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000255/2016002

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Dates: April 1 through June 30, 2016

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Enclosure

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SUMMARY

Inspection Report (IR) 05000255/2016002, 04/01/2016 – 06/30/2016; Palisades Nuclear Plant;
Routine Integrated Inspection Report

This report covers a 3-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. The Nuclear Regulatory Commission's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," dated February 2014.

No violations of significance were identified.

REPORT DETAILS

Summary of Plant Status

The plant began the assessment period operating at full power. The unit was down-powered to approximately 95 percent on April 6, 2016, to perform emergent maintenance on the Moisture Separator and Drain Tank level control valve, CV-0608. The unit was returned to 100 percent power on April 7, 2016, and operated at or near full power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Readiness of Offsite and Alternate AC Power Systems

a. Inspection Scope

The inspectors verified that plant features and procedures for operation and continued availability of offsite and alternate alternating current (AC) power systems during adverse weather were appropriate. The inspectors reviewed the licensee's procedures affecting these areas and the communications protocols between the transmission system operator (TSO) and the plant to verify that the appropriate information was being exchanged when issues arose that could impact the offsite power system. Examples of aspects considered in the inspectors' review included:

- coordination between the TSO and the plant during off-normal or emergency events;
- explanations for the events;
- estimates of when the offsite power system would be returned to a normal state; and
- notifications from the TSO to the plant when the offsite power system was returned to normal.

The inspectors also verified that plant procedures addressed measures to monitor and maintain the availability and reliability of both the offsite AC power system and the onsite alternate AC power system prior to or during adverse weather conditions. Specifically, the inspectors verified that the procedures addressed the following:

- actions to be taken when notified by the TSO that the post-trip voltage of the offsite power system at the plant would not be acceptable to assure the continued operation of the safety-related loads without transferring to the onsite power supply;
- compensatory actions identified to be performed if it would not be possible to predict the post-trip voltage at the plant for the current grid conditions;
- re-assessment of plant risk based on maintenance activities which could affect grid reliability, or the ability of the transmission system to provide offsite power; and

- communications between the plant and the TSO when changes at the plant could impact the transmission system, or when the capability of the transmission system to provide adequate offsite power was challenged.

Documents reviewed are listed in the Attachment to this report. The inspectors also reviewed corrective action program (CAP) items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station corrective action procedures.

This inspection constituted one readiness of offsite and alternate AC power systems sample as defined in Inspection Procedure (IP) 71111.01–05.

b. Findings

No findings were identified.

.2 Summer Seasonal Readiness Preparations

a. Inspection Scope

The inspectors performed a review of the licensee’s preparations for summer weather for selected systems, including conditions that could lead to an extended drought.

During the inspection, the inspectors focused on plant specific design features and the licensee’s procedures used to mitigate or respond to adverse weather conditions. Additionally, the inspectors reviewed the Updated Final Safety Analysis Report (UFSAR) and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. Documents reviewed are listed in the Attachment to this report. The inspectors also reviewed CAP items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station corrective action procedures. The inspectors’ reviews focused specifically on the following plant systems:

- service water system;
- emergency diesel generators (DGs);
- auxiliary feedwater (AFW) system; and
- the ultimate heat sink.

This inspection constituted one seasonal adverse weather sample as defined in IP 71111.01–05.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- 'A' and 'B' containment spray trains;
- 'A' and 'C' service water trains; and
- 'A' high pressure safety injection train.

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, the UFSAR, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

These activities constituted three partial system walkdown samples as defined in IP 71111.04–05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on the availability, accessibility, and condition of firefighting equipment in the following risk-significant plant areas:

- Fire Area 23: turbine building, elevations 607', 612', and 625';
- Fire Area 28: west engineered safeguards room, elevation 570';
- Fire Area 16: component cooling water pump room, elevation 590';
- Fire Area 10: east engineered safeguards room, elevation 570'; and
- Fire Area 9: screen house/intake structure, elevation 590'.

The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive fire protection features in good material condition, and implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features in accordance with the licensee's fire plan.

The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to impact equipment which could initiate or mitigate a

plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP. Documents reviewed are listed in the Attachment to this report.

These activities constituted five quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11)

a. Inspection Scope

On May 17, 2016, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator regualification training. The inspectors verified that operator performance was adequate, evaluators were identifying and documenting crew performance problems, and that training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and successful critical task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator regualification program simulator sample as defined in IP 71111.11-05.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk-significant systems:

- diesel generator rooms heating, ventilation and air conditioning systems;
- primary coolant system; and
- a review of the licensee's maintenance rule (a)(3) periodic evaluations.

The inspectors reviewed events where ineffective equipment maintenance had resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- implementing appropriate work practices;
- identifying and addressing common cause failures;
- scoping of systems in accordance with Title 10 of the *Code of Federal Regulations* (CFR) 50.65(b) of the maintenance rule;
- characterizing system reliability issues for performance;
- charging unavailability for performance;
- trending key parameters for condition monitoring;
- ensuring 10 CFR 50.65(a)(1) or (a)(2) classification or re-classification; and
- verifying appropriate performance criteria for structures, systems, and components (SSCs)/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

This inspection constituted three quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed the licensee's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- emergent downpower and repair of moisture separator and drain tank level control valve, CV-0608;

- elevated plant risk for P-7A, 'A' service water pump, maintenance window concurrent with 'B' channel RPS power supply board replacements;
- elevated plant risk for work activities on May 18-20, 2016;
- troubleshooting activities associated with P-50A, 'A' primary coolant pump, seal low flow alarms; and
- elevated plant risk due to emergent work to replace all DG air start motors.

These activities were selected based on their potential risk significance relative to the Reactor Safety Cornerstones. As applicable for each activity, the inspectors verified that risk assessments were performed as required by 10 CFR 50.65(a)(4) and were accurate and complete. When emergent work was performed, the inspectors verified that the plant risk was promptly reassessed and managed. The inspectors reviewed the scope of maintenance work, discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor, and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed TS requirements and walked down portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Documents reviewed during this inspection are listed in the Attachment to this report.

These maintenance risk assessments and emergent work control activities constituted five samples as defined in IP 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Determinations and Functional Assessments (71111.15)

a. Inspection Scope

The inspectors reviewed the following issues:

- evaluation of the environmental conditions of the atmospheric dump valve cabinet tornado enclosure after a postulated high energy line break in the component cooling water room impacting an unsealed penetration;
- evaluation of CV-3042, safety injection tank T-82A pressure control valve, stroke test time degradation;
- evaluation of non-compliance with American Society of Mechanical Engineers (ASME) code required testing of safety-related valves;
- evaluation of the solenoid air valves associated with the safety injection tank pressure control valves after discovery of not performing all environmental qualification required maintenance;
- evaluation of DG air start motors (ASMs) due to identification of unhardened stop nut pin material on ASM-1A; and
- evaluation of the DG jacket water coolers remaining service life due to identified tube degradation.

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in

risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and UFSAR to the licensee's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sample of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

This operability inspection constituted six samples as defined in IP 71111.15–05.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

The inspectors reviewed the following modification:

- Temporary modification for monitoring the operation of breaker 52–2535 for V–24A, 1–1 DG ventilation fan.

The inspectors reviewed the configuration changes and associated 10 CFR 50.59 safety evaluation screening against the design basis, the UFSAR, and the TSs, as applicable, to verify that the modification did not affect the operability or availability of the affected systems. The inspectors, as applicable, observed ongoing and completed work activities to ensure that the modification was installed as directed and consistent with the design control documents; the modification operated as expected; post-modification testing adequately demonstrated continued system operability, availability, and reliability; and that operation of the modification did not impact the operability of any interfacing systems. As applicable, the inspectors verified that relevant procedure, design, and licensing documents were properly updated. Lastly, the inspectors discussed the plant modification with operations, engineering, and training personnel to ensure that the individuals were aware of how the operation with the plant modification in place could impact overall plant performance. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one temporary modification sample as defined in IP 71111.18–05.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed the following post-maintenance testing activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- 'A' component cooling water pump surveillance test following maintenance;
- escape air lock local leak rate test following repair of the equalizing valve;
- right train control room Heating, Ventilation and Air Conditioning (HVAC) surveillance test following condenser overhaul and RV-1686 replacement;
- 'B' channel reactor protection system surveillance and voltage checks following plug-in power supply boards replacements;
- 'A' service water pump surveillance test following coupling and shaft sleeve replacements;
- 1-1 and 1-2 DG test starts and surveillance tests following replacement of all air start motors; and
- 'C' containment spray pump surveillance test following maintenance.

These activities were selected based upon the structure, system, or component's ability to impact risk. The inspectors evaluated these activities for the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed; acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate; tests were performed as written in accordance with properly reviewed and approved procedures; equipment was returned to its operational status following testing (temporary modifications or jumpers required for test performance were properly removed after test completion); and test documentation was properly evaluated. The inspectors evaluated the activities against TSSs, the UFSAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with post-maintenance tests to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

This inspection constituted seven post-maintenance testing samples as defined in IP 71111.19-05.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the test results for the following activities to determine whether risk-significant systems and equipment were capable of performing their intended safety function and to verify testing was conducted in accordance with applicable procedural and TS requirements:

- RO-147B, 'B' high pressure safety injection pump surveillance (in-service test);
- QO-20B, 'B' low pressure safety injection pump surveillance (routine);
- QO-21C, 'C' AFW pump surveillance (routine); and
- QI-39, AFW actuation system logic test (routine).

The inspectors observed in-plant activities and reviewed procedures and associated records to determine the following:

- did preconditioning occur;
- were the effects of the testing adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- were acceptance criteria clearly stated, demonstrate operational readiness, and consistent with the system design basis;
- was plant equipment calibration correct, accurate, and properly documented;
- were as-left setpoints within required ranges; and was the calibration frequency in accordance with TSs, the USAR, procedures, and applicable commitments;
- was measuring and test equipment calibration current;
- was test equipment within the required range and accuracy; and were applicable prerequisites described in the test procedures satisfied;
- were test frequencies met for TS requirements to demonstrate operability and reliability; were tests performed in accordance with the test procedures and other applicable procedures; and were jumpers and lifted leads controlled and restored where used;
- were test data and results accurate, complete, within limits, and valid;
- was test equipment removed after testing;
- where applicable for inservice testing activities, was testing performed in accordance with the applicable version of Section XI, American Society of Mechanical Engineers code, and were reference values consistent with the system design basis;
- where applicable, were test results not meeting acceptance criteria addressed with an adequate operability evaluation or was the system or component declared inoperable;
- where applicable for safety-related instrument control surveillance tests, were reference setting data accurately incorporated in the test procedure;
- where applicable, were actual conditions encountering high resistance electrical contacts such that the intended safety function could still be accomplished;
- had prior procedure changes provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- was equipment returned to a position or status required to support the performance of its safety functions; and
- were all problems identified during the testing appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted three routine surveillance testing samples and one in-service test sample as defined in IP 71111.22, Sections-02 and-05.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors evaluated the conduct of routine licensee emergency drills on April 13, 2016, and May 17, 2016, to identify any weaknesses or deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the control room simulator, technical support center, operations support center, and emergency operations facility to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the CAP. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the Attachment to this report.

This emergency preparedness drill inspection constituted two samples as defined in IP 71114.06–06.

b. Findings

No findings were identified.

2. RADIATION SAFETY

2RS7 Radiological Environmental Monitoring Program (71124.07)

.1 Site Inspection (02.02)

a. Inspection Scope

The inspectors walked down select air sampling stations and dosimeter monitoring stations to determine whether they were located as described in the Offsite Dose Calculation Manual (ODCM) and to determine the equipment material condition.

The inspectors reviewed calibration and maintenance records for select air samplers, dosimeters, and composite water samplers to evaluate whether they demonstrated adequate operability of these components.

The inspectors assessed whether the licensee had initiated sampling of other appropriate media upon loss of a required sampling station.

The inspectors observed the collection and preparation of environmental samples from select environmental media to determine if environmental sampling was representative of the release pathways specified in the ODCM and if sampling techniques were in accordance with procedures.

The inspectors assessed whether the meteorological instruments were operable, calibrated, and maintained in accordance with guidance contained in the UFSAR, NRC Regulatory Guide 1.23, "Meteorological Monitoring Programs for Nuclear Power Plants," and licensee procedures. The inspectors assessed whether the meteorological data readout and recording instruments were operable.

The inspectors evaluated whether missed and/or anomalous environmental samples were identified and reported in the annual environmental monitoring report. The inspectors selected events that involved a missed sample, inoperable sampler, lost dosimeter, or anomalous measurement to determine if the licensee had identified the cause and had implemented corrective actions. The inspectors reviewed the licensee's assessment of any positive sample results and reviewed any associated radioactive effluent release data that was the source of the released material.

The inspectors selected structures, systems, or components that involve or could reasonably involve a credible mechanism for licensed material to reach ground water, and assessed whether the licensee had implemented a sampling and monitoring program sufficient to detect leakage to ground water.

The inspectors evaluated whether records important to decommissioning, as required by 10 CFR, Part 50.75(g), were retained in a retrievable manner.

The inspectors reviewed any significant changes made by the licensee to the ODCM as the result of changes to the land census, long-term meteorological conditions, or modifications to the sampler stations since the last inspection. The inspectors reviewed technical justifications for any changed sampling locations to evaluate whether the licensee performed the reviews required to ensure that the changes did not affect its ability to monitor the impacts of radioactive effluent releases on the environment.

The inspectors assessed whether the appropriate detection sensitivities with respect to the ODCM were used for counting samples. The inspectors reviewed the quality control program for analytical analysis.

The inspectors reviewed the results of the licensee's Interlaboratory Comparison Program to evaluate the adequacy of environmental sample analyses performed by the licensee. The inspectors assessed whether the interlaboratory comparison test included the media/nuclide mix appropriate for the facility. The inspectors reviewed the licensee's determination of any bias to the data and the overall effect on the Radiological Environmental Monitoring Program.

These inspection activities constituted one sample as defined in IP 71124.07-05

b. Findings

No findings were identified.

.2 Groundwater Protection Initiative Implementation (02.03)

a. Inspection Scope

The inspectors reviewed monitoring results of the Groundwater Protection Initiative to evaluate whether the licensee had implemented the program as intended and to assess

whether the licensee had identified and addressed anomalous results and missed samples.

The inspectors evaluated the licensee's implementation of the minimization of contamination and survey aspects of the Groundwater Protection Initiative and the Decommissioning Planning Rule requirements in 10 CFR 20.1406 and 10 CFR 20.1501.

The inspectors reviewed leak and spill events and 10 CFR 50.75 (g) records and assessed whether the source of the leak or spill was identified and appropriately mitigated.

The inspectors assessed whether unmonitored leaks and spills were evaluated to determine the type and amount of radioactive material that was discharged. The inspectors assessed whether the licensee completed offsite notifications in accordance with procedure.

The inspectors reviewed evaluations of discharges from onsite contaminated surface water bodies and the potential for ground water leakage from them. The inspectors assessed whether the licensee properly accounted for these discharges as part of the Effluent Release Reports.

The inspectors assessed whether onsite ground water sample results and descriptions of any significant on-site leaks or spills into ground water were documented in the Annual Radiological Environmental Operating Report or the Annual Radiological Effluent Release Report.

The inspectors determined if significant new effluent discharge points were updated in the ODCM and the assumptions for dose calculations were updated as needed.

These inspection activities constituted one sample as defined in IP 71124.07-05

b. Findings

No findings were identified.

.3 Problem Identification and Resolution (02.04)

a. Inspection Scope

The inspectors assessed whether problems associated with the Radiological Environmental Monitoring Program were being identified by the licensee at an appropriate threshold and were properly addressed for resolution. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee that involved the Radiological Environmental Monitoring Program.

These inspection activities constituted one sample as defined in IP 71124.07-05

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security

4OA1 Performance Indicator Verification (71151)

.1 Unplanned Power Changes per 7000 Critical Hours

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Power Changes per 7000 Critical Hours Performance Indicator (1E03) for the period from the second quarter 2015 through the first quarter 2016. To determine the accuracy of the Performance Indicator (PI) data reported during those periods, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, condition reports, maintenance rule records, event reports and NRC Integrated Inspection Reports for the period of April 1, 2015, through March 31, 2016, to validate the accuracy of the submittals. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one unplanned power changes per 7000 critical hours sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Safety System Functional Failures

a. Inspection Scope

The inspectors sampled licensee submittals for the Safety System Functional Failures PI (MS05) for the period from the second quarter 2015 through the first quarter 2016. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, dated August 31, 2013, and NUREG-1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73" definitions and guidance, were used. The inspectors reviewed the licensee's operator narrative logs, operability assessments, maintenance rule records, maintenance work orders, condition reports, event reports and NRC Integrated Inspection Reports for the period of April 1, 2015, through March 31, 2016, to validate the accuracy of the submittals. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one safety system functional failures sample as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to this report.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished through inspection of the station's daily condition report packages.

These daily reviews were performed by procedure as part of the inspectors' daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 40A2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the 6-month period of January 2016 through June 2016, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside the normal CAP in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self-assessment reports, and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

Observations: The inspectors noted during this time period a potential trend in repetitive equipment issues, specifically issues being resolved through the licensee's troubleshooting process. The inspectors reviewed the troubleshooting process documents, associated work orders, corrective actions, and causal evaluations (if completed) for the following issues:

- 'C' containment spray pump failure to run due to a breaker issue;
- containment instrument air system low pressure alarms repeatedly received in the control room;
- intermittent 2400 volt (V) ground on the safety-related electrical system;
- DG ventilation fan, V-24A, found tripped (twice);
- moisture separator and heater drain tank, T-5, level control issues; and
- the inability to clear the 'A' isophase bus cooler low cooling air flow alarm when placed in service.

The inspectors also reviewed the licensee's troubleshooting benchmark snapshot assessment. This assessment was performed based on the licensee's identification of a potential trend.

Through the review, it appeared that identified equipment problems were being entered into the CAP in a timely manner. There were some examples identified where more complete and accurate documentation of the identified problem was needed. Since troubleshooting is an integral part of cause determination, it is essential that a thorough and documented initial investigation of the as-found condition be made prior to disturbing installed equipment or components to ensure that evidence leading to the cause(s) of a failure is not destroyed or lost. One example was when the 'C' containment spray pump would not run. A complete and accurate set of data was not gathered or documented prior to personnel removing the breaker from the cubicle before starting intrusive work. An apparent cause was not identified during the causal evaluation process for this issue due to a lack of initial information gathered. Also, in this instance, the timeliness of

resolution of the issue was affected by the need to perform additional troubleshooting activities which required the plant to be in a certain configuration. The pump was determined to have been operable prior to and leading up to this event and passed its surveillance test run after intrusive work on the breaker.

In general, it appeared that the licensee completed corrective actions that were appropriately focused to correct the problem and to address root or apparent and contributing causes. It also appeared that the licensee generally appropriately considered the extent of condition and causes when evaluating problems and appropriately reviewed previous occurrences/operating experience to aid in the development of corrective actions.

Some weaknesses in the classification and prioritization of a problem's resolution, commensurate with safety significance, were identified during this review. An example was when the moisture separator and heater drain tank level control valve, CV-0608, was not operating as designed. Condition reports written for identified deficiencies with this valve were not correctly classified as adverse conditions within the licensee's CAP. The appropriate level of corrective actions to either evaluate the condition or correct the condition were not completed and the issues identified contributed to additional problems with the level control system later. These issues have been corrected and did not have an adverse impact on plant operations.

Also during this review, it was identified that not all actions taken resulted in correcting the identified problem. One example was when the 1-1 DG ventilation fan, V-24A, was found with no light indication for the control switch and the fan breaker was found tripped on two different occasions approximately one month apart. Initially, the licensee replaced the breaker without entering the troubleshooting process. After the second trip, the licensee entered the troubleshooting process and identified excessive heating and signs of arcing on the temperature switch, which was determined to have caused the trip previously, as well. The licensee completed an apparent cause evaluation to review organizational and programmatic components of why there was a repeat failure. It was identified that personnel "did not exhibit teamwork and advocacy necessary to resolve an equipment issue and were not in the mindset to prevent repeat equipment issues." These two instances of the ventilation fan tripping did not cause the 1-1 DG to be declared inoperable since it was during colder months and the redundant train of ventilation was functional. However, this was identified as an example of underlying organizational and programmatic weaknesses which prevented the issue from being thoroughly evaluated after the first event.

This review constituted one semi-annual trend inspection sample as defined in IP 71152-05. Findings

b. Findings

No findings were identified.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

.1 (Closed) Licensee Event Report 05000255/2016-002-00: Both Control Room Ventilation Filtration Trains Declared Inoperable

On March 24, 2016, at approximately 2:11 a.m., both trains of the control room ventilation filtration system were declared inoperable due to the inability to close the control room envelope boundary door. This event was caused by personnel inadvertently operating the hand wheel for the door to the closed position with the door still open. This caused the door's locking bolts to extend, engage an interlock in the door, and prevent full closure. Additionally, the personnel operating the door were unaware of the interlock and continued turning the hand wheel, which was identified as a potential cause of the failure of a bushing inside the door's operating mechanism. The bushing failure prevented both normal and emergency operation of the door's locking bolts and prevented full closure of the door. Corrective actions included replacing the failed bushing and adding detail to the operating instructions for the door to ensure personnel were aware of the interlock. These actions are reasonable to prevent recurrence. Documents reviewed are listed in the Attachment to this report. This Licensee Event Report (LER) is closed.

This event follow-up review constituted one sample as defined in IP 71153-05.

4OA5 Other Activities

.1 (Closed) Notice of Violation and Apparent Violation 05000255/2015012-01: Inaccurate/Incomplete Information Provided For Relief Request 4-18

In March of 2015, the licensee notified the NRC that the information provided to the NRC in letter PNP 2014-015 "Relief Request Number RR 4-18 - Proposed Alternative, Use of Alternate ASME Code Case N-770-1 Baseline Examination," dated February 25, 2014, was not complete and accurate in all material respects. Specifically, in letter PNP 2014-015, the licensee stated, "In the unlikely case that crack initiation were to occur, crack growth calculations considering primary water stress corrosion cracking as the failure mechanism demonstrate that the hot leg drain nozzle weldment satisfies ASME Code acceptance criteria for 60 effective full power years (EFPY) for a circumferential flaw, and more than 34 years for an axial flaw." However, this statement was not correct/accurate because of an error in a supporting vendor calculation related to misapplication of the normal operating pressure loads into the piping segment stress model which introduced a bending moment into the hot leg pipe wall rather than an expected radial and axial expansion loads typical of internally applied pressure in the piping. In particular, the induced bending moment created a compressive (i.e., less tensile) stress behavior in and around the inside of the nozzle-to-pipe weld. As a result of the erroneously applied pressure load, the radial and hoop tensile stresses at the weld inside diameter were reduced rather than increased. The net effect of this error on the analysis results was that the ASME Code acceptance criteria were met for only 20 EFPY for a postulated circumferential flaw and 11.3 EFPY for a postulated axial flaw. Palisades EFPY of operation had exceeded both of these values at the point that the calculation error was discovered. This condition was not an immediate safety concern because the licensee demonstrated an adequate basis for continued operability of the affected welds. The licensee subsequently submitted corrected calculations to the NRC, completed an Apparent Cause Evaluation, and implemented corrective actions.

On September 17, 2015, the NRC identified an Apparent Violation (AV) 05000255/2015012-01 of 10 CFR Part 50.9, related to a failure to provide information that was complete and accurate in all material respects to the NRC in letter PNP 2014-015. By letter dated November 24, 2015, the NRC determined that a Violation of 10 CFR 50.9 occurred and issued a Notice of Violation (NOV) as the failure to provide complete and accurate information was of significant safety concern to the NRC because the inaccurate information impacted the NRC's ability to perform its regulatory function. Specifically, the NRC had relied on the inaccurate information to make a licensing decision for approval of Relief Request 4-18. If the information had been correct, the NRC would have undertaken substantial further inquiry and/or reconsidered its regulatory position. Therefore, this violation was categorized in accordance with the NRC Enforcement Policy at Severity Level III. The NRC also concluded that information regarding: (1) the reason for the violation; (2) the corrective actions that had been taken and the results achieved; and (3) the date when full compliance will be achieved was adequately addressed in licensee letters, dated October 17, 2015 and October 28, 2015. The inspectors conducted additional reviews as discussed in Section 40A5.2 (below) to confirm that the licensee had implemented adequate corrective actions for this issue and this NOV and AV are closed.

.2 Follow-Up on Traditional Enforcement Actions Including Violations, Deviations Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders Inspection Activities (92702)

a. Inspection Scope

From June 6, 2016, through June 8, 2016, the inspectors conducted a review of the licensee's Apparent Cause Evaluation, "50.9 Violation of Relief Request 4-18" and associated corrective actions, attended biennial engineering training, reviewed Quality Assurance Audits of Engineering, and conducted interviews with the licensee's Engineering Director and vendor staff to determine whether:

- the corrective actions for NOV and AV 05000255/2015012-01; Inaccurate/Incomplete Information Provided For Relief Request 4-18 had been fully implemented and that licensee management assigned responsibility for implementing corrective actions, including any necessary changes in procedures and practices;
- an adequate cause analysis and generic implication evaluation had been completed; and
- follow-up actions were initiated for deviations noted in any recent Quality Assurance audits conducted by the licensee of the inspection area in which traditional enforcement actions were identified.

The inspectors performed these reviews to evaluate compliance with 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requirements. The corrective action documents reviewed by the inspectors are listed in the Attachment to this report.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On July 7, 2016, the inspectors presented the inspection results to Mr. A. Vitale, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Interim Exit Meetings

Interim exits were conducted for:

- The results of the follow-up inspection for Apparent Violation 05000255/2015012-01 with Mr. A. Vitale, Site Vice President, and other members of the licensee staff, on June 8, 2016; and
- The results for the Radiological Environmental Monitoring Program inspection with Mr. A. Vitale, Site Vice President, and other members of the licensee staff, on June 27, 2016.

The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during the inspection was returned to the licensee.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

A. Vitale, Site Vice President
A. Williams, General Manager Plant Operations
T. Mulford, Operations Manager
B. Baker, Operations Manager – Shift
J. Borah, Engineering Manager, Systems and Components
R. Craven, Production Manager
T. Davis, Licensing Specialist
B. Dotson, Acting Regulatory Assurance Manager
D. Nestle, Radiation Protection Manager
J. Hardy, Acting Director of Regulatory and Performance Improvement
J. Haumersen, Site Projects and Maintenance Services Manager
G. Heisterman, Maintenance Manager
M. Lee, Operations Manager - Support
D. Lucy, Outage Manager
D. Malone, Emergency Planning Manager
W. Nelson, Training Manager
K. O'Connor, Engineering Manager, Design and Programs
C. Plachta, Nuclear Independent Oversight Manager
P. Russell, Site Engineering Director
M. Schultheis, Performance Improvement Manager
M. Soja, Chemistry Manager
J. Tharp, Security Manager

U.S. Nuclear Regulatory Commission

E. Duncan, Chief, Reactor Projects Branch 3

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

05000255/2015012-01	AV	Inaccurate/Incomplete Information Provided For Relief Request 4-18 (Section 4OA5)
05000255/2015012-01	NOV	Inaccurate/Incomplete Information Provided For Relief Request 4-18 (Section 4OA5)
05000255/2016-002-00	LER	Both Control Room Ventilation Filtration Trains Declared Inoperable (Section 4OA3)

Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1R01 Adverse Weather Protection

- Admin 4.00, Operations Organization: Responsibilities and Conduct, Revision 59
- Admin 4.02, Attachment 3, Risk Management and Risk Monitoring, Revision 75
- Admin 4.28, Control of Palisades Switchyard Activities, Revision 9
- AOP-35, Loss of Service Water, Revision 0
- AOP-38, Acts of Nature, Revision 6
- AOP-6, Loss of Condenser Vacuum, Revision 1
- Condition Report (CR)-PLP-2015-02836, V-21H, Intake Structure Fresh Air Fan, Dampers are Not Closing When Fan Cycles Off, July 7, 2015
- CR-PLP-2015-03222, Found P-45A, South Turbine Building Sump Pump, Not Running, August 2, 2015
- CR-PLP-2015-03345, NPO Noticed Station Power Transformer 1-1 South Winding Temperature was High Out of Specifications at 94 Degrees Centigrade, August 11, 2015
- CR-PLP-2015-03345, Station Power Transformer 1-1, South Winding Temperature was High Out of Specifications, August 11, 2015
- CR-PLP-2015-03418, Found Mound of Zebra Mussels on Floor Bay West of the Trash Rack/F-4C After Storm, August 17, 2015
- CR-PLP-2015-03590, V-21K, Turbine Building Fresh Air Fan, is Making Bearing Failure-Like Noise, August 29, 2015
- CR-PLP-2015-04574, Discovered the Z-Phase Current Transformer had its Insulation Scraped Off and Bare Conductors Showing for Breaker 252-201, Station Power Transformer 1-1 Incoming Breaker, October 1, 2015
- CR-PLP-2015-04955, VLF Tan Delta and Withstand Testing of the 2.4 kV Bus 1E Feeder Cables from Startup Transformer 1-2 Indicated Action Required, October 4, 2015
- CR-PLP-2015-05003, Tan Delta Testing of a Newly Installed 1000 MCM Cable from Safeguards Transformer to Bus 1D Identified One of the Three Phases of the Cable with Failed Test (Grounded), October 12, 2015
- CR-PLP-2015-05084, During Voltage Disturbance, Bus 1A and Bus 1B Tripped from Their Associated Lockout Relays, October 16, 2015
- CR-PLP-2015-05097, Identification and Resolution of a Grounded Conductor from the Switchyard to Safeguards Transformer Identified by ITS, October 13, 2015
- CR-PLP-2015-05234, Found Both P-45A, South Turbine Building Sump Pump, and P-45B, North Turbine Building Sump Pump, Not Running, October 21, 2015
- CR-PLP-2015-05484, Following Maintenance, Operations Discovered All Outputs from LIC-1300, Southwest Bay Level Indicating Controller, Indicating 575 Feet, November 3, 2015
- CR-PLP-2015-05775, During F-4C, 'C' Traveling Screen, Post-Maintenance, Significant Below Surface Wear and Damage was Noted in the Lower Boot Section Assembly, November 20, 2015
- CR-PLP-2015-05844, During Post-Maintenance for F-4B, 'B' Traveling Screen, Found Head Sprocket Insert Bearings and All Rollers Worn and Need Replacement, November 24, 2015

- CR-PLP-2015-06092, Diving Report Submitted for All Diving Work Conducted in Fall/Winter 2015 by Underwater Construction Corporation (UCC) Identified Multiple Issues, December 9, 2015
- CR-PLP-2015-06097, Failure to Resolve Single Point Vulnerability on Main Transformer Cooling Supply Circuit Breakers in 1R24, December 10, 2015
- CR-PLP-2016-00296, Lake Level has Risen Above 580' and the Transmitters With Indications for Determining Traveling Screen Differential Levels are Above Their Operating Range, January 15, 2016
- CR-PLP-2016-00500, Yellow Alarm Light Actuated for Channel 2 of Sudden Pressure Relay on Startup Transformer 1-1, January 27, 2016
- CR-PLP-2016-01161, Conductor Shields on the New Startup Side Feeder Cables to Buses 1C and 1D were Not Grounded on Both Termination Ends, February 25, 2016
- CR-PLP-2016-01231, Medium Voltage Cable Program Tan Delta Testing Not Completed on the Startup Transformer 1-3 Feeder Cable to Bus-1G, March 7, 2016
- CR-PLP-2016-01303, After Replacement of the Card on Phase 2 of the Sudden Pressure Relay on Startup Transformer 1-1, the Channel 2 on the Multi-Function Relay Actuated Again, March 15, 2016
- CR-PLP-2016-01551, Burned Resistor Found on 463-11, Startup Transformer 1-3 Sudden Pressure Relay, March 30, 2016
- CR-PLP-2016-02017, While Investigating a Turbine Building Sump High Level Alarm, P-45A, South Turbine Building Sump Pump, Was Discovered to be Not Running, May 1, 2016
- CR-PLP-2016-02093, Megger Results Did Not Meet Minimum Acceptance Criteria for Cables from Diesel Generator 1-3, Supplemental Diesel, May 5, 2016
- CR-PLP-2016-02131, During Monthly Rotation of Equipment, Received Low Cooling Air Flow Alarm on U-10, "A" Isophase Bus Cooler, May 8, 2016
- CR-PLP-2016-02199, During Performance of Zebra Mussel Removal Under WO 52661376-01, Cleanliness Criteria Under Work Order Step 4.5.1 was Not Met Due to Access and Time Limitations, May 11, 2016
- CR-PLP-2016-02562, While Investigating a Turbine Building High Sump Level Alarm, P-45B, North Turbine Building Sump Pump, was Discovered to be Not Running, June 3, 2016
- CR-PLP-2016-02827, EX-01, Station Power Transformer 1-1, has a Lot of Paint Peeling on the Heat Exchanger, June 19, 2016
- CR-PLP-2016-02884, P-45B, North Turbine Building Sump Pump Tripped on Thermals at the Breaker, June 22, 2016
- CR-PLP-2016-02996, Cottonwood Seed Fouling of Main Transformer Cooler Fins, June 29, 2016
- CR-PLP-2016-02997, Space Heater Wires in Station Power Transformer 1-3 are Degraded, June 29, 2016
- CR-PLP-2016-03003, Spot of Surface Corrosion on Safeguards Transformer 1-1 Oil Radiator, June 29, 2016
- CR-PLP-2016-03005, Bird's Nests on Startup Transformers 1-1 and 1-3, June 29, 2016
- CR-PLP-2016-03025, Discharge Piping on P-45B, North Turbine Building Sump Pump Blocked Approximately 50-60% in a Sand-Like Aggregate, June 30, 2016
- DBD-6.02, Design Basis Document for 345 kV Switchyard, Revision 5
- EC Reply 63624, Startup Transformer 1-2 Cables to Bus 1C and Bus 1D: Cable Shield Configuration, Revision 0
- EN-FAP-EP-010, Severe Weather Response, Revision 3
- SOP-30, Station Power, Revision 81
- SOP-32, 345 kV Switchyard, Revision 38
- WO 419349, V-21H; Dampers are Not Closing When Fan Cycles Off
- WO 424073, V-21K; Making Bearing Failure Noise

- WO 441290, Startup Transformer 1–3; Troubleshoot the Sudden Pressure Relay Actuation
- WO 5261903, Warm Weather Checklist
- WO 52633991, Annual Assessment of Grid Conditions
- WO 52661376, Diver Inspections/Cleaning of Intake Bay

1R04 Equipment Alignment

- Admin 1.01, Material Condition Standards and Housekeeping Responsibilities, Revision 28
- Admin 4.02, Control of Equipment, Revision 75
- CR–PLP–2015–03993, Found Boric Acid Build-Up on the Packing Gland Area for CV–3071, HPSI Pump P–66A Subcooling Valve, September 19, 2015
- CR–PLP–2015–04002, Found Boric Acid Build-Up on the Packing Gland Area for CV–3070, HPSI Pump P–66B Subcooling Valve, September 19, 2015
- CR–PLP–2015–04488, MV–ES3184, HPSI Pump P–66A Suction Manual Valve, was Difficult to Operate, September 29, 2015
- CR–PLP–2015–05020, Documenting As-Found Condition of the Graphite Pressure Seal for Check Valve, CK–ES3340, HPSI Pump P–66A Mini-Flow Check Valve, October 14, 2015
- CR–PLP–2015–05026, Evidence of Leakage from the Packing Gland of MV–ES103, HPSI Pump P–66B Discharge Recirculation Bypass Valve, October 15, 2015
- CR–PLP–2015–05130, Noticeable Active Leak on CK–ES3340 and CK–ES3339 and Evidence of Boric Acid on Both Check Valves, October 17, 2015
- CR–PLP–2015–05351, Dry White Boric Acid Leak on the Body Flange of CK–ES3183, HPSI Pump P–66A Suction Check Valve, October 27, 2015
- CR–PLP–2016–00469, White Dry Boric Acid Seen at the Inboard Mechanical Seal Area of P–66A, ‘A’ HPSI Pump, January 26, 2016
- CR–PLP–2016–00911, System Engineer Identified White, Dry Boric Acid at the Bonnet to Yoke Flange of CV–3071, HPSI Pump P–66A Subcooling Valve, February 22, 2016
- CR–PLP–2016–00985, CK–ES3340, HPSI Pump P–66A Mini-Flow Check Valve, was Identified to Have an Active Boric Acid leak from the Bonnet Cap, February 25, 2016
- CR–PLP–2016–01502, P–66A, ‘A’ High Pressure Safety Injection Pump, Alignment Found Out of Tolerance per Procedure, March 28, 2016
- CR–PLP–2016–01793, NRC Identified, SOP–15 “Service Water System” Attachment 2 “Checklist CL 15.1” States that MV–SW131, D/G 1–1 SW Outlet, and MV–SW132, D/G 1–2 SW outlet, Should Be Locked Open, April 14, 2016
- CR–PLP–2016–01811, Long Term Scaffold #16–018 Does Not Meet the EN–MA–133 Revision 12, Control of Scaffolding, Horizontal Bracing Requirements for Seismic Scaffolding, April 14, 2016
- EN–MA–133, Control of Scaffolding, Revision 12
- M–203, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 2, Revision 28
- M–204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1A, Revision 44
- M–204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1B, Revision 41
- M–204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1A, Revision 44
- M–204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1, Revision 86
- M–208, Service Water System, Sheet 1A, Revision 65
- M–208, Service Water System, Sheet 1B, Revision 40
- M–213, Service Water Screen Structure and Chlorinator, Revision 96

- SOP-15, Service Water System, Revision 63
- SOP-3, Safety Injection and Shutdown Cooling System, Revision 103
- SOP-4, Containment Spray System, Revision 27

1R05 Fire Protection

- DBD 7.10, NFPA 805 Fire Protection Program, Revision 0
- EA-FPP-03-001, Analysis of Combustible Loading at Palisades Nuclear Plant, Revision 3
- EN-DC-127, Control of Hot Work and Ignition Sources, Revision 15
- EN-DC-161, Control of Combustibles, Revision 13
- FPIP-4, Fire Protection Systems and Fire Protection Equipment, Revision 36
- PLP-RPT-12-0143, Nuclear Safety Capability Assessment Fire Area Analysis Results, Revision 1
- PLP-RPT-12-0145, NFPA 805 Nuclear Safety Performance Criteria - Fire Area Transition, Revision 1
- Pre-Fire Plan 10, East Engineered Safeguards Room, Elevation 570'
- Pre-Fire Plan 16, Component Cooling Water Pump Room, Elevations 590', 607', and 625'
- Pre-Fire Plan 23, Turbine Building, Elevations 607', 612', and 625'
- Pre-Fire Plan 28, West Engineered Safeguards Room, Elevation 570'
- Pre-Fire Plan 9, Screen House/Intake Structure, Elevation 590'

1R11 Licensed Operator Regualification Program

- Admin 4.02, Control of Equipment, Revision 75
- ARP-7, Auxiliary Systems Scheme EK-11 (C-13), Revision 95
- CR-PLP-2016-2287, Use of a Transient Briefing Checklist or Critical Parameters Were Not Used as Required By EN-OP-200 or EN-OP-115-04 During 5/17 E-Plan Drill, May 17, 2016
- EI-3, Communications and Notifications, Revision 32
- EI-6.13, Attachment 1, Protective Action Recommendations for Offsite Populations Flowcharts, Revision 24
- Emergency Action Level Technical Bases Document, Revision 7
- Emergency Planning Drill Scenario, May 17, 2016
- EN-OP-115, Conduct of Operations, Revision 17
- EOP Supplement 1, Pressure/Temperature Limit Curves, Revision 6
- EOP Supplement 12, 'A' Steam Generator SGTR Isolation Checklist, Revision 8
- EOP Supplement 17, 'A' Steam Generator ESDE Isolation Checklist, Revision 7
- EOP Supplement 4, HPSI and LPSI Flow Curves, Revision 6
- EOP Supplement 40, Charging Pump Suction Alignment, Revision 5
- EOP Supplement 45, Spent Fuel Pool Monitoring, Revision 2
- EOP Supplement 5, Checklist for Safeguards Equipment Following Safety Injection Actuation Signal, Revision 7
- EOP Supplement 6, Checksheet for Containment Isolation and CCW Restoration, Revision 8
- EOP-1.0, Standard Post-Trip Actions, Revision 17
- EOP-2.0, Reactor Trip Recovery, Revision 14
- EOP-5.0, Steam Generator Tube Rupture Recovery, Revision 19
- EOP-9.0, Functional Recovery, Revision 23
- GOP-10, Balance of Plant Actions Following a Trip, Revision 23
- SEP Supplement 1, Emergency Action Level Wall Charts, Revision 3
- Site Emergency Plan, Revision 26
- SOP-24, Ventilation and Air Condition System, Revision 69
- SOP-2A, Chemical and Volume Control System, Revision 85

1R12 Maintenance Effectiveness

- AOP-29, Primary Coolant Pump Abnormal Conditions
- CR-PLP-2012-05066, P-50D Lower Oil Reservoir Level was Observed to Step Change, July 14, 2012
- CR-PLP-2012-05990, P-50D Lower Oil Level Indicated 100.4%, August 30, 2012
- CR-PLP-2013-03146, The Emergency Diesel Generator Ventilation System has Exceeded its Maintenance Rule Criterion for Functional Failures of Less Than 2 Functional Failures per 24 Months, July 19, 2013
- CR-PLP-2014-03615, Incorrect Primary Cold Leg Temperature Reading, July 6, 2014
- CR-PLP-2014-03895, The Primary Coolant System has Recorded a Second Functional Failure, July 29, 2014
- CR-PLP-2014-2205, Tracking CR for Maintenance Rule Evaluations of Low Safety Significant Equipment Performance Issues for 2nd Quarter 2014, March 19, 2014
- CR-PLP-2014-3646, Tracking CR for Maintenance Rule Evaluations of Low Safety Significant Equipment Performance Issues for 3rd Quarter 2014, July 9, 2014
- CR-PLP-2014-4736, Tracking CR for Maintenance Rule Evaluations of Low Safety Significant Equipment Performance Issues for 4th Quarter 2014, September 29, 2014
- CR-PLP-2015-01796, D-27, V-24B Gravity Damper, was Not Fully Closed, April 30, 2015
- CR-PLP-2015-03024, V-24A, Diesel Generator Room Supply Fan, was Not Shutting Off and was Running Continually, July 19, 2015
- CR-PLP-2015-03024, V-24A, Diesel Generator Room Supply Fan, Was Not Shutting Off and Running Continually, July 19, 2015
- CR-PLP-2015-03311, Due to Settings of Thermostats, V-24A Remains Cycling to Maintain Room Temperature and V-24B is not Getting Equal Run Time, August 9, 2015
- CR-PLP-2015-03385, Discrepancy Between Field Configuration and Asset Suites for Emergency Diesel Generator Room Ventilation Fan Temperature Switch Setpoints, August 14, 2015
- CR-PLP-2015-03840, Observed Oil Buildup Under Fill Port, September 16, 2015
- CR-PLP-2015-04344, Flexible Conduit Going to TE-0133A is Broken, September 26, 2015
- CR-PLP-2015-05397, It Was Noticed that P-50C Vapor Stage Seal Temperatures Have Risen Approximately Six Degrees in the Last Five Days, October 29, 2015
- CR-PLP-2015-05566, Temperature in the 1-1 Diesel Generator Room is 15 Degrees Cooler than Previous Shift Reading, November 8, 2015
- CR-PLP-2015-05632, Received Alarm EK-0928, Primary Coolant Pump P-50D Oil level High-Low, Unexpectedly, November 12, 2015
- CR-PLP-2015-05747, Lower Oil Level in P-50A Motor is Showing a Rising Trend, November 19, 2015
- CR-PLP-2015-05893, Received Alarm EK-0925, Primary Coolant Pump P-50A Oil Level High-Low, Unexpectedly, November 30, 2015
- CR-PLP-2015-06106, Operability Evaluation did Not Require Any Compensatory Actions put in Place to Ensure that V-24C Remained Available for Service When D-28 Gravity Damper had Two Louvers Not Connected to Alignment Shaft, December 20, 2015
- CR-PLP-2015-06192, Work Request to Ensure Level in 'D' Primary Coolant Pump Lower Oil Reservoir Gets Adjusted, December 16, 2015
- CR-PLP-2015-06210, P-50C Temperature Element, TE-0143A, is Trending Upwards, December 16, 2015
- CR-PLP-2016-00294, Diesel Generator 1-1 Room Ventilation Fan V-24A Found to be Tripped Although Breakers Showed No Indication, January 15, 2016
- CR-PLP-2016-00299, Old Breaker 52-2535 is in the Tripped Position and is Unable to be Reset or Closed, January 15, 2016

- CR-PLP-2016-00314, Received EK-0925, P-50A Oil level High-Low, January 18, 2016
- CR-PLP-2016-00883, No Light Indication on Breaker 42-2535, Control Switch for V-24A, Diesel Generator Supply Fan, February 19, 2016
- CR-PLP-2016-00884, CR Written to Address the Operability of K-6A, Emergency Diesel Generator 1-1, Due to V-24A, 1-1 Diesel Generator Room Supply Fan, Being Declared Non-Functional, February 19, 2016
- CR-PLP-2016-01052, The Control Room Received EK-0907, P-50A High Temperature Overload Alarm, February 29, 2016
- CR-PLP-2016-01095, VAS-DGV System has Exceeded its Performance Criteria of Less than Two Functional Failures in 24 Months, March 3, 2016
- CR-PLP-2016-01388, Narrative Log Entry had Not Been Made on January 15, 2016 to Document that V-24A was Non-Functional, February 19, 2016
- CR-PLP-2016-01392, Work Request to Support Installation and Removal of a Wavebook to Monitor the Operation of DG Ventilation Fan, V-24A, March 21, 2016
- CR-PLP-2016-01633, Primary Coolant Pump P-50A Motor Lower Oil Level Trends Indicate a Loss of Inventory, April 4, 2016
- CR-PLP-2016-01834, While Trending the Lower Oil Level of Primary Coolant Pump P-50A the PCS Systems Engineer Determined that the Lower Oil Level of Primary Coolant Pump P-50C is Also Declining, April 18, 2016
- CR-PLP-2016-01933, Primary Coolant Pump Controlled Bleedoff Header Pressure Took a Step Change From 55 to 60 psig, April 25, 2016
- CR-PLP-2016-02102, Received Alarm EK-0943, P-50A Seal Leakage Flow Low, Unexpectedly and Then Cleared, May 6, 2016
- CR-PLP-2016-02139, Work Request to Install a Replacement Temperature Switch for TS-1828 for Ventilation Fan V-24A, May 9, 2016
- CR-PLP-2016-02195, Work Request for the Replacement of All Diesel Generator Room Fan Temperature Switches, May 11, 2016
- CR-PLP-2016-02424, V-24A and B, 1-1 Diesel Generator Ventilation Fans, Standby Fan Running and Auto Fan Not Running, May 26, 2016
- CR-PLP-2016-02452, Received Numerous EK-0943, P-50A Seal Leakage Low Flow Alarms, May 26, 2016
- CR-PLP-2016-02462, Received Alarm EK-0955, Primary Coolant Pump P-50A Seal Heat Exchanger High Temperature and Leak High Flow, Unexpectedly, May 28, 2016
- CR-PLP-2016-02514, Standby Fan in Each Diesel Generator Room Supply Fans Were Running While the Auto Fan was Off, June 1, 2016
- CR-PLP-2016-02517, Work Orders to Correct the Lower Oil Reservoir Problems are Not Coded as Key System Health, June 1, 2016
- CR-PLP-2016-02594, The Requirements of EN-DC-206, Maintenance Rule (a)(1) Process, Were Not Met, June 6, 2016
- CR-PLP-2016-02718, During Bench Test of TS-1844 it was Discovered That the Contacts Were Not Responding Properly, June 14, 2016
- CR-PLP-2016-03110, The NRC Resident Inspector Asked a Question of Engineering Regarding the Component Classification of LT-0147B, July 6, 2016
- EA-EC9600-01, Functionality of Electrical Equipment in the Emergency Diesel Room at an Elevated Temperature of 121 Degrees Fahrenheit, Revision 1
- EC 46628, Equivalent Replacement for FT-0133B and FT-0143B, Revision 0
- EC 62482, LTVR-0901; P-50A Lower Oil Level Upper Alarm limit, Temporary Setpoint Upper Limit Change, Revision 0
- EC Reply 51256, Margin in Maximum Diesel Generator Room Temperature, Revision 0
- EC-64026, Emergency Diesel Generator Ventilation Fan Temperature Switch Replacement, Revision 0

- EC-64633, P-50A; Change Primary Coolant Pump Seal Controlled Bleedoff Low Flow Alarm
- EN-DC-153, Preventive Maintenance Component Classification, Revision 14
- EN-DC-203, Maintenance Rule Program, Revision 3
- EN-DC-204, Maintenance Rule Scope and Basis, Revision 3
- EN-DC-205, Maintenance Rule Monitoring, Revision 5
- EN-DC-206, Maintenance Rule (a)(1) Process, Revision 3
- EN-DC-207, Maintenance Rule Periodic Assessment, Revision 3
- M-209, Component Cooling System, Sheet 1, Revision 68
- M-214, Lube Oil, Fuel Oil and Diesel Generator Systems, Sheet 5, Revision 2
- Maintenance Rule (a)(1) Action Plan Emergency Diesel Generator Room Fan System, Revision 4
- Palisades Maintenance Rule Periodic Assessment for Period from July 1, 2011 to February 28, 2013
- Palisades Maintenance Rule Periodic Assessment for Period from March 1, 2013 to December 31, 2014
- Plant Health Committee Meeting Package, May 16, 2016
- PLP-RPT-12-00026, EGAD-EP-10: Palisades Maintenance Rule Scoping Document, Revision 0
- SOP-22, Emergency Diesel Generators, Revision 68
- System Heal Report for Diesel Generator Room Heating, Ventilation and Air Conditioning, 4th Quarter 2015
- System Health Report for Diesel Generator Room Heating, Ventilation and Air Conditioning, 1st Quarter 2016
- System Health Report for Primary Coolant System, 1st Quarter 2016
- V-24, Emergency Diesel Generator Ventilation Fan Motor Replacements Long Range Plan
- WO 325734, P-50D; Lower Oil Level Transmitters Reads 100.4%
- WO 334982, P-50A; 'A' Primary Coolant Pump, Lower Oil Reservoir Low
- WO 362356, V-24C; D-28 Damper Needs Repair
- WO 369958, TS-1827; Replace Diesel Generator Room Ventilation Fan, V-24A, Standby Temperature Switch
- WO 369973, TS-1844; Replace Diesel Generator Room Ventilation Fan V-24B, Automatic Temperature Switch
- WO 369976, TS-1822; Replace Diesel Generator Room Ventilation Fan, V-24C, Automatic Temperature Switch
- WO 369978, TS-1843; Replace Diesel Generator Room Ventilation Fan V-24B, Standby Temperature Switch
- WO 369980, TS-1821; Replace Diesel Generator Room Ventilation Fan, V-24C, Standby Temperature Switch
- WO 420528, TIS-8954; Indication Does Not Agree with Local Outlet Temperature Indication
- WO 422437, V-24A; Runs Continuously Without Shutting Off
- WO 426229, P-50A; Leak from Lower Bearing Gasket
- WO 426256, TE-0133A; Broken Flex and Loose Terminal Block
- WO 430823, TE-0143A; P-50C Vapor Stage Seal Temperature Abnormal Trend
- WO 431817, LTVR-0901; Oil Level in P-50A Showing Rise in Level – Troubleshoot
- WO 433637, EMA-2204; Remove Oil to Clear High-Low Alarm and Sample for Water
- WO 435281, V-24A; 52-2535 Breaker, 1-1 Diesel Generator Ventilation Fan, Tripped
- WO 438690, 52-2535; V-24A Breaker Found Tripped Free
- WO 445577, REC-C11-02 (CH 08); Change Set Points per TM EC-64633
- WO 445715, TS-1828; V-24A Temperature Switch, Replace per EC-64026
- WO 445719, TS-1820; V-24D Temperature Switch, Replace per EC-64026
- WO 445719, TS-1827; V-24A Temperature Switch, Replace per EC-64026

- WO 445721, TS-1821; V-24C Temperature Switch, Replace per EC-64026
- WO 445724, TS-1823; V-24D Temperature Switch, Replace per EC-64026
- WO 445726, TS-1843; V-24B Temperature Switch, Replace per EC-64026
- WO 445727, TS-1844; V-24B Temperature Switch, Replace per EC-64026
- WO 446678, TS-1822; V-24C Temperature Switch, Replace per EC-64026
- WO 52435949, P-50D Oil Level Transmitters
- WO 52446796, D-27; Replace Backdraft Damper
- WO 52562413, P-50A; Oil Leak Inspection
- WT-WTPLP-2014-00295, This Work Task Will Track Outstanding Maintenance Rule (a)(1) Monitoring Activities from CR-PLP-2013-03146 and Track Final Maintenance Rule (a)(1) Action Plan Processing, October 28, 2014

1R13 Maintenance Risk Assessments and Emergent Work Control

- Admin 4.02, Control of Equipment, Revision 75
- Admin. 4.02, Attachment 3, Risk Management and Risk Monitoring, Revision 75
- ARP-5, Primary Coolant Pump Steam Generator and Rod Drives Scheme EK-09 (C-12), Revision 104
- CR-PLP-2012-00784, Primary Coolant Pump P-50B Seal Flow Transmitter FT-0133B Indications are Degraded and Declining, February 1, 2012
- CR-PLP-2012-05018, Primary Coolant Pump P-50D Seal Leak-off Flow is Low at 0.49 gallons Per Minute, July 11, 2012
- CR-PLP-2016-01643, Observed CV-0608, Heater Drain Pump Discharge, to be 60% Open and Not be Moving, April 5, 2016
- CR-PLP-2016-01656, Initiated to Track the Installation of an Emergency Temporary Modification for CV-0608, Moisture Separator Drain Tank T-5 Level Control Valve, April 5, 2016
- CR-PLP-2016-01671, Due to Plant Downpower for Repairs to CV-0608, Operations is Requesting Engineering/PRA Perform a Risk Assessment/Analysis and Align with Operations Management on any Needed Defense In-Depth Measures that may Need to be Implemented for the Duration of the Condition, April 6, 2016
- CR-PLP-2016-01673, During Repairs to CV-0608, Heater Drain Pump Discharge, Rod End Bearing was Found Damaged, April 7, 2016
- CR-PLP-2016-02102, Received Alarm EK-0943, Primary Coolant Pump P-50A Seal Leakage Flow Low, May 6, 2016
- CR-PLP-2016-02289, Received Alarm EK-0943, Primary Coolant Pump P-50A Seal Leakage Flow Low, May 17, 2016
- CR-PLP-2016-02361, The P-55B Charging Pump Maintenance Window During WW1620 Unexpectedly Exceeded 60 Hours Causing Fire Risk Turning Yellow, May 22, 2016
- CR-PLP-2016-02409, Rescheduled Containment Spray Header Pressure Indicator Replacement and ESSO-1, Containment Spray Header Fill, to Prevent Conflict with Scheduled P-7A Service Water Pump Outage, May 25, 2016
- CR-PLP-2016-02410, Mechanical Superintendent Identified a Seven Hour Gap Between Two Mechanical Tasks That was Not in the Schedule at the End of the T-2 Week, May 25, 2016
- DBD-1.04, Chemical and Volume Control System, Revision 7
- EC 34629, Change Low Alarm Setpoint for FT-0133B, P-50B Seal Flow, to 0.3 Gallons Per Minute, Revision 0
- EC 38730, Change Low Alarm Setpoint for FT-0143B, P-50D Seal Flow, to 0.4 Gallons Per Minute, Revision 0

- EC 64633, EK-0943: Change 'A' Primary Coolant Pump Seal Controlled Bleed-Off Low Flow Alarm
- EN-DC-136, Temporary Modifications, Revision 12
- EN-OP-119, Protected Equipment Postings, Revision 7
- EN-WM-104, On-Line Risk Assessment, Revision 12
- M-202, Chemical and Volume Control System, Sheet 1, Revision 77
- M-206, Extraction, Heater Vents, and Drain Systems, Sheet 1, Revision 52
- M-207, Feedwater & Condensate System, Sheet 1C, Revision 53
- M-209, Component Cooling Water System, Sheet 1, Revision 68
- M-210, Radioactive Waste Treatment System - Clean, Sheet 2, Revision 40
- Operations Log, April 5, 2016
- Operations Logs, June 3, 2016
- Operations Logs, May 18-20, 2016
- Risk Achievement Worth Calculations for June 3, 2016
- Risk Achievement Worth Calculations for May 18-20, 2016
- SOP-10, Extraction and Heater Drain System, Revision 38
- SOP-22, Emergency Diesel Generators, Revision 68
- VEN-M1ED, Instrumentation Seal System Parameters Circulating Pump, Sheet 802, Revision 76
- WO 261642, FT-0133B; P-50B Controlled Bleed-Off Flow Transmitter Noisy
- WO 323433, FT-0143B; P-50D Seal Flow Transmitter Does Not Function Correctly
- WO 327635, FE-0143B; P-50D Controlled Bleed-Off Flow Element Sticks
- WO 443081, CV-0608, Moisture Separator Drain Tank T-5 Level Control, Install Block
- WO 445577, REE-C11-02 (Ch. 08); P-50A Change Setpoints Per Temporary Modification EC-64633
- Work Schedule for June 3, 2016
- Work Week Schedule 1620: May 16-22, 2016

1R15 Operability Determinations and Functionality Assessments

- Basis Document for QO-6, Cold Shutdown Valve Test Procedure (Includes Containment Isolation Valves), Revision 14
- C-626Q, Auxiliary Building Tornado Protection for Control Panel Steam Dump Valve, Revision 6
- CR-PLP-2015-01181, During MO-7A-2, K-6B, Emergency Diesel Generator 1-2, Failed to Start, March 18, 2015
- CR-PLP-2015-03845, An Existing 12" Pipe Sleeve Type Penetration Noted Through the North-South Concrete Wall that Separates Room 807 from Auxiliary Building Room 338, September 16, 2015
- CR-PLP-2015-05931, During the Destructive Analysis of ASM-2A, Diesel Generator Air Start Motor, it was Identified that the Stop Nut Pin Hardness was Approximately 17.5 HRC, December 1, 2015
- CR-PLP-2016-00573, E-22A, Diesel Generator 1-1 Jacket Water Cooler, Eddy Current Inspection Identified Tubes for Plugging, February 1, 2016
- CR-PLP-2016-01287, Documenting an Existing Unsealed 12" Pipe Sleeve Type Penetration Through the North-South Wall that Separates Room 807 from Auxiliary Building Room 338, March 14, 2016
- CR-PLP-2016-01431, During the 10 Year IST Program Update, 24 Valve Stroke Timing Tests were Added, March 23, 2016
- CR-PLP-2016-01821, While Touring the 1-2 Emergency Diesel Generator Room, Noted that the Air Line Tubing Under the Generator is Worn in Some Spots, April 17, 2016

- CR-PLP-2016-01831, It was Identified that the Spring on ASM-1B Was in Two Pieces that Did Not Add Up to the Length of the Intact Spring Removed from the Other Air Start Motor, April 18, 2016
- CR-PLP-2016-02056, Two Deficiencies Were Noted Regarding the Stop Nut Pin from ASM-1A, March 3, 2016
- CR-PLP-2016-02158, During an Inservice Test (IST) Review of Technical Specification Surveillance Procedure QO-5, Valve Test Procedure (Includes Containment Isolation Valves), it was Identified that the Stroke Close Time for CV-3042, Safety Injection Tank T-82A Pressure Control, is Near the Upper Limit of its Acceptable Stroke Range, May 9, 2016
- CR-PLP-2016-02433, Failure to Properly Observe Safety-Related Solenoid Air Valve Operation in Accordance with Commitment CMT922001980 for Compliance with Generic Letter 91-15, May 26, 2016
- CR-PLP-2016-02488, While Discussing the Content of the Operational Decision-Making Issue, It was Identified that the "Actions if Trigger Point(s) Exceeded" Section was not Aligned with the "Trigger Points(s)" Section, May 31, 2016
- CR-PLP-2016-02565, During Performance of WO#445279 it was Noted that the Bendix Gear was Fully Extended and Would Not Retract, June 3, 2016
- CR-PLP-2016-02709, During Eddy Current Tube Inspection on Emergency Diesel Generator 1-1 Jacket Water Heat Exchanger E-22A, the Highest Degradation for an Unplugged Tube Was Found Not to Have Sufficient Life to Last to the Next Inspection, June 13, 2016
- CR-PLP-2016-02888, Operability Evaluation Performed Under CR-PLP-2016-02709 Determined that E-22B 1-2 Emergency Diesel Generator Jacket Water Cooler May Have Similar Degradation, June 23, 2016
- DBD-1.09, Design Basis Document for Main Steam System, Revision 4
- DBD-7.03, Plant Protection Against High Energy Line Breaks, Revision 2
- E48-SV-01, ASCO Model 206-381 and NP 8320 Solenoid Valves, Revision 17
- EA-EC28106-04, Diesel Generator Jacket Water Cooler Tube Plugging Calculation, Revision 1
- EC 63912, GOTHIC Evaluation of 625' Elevation Tornado Enclosure Environment Post CCW Room HELB, Revision 0
- EC 64669, Safety Analysis Required Closure Time of Safety Injection Tank Pressure Control Valves, Revision 0
- EN-DC-316, Heat Exchanger Performance and Condition Monitoring, Revision 7
- EN-OP-104, Operability Determination Process, Revision 10
- M-203, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1, Revision 48
- Night and Standing Order Log for Wednesday, May 11, 2016
- PLP-RPT-16-00007, Final Eddy Current Inspection Report, 1-1 Emergency Diesel Generator, Revision 0
- QO-1, Safety Injection Actuation System Surveillance Test, Revision 68
- QO-2, Recirculation Actuation System, Revision 46
- QO-5, Valve Test Procedure (Includes Containment Isolation Valves), Revision 97
- QO-6, Cold Shutdown Valve Test Procedure (Includes Containment Isolation Valves), Revision 49
- RO-127, Auxiliary Feedwater System 18-Month Test Procedure, Revision 14
- SEP-HX-PLP-001, Heat Exchanger Condition Assessment Program, Revision 2
- SEP-PLP-IST-101, Inservice Testing of Plant Valves, Revision 3
- WO 329290, E-22A; 1-1 Diesel Generator Jacket Water Cooler Replacement
- WO 346921, E-22B; 1-2 Diesel Generator Jacket Water Cooler Replacement
- WO 415439, E-22A; 1-1 Diesel Generator Replace Jacket Water Cooler
- WO 415440, E-22B; 1-2 Diesel Generator Replace Jacket Water Cooler

- WO 52590437, E-22A; 1-1 Diesel Generator Jacket Water Cooler

1R18 Plant Modifications

- CR-PLP-2016-00883, Found No Light Indication on Breaker 42-2535 Control Switch for V-24A, 1-1 Diesel Generator Supply Fan, February 19, 2016
- CR-PLP-2016-02139, Engineering Equivalent Change 64026 Requires a Work Request to Install a Replacement Temperature Switch for TS-1828, 1-1 DG Ventilation Fan V-24A, May 9, 2016
- CR-PLP-2016-02195, This CR is Written to Generate a Work Request for the Replacement of Each Diesel Generator Room Fan Temperature Switch, May 11, 2016
- DBD-1.07, Design Basis Document for Auxiliary Building HVAC Systems, Revision 6
- E-280, Schematic Diagram for Diesel Generator Boiler Rooms and Auxiliary Building Heating and Ventilation, Sheet 1A, Revision 0
- EC 63408, Breaker 52-2535 Troubleshooting Wavebook Recommendations, Revision 0
- EC 63643, Monitor V-24A Fan Control Circuit Operation and Motor Current, Revision 0
- EN-DC-136, Temporary Modifications, Revision 12
- Limiting Condition for Operations Annex Log, Tuesday, April 5, 2016
- Operations Log, Friday, March 4, 2016
- Process Applicability Determination 16-0056, Temporary Modification for Breaker 52-2535, Revision 0
- WO 438690-05, 52-2535; 1-1 Diesel Generator Supply Fan, V-24A, Breaker Found Tripped Free

1R19 Post Maintenance Testing

- Admin 1.04, Attachment 3, Escape Containment Airlock Operation, Revision 7
- Basis Document for QO-16, Containment Spray Pumps Surveillance Test, Revision 16
- CR-PLP-2010-02351, Received Alarm EK-0601A and EK-0605A Unexpectedly, June 13, 2010
- CR-PLP-2014-01099, P-54C, 'C' Containment Spray Pump, Would Not Start During RT-8C, Engineered Safeguards System - Left Channel, February 5, 2014
- CR-PLP-2015-05100, While Test Starting P-54C, Containment Spray Pump, Received Alarm EK-1161, Containment Spray Pumps P-54A, P-54B, P-54C Trip, October 17, 2015
- CR-PLP-2015-1712, The PMT for WO #52539433 Did Not Pass, April 23, 2015
- CR-PLP-2016-01647, Unable to Satisfy Step 5.3.1 of Work Instructions During Oil Change on P-52A, 'A' Component Cooling Water Pump, April 5, 2016
- CR-PLP-2016-01862, During Post Maintenance Inspection of Elastomer Flex Connection, We Noted the Lower Flange was Missing One Bolt and Another was Loose, April 19, 2016
- CR-PLP-2016-01863, Door-16, Equipment Room Missile Shield/Radiation Shield, was Opened at Approximately 0800 on April 19, 2016 Without the Proper Control Room Notification, April 19, 2016
- CR-PLP-2016-01864, While Performing EN-MA-141, General Condition Check-Electrical, on PO-1746 for Damper D-14 Discovered the Flex Conduit Fitting Clamp to be Broken, April 20, 2016
- CR-PLP-2016-01865, While Performing EN-MA-141, General Condition Check-Electrical, of PO-1746 Motor Operator for D-14, Air Filter VF-26 Outside Air Damper, 3 Wire Terminations were Discovered Loose, April 20, 2016
- CR-PLP-2016-01885, While Performing Disassembly Work on VC-10, the Crankshaft Mechanical Seal Discovered the Inner Edge of the Carbon Ring Seal was Exhibiting Highly Degraded Wear/Erosion, April 20, 2016

- CR-PLP-2016-01886, During the Heat Exchanger Visual Inspection of VC-10, Control Room HVAC Refrigeration Condensing Unit, it was Discovered that the Critical Service Water Piping Had Corrosion, April 20, 2016
- CR-PLP-2016-01931, While Performing Maintenance to Repair a Shaft Seal Oil leak on VC-10, the Mechanical Maintenance Workers Noticed a Lack of Needed Guidance in the Work Package, April 25, 2016
- CR-PLP-2016-01977, During Performance of RO-32-50, Escape Air Lock Local Leak Rate Test, it Was Discovered that the Outer Equalizing Valve Was Not Fully Closed, April 28, 2016
- CR-PLP-2016-01977, During RO-32-50, Escape Air Lock (MZ-50) Local Leak Rate Test, It was Discovered that the Outer Equalizing Valve was Not Fully Closed, April 28, 2016
- CR-PLP-2016-02060, P-54C Immediately Tripped and Received Alarm EK-1161, Containment Spray Pump Trip, May 3, 2016
- CR-PLP-2016-02112, The CR is to Create a WR to Start P-54C Containment Spray Pump from the Control Room, May 6, 2016
- CR-PLP-2016-02113, This CR is to Create a WR to Replace the 152-114, Containment Spray Pump P-54C, Breaker Cubicle Secondary Disconnect Assembly, May 6, 2016
- CR-PLP-2016-02405, P-7A Service Water Pump Polarization Index Test was at the Minimum of 1.0 and was a Red Result, May 25, 2016
- CR-PLP-2016-02412, I&C Technicians did Not Wear Protective Gloves While Racking in the Power Supply Drawer for Reactor Protection System Channel 'B', Nor When They Installed the Mounting Hardware, May 25, 2016
- CR-PLP-2016-02413, During Performance of WI-SWS-M-03, the Crew Suspected Pump Packing was Holding Up the Pump Shaft from Lowering Completely, May 25, 2016
- CR-PLP-2016-02423, The CSI-2130 Vibration Analyzer Failed While Taking Readings, May 26, 2016
- CR-PLP-2016-02435, After Cutting the Coupling Free From the Pump, Thread Damage was Observed on Both the Pump Packing Shaft and Motor Shaft, May 26, 2016
- CR-PLP-2016-02436, Step Missing in the Work Instruction for Replacement of +/- 15 Volt Bistable Trip Unit Power Supply Boards for the Channel 'B' Reactor Protection System., May 26, 2016
- CR-PLP-2016-02564, During Performance of an SOP-22 Test Start of the 1-2 Emergency Diesel Generator, the Dragar X-AM Multi-Gas Monitor Alarmed for NO2, June 3, 2016
- CR-PLP-2016-02565, ASM-1B, 1-1 Diesel Generator 'B' Air Start Motor Replacement, Noted Upon Removal of the Existing Motor that the Bendix Gear was Fully Extended and Would Not Retract as Designed, June 3, 2016
- CR-PLP-2016-02570, During Performance of MO-7A-1, Emergency Diesel Generator 1-1 Monthly Surveillance Test, the Temperature Readings on Cylinder 4R and 8L were Greater than 150F, June 3, 2016
- CR-PLP-2016-1866, Upon Removing the Relief Valve the Suction Strainer was Found to be Damaged, April 20, 2016
- CR-PLP-2016-1867, The South Side Oil Check Valve was Found to be Unsatisfactory, April 20, 2016
- CR-PLP-2016-1868, Refrigerant in the Flex Hose from RV-1686, April 22, 2016
- DBD-2.03, Design Basis Document for Containment Spray System, Revision 9
- E-129, Schematic Diagram for Stored Energy Operated Circuit Breaker 152-114, Sheet 25, Revision 0
- E-251, Schematic Diagram for Containment Spray Pump P-54C, Sheet 3, Revision 2
- E-251, Schematic Diagram for Containment Spray Pump P-54C, Sheet 3A, Revision 1
- EC 64914, Clarifying Polarization Index Results on 'A' Service Water Pump and Impact on Operability, Revision 0
- EN-DC-205, Maintenance Rule Monitoring, Revision 5

- EN-MA-125, Troubleshooting Control of Maintenance Activities, Revision 18
- EN-WM-102, Work Implementation and Closeout, Revision 9
- EN-WM-105, Planning, Revision 16
- EN-WM-107, Post-Maintenance Testing, Revision 5
- EPS-M-14A, Diesel Generator Every Cycle Maintenance, Revision 5
- M-0001Q, Power Supply Distribution Assembly, Sheet 4000(1), Revision 7
- M-0001Q, Reactor Protective System Functional Diagram, Sheet 113, Revision F
- M-214, Lube Oil, Fuel Oil, and Diesel Generator Auxiliary Systems, Sheet 1, Revision 79
- MO-7A-1, Emergency Diesel Generator 1-1 Monthly Surveillance Test, Revision 94
- QI-2A, Thermal Margin/Low Pressure Trip Units, Revision 11
- QI-9, Reactor Protective Trip Units, Revision 19
- QO-14, Service Water Pumps Surveillance Test, Revision 40
- QO-15, Component Cooling Water Pumps Surveillance Test, Revision 35
- RO-32-50, Local Leak Rate Test Procedure for Escape Air Lock, Revision 8
- SHO-1, Operator's Shift Items Modes 1, 2, 3, and 4, Revision 73
- SOP-22, Emergency Diesel Generators, Revision 68
- SOP-30, Station Power, Revision 80
- VTD-2725-0006, Siemens Energy and Automation Including Installation, Operation, and Maintenance Instructions for Vacuum Circuit Breakers Type FSV and MSV
- WI-SWS-M-03, Service Water Pump P-7A Removal, Inspection, and Reinstallation, Revision 9
- WO 254608, RPS-AW-8; Replacement of RPS Plug-in Power Supply Boards
- WO 254610, RPS-BW8; Replacement of Reactor Protection System Plug-in Power Supply Boards, May 24, 2016
- WO 254611, RPS-CW8; Replacement of Reactor Protection System Plug-in Power Supply Boards
- WO 254612, RPS-DW8; Replacement of Reactor Protection System Plug-in Power Supply Boards
- WO 369035, VC-10 Refrigerant Leaks and Shaft Seal Oil Leak
- WO 380572, RPS-AW8; Power Supply Voltage Checks
- WO 444684, MZ-50, Escape Air Lock, Outer Door Equalizing Valve is Stuck Open
- WO 445278, ASM-1A (K-6A, 1-1 Diesel Generator Air Start Motor) Replacement
- WO 445279, ASM-1B (K-6A, 1-1 Diesel Generator Air Start Motor) Replacement
- WO 445280, ASM-2A (K-6B, 1-2 Diesel Generator Air Start Motor) Replacement
- WO 445281, ASM-2B (K-6B, 1-2 Diesel Generator Air Start Motor) Replacement
- WO 447526, 152-114; Containment Spray Pump P-54C Breaker, Troubleshoot Cause of Non-Closure
- WO 52435645, Load Test Reactor Protection System 28V DC Auctioneered Power Supplies
- WO 52487834, RV-1686; Inspect/Repair/Set Point Testing
- WO 52575779, Preventive Maintenance for Breaker 152-114
- WO 52577530, MZ-50; Grease and Inspect Seals/Doors/Valves
- WO 52591772, VC-10; Condenser Overhaul Post Maintenance
- WO 52598935-01, 152-114; Protective Relay Functional Testing
- WO 52665637, Perform MO-33B for 'B' Control Room Heating, Ventilation and Air Conditioning
- WO 52670148, P-52A, 'A' Component Cooling Water Pump, Oil Change
- WO-52619973, P-7A; Replacement of Packing Sleeve

1R22 Surveillance Testing

- Basis Document for QO-20, Low Pressure Safety Injection Pump Surveillance Test, Revision 18
- Basis Document for QO-21, Auxiliary Feedwater Pump Surveillance Test, Revision 15
- Basis Document for RO-147, Comprehensive Pump Test Procedure High Pressure Safety Injection Pumps P-66 and P-66B, Revision 0
- CR-PLP-2016-01747, During RO-147B There Was Approximately 1 Drop per Minute Leak-by Noted on MV-ES3291, 'B' HPSI Pump Casing Vent, April 12, 2016
- CR-PLP-2016-02062, NRC-Identified Valves Associated with FI-0736A are Missing Valve Tag Labels, May 3, 2016
- CR-PLP-2016-02675, During Check Valve Testing on Low Pressure Safety Injection Pump Recirculation Line it was Discovered That the Check Valve Would Not Be Properly Tested, June 9, 2016
- M-201, Primary Coolant System, Sheet 1, Revision 90
- M-203, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1, Revision 48
- M-203, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 2, Revision 28
- M-204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1, Revision 86
- M-204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1A, Revision 44
- M-204, Safety Injection, Containment Spray, and Shutdown Cooling System, Sheet 1B, Revision 41
- M-207, Auxiliary Feedwater System, Sheet 2, Revision 41
- M-207, Feedwater and Condensate System, Sheet 1, Revision 91
- QI-39, Auxiliary Feedwater Actuation System Logic Test, Revision 7
- QO-20, Low Pressure Safety Injection Pump Surveillance Test, Revision 22
- QO-21, Auxiliary Feedwater Pump Surveillance Test, Revision 46
- RO-147B, High Pressure Safety Injection In-Service Comprehensive Pump Test, Revision 9
- SEP-PLP-IST-102, Inservice Testing of Selected Safety-Related pumps, Revision 2

1EP6 Drill Evaluation

- CR-PLP-2016-01795, During EP Drill, State of Michigan Expressed Frustration with Information Received that Should Allow them to Project a Dose for Surrounding Off-Site Areas, April 14, 2016
- CR-PLP-2016-01797, During EP Drill, State of Michigan Health Physics Personnel Expressed Frustration with the PAR Recommendation Received from the EOF Emergency Director, April 14, 2016
- CR-PLP-2016-01800, While Performing Controller Activities at the State of Michigan Off-Site Facility on April 13, 2016, the Communication Systems Did Not Function at Optimum Initially, April 14, 2016
- CR-PLP-2016-01801, Issues Discovered During Emergency Planning Drill on April 13, 2016, April 14, 2016
- CR-PLP-2016-01845, During the 2016 2nd Quarter Emergency Preparedness Drill the Incorrect Revision of a Procedure was Discovered in the Emergency Offsite Facility Log Keeper Book, April 19, 2016
- CR-PLP-2016-01875, Critique Forms were Being Filled out Before Drill was Complete, April 18, 2016

- CR-PLP-2016-01895, Objective J.6, Potassium Iodide (KI), in EN-EP-308, Emergency Planning Critiques, Attachment 9.3, Typical Critique Performance Objectives And Evaluation Criteria, Needs Improvement, April 21, 2016
- CR-PLP-2016-01896, Objective K.1, Emergency Worker Exposure Control, In EN-EP-308, Typical Critique Performance Objectives and Evaluation Criteria, Typical Critique Performance Objectives And Evaluation Criteria, Needs Improvement, April 21, 2016
- CR-PLP-2016-01899, During an EP Drill, an Operator Signed into the Radiological Controlled Area Using the Radiation Work Permit Designated for Actual Emergencies Instead of the One Designated for Drills, April 21, 2016
- CR-PLP-2016-02355, Objective K.4, Area Contamination Controls, Needs Improvement, May 20, 2016
- CR-PLP-2016-02371, Items for Improvement Were Observed During the WANO Evaluated Emergency Planning Exercise, May 23, 2016
- CR-PLP-2016-0897, During an EP Drill, an Administrative Issue Caused the Appearance that an Event Notification had Been Communicated Before it was Approved by the Emergency Director When it Had Not, April 21, 2016
- EI-3, Communications and Notifications, Revision 32
- EI-6.13, Attachment 1, Protective Action Recommendations for Offsite Populations Flowcharts, Revision 24
- Emergency Action Level Technical Bases Document, Revision 7
- Emergency Planning Drill Scenario, May 17, 2016
- EN-EP-610, Technical Support Center Operations, Revision 2
- EN-EP-611, Operations Support Center Operations, Revision 2
- EOP Supplement 12, 'A' Steam Generator Steam Generator Tube Rupture Isolation Checklist, Revision 8
- EOP Supplement 17, 'A' Steam Generator Excessive Steam Demand Event Isolation Checklist, Revision 7
- EOP-1.0, Standard Post-Trip Actions, Revision 17
- EOP-5.0, Steam Generator Tube Rupture Recovery, Revision 19
- EOP-9.0, Functional Recovery, Revision 23
- SEP Supplement 1, Emergency Action Level Wall Charts, Revision 3
- Site Emergency Plan, Revision 26

2RS7 Radiological Environmental Monitoring Program

- 2015 Radiological Environmental Operating Report, May 12, 2016
- CH 6.10, Radiological Environmental Monitoring Program, Revision 16
- CH 6.41, Land Use Census, Revision 9
- COP-35, Ground Water Monitoring Program, Revision 05
- CR-PLP-2015-01359, Internal Video Inspections of Buried Pipes for Indications of Potential Leakage, April 1, 2015
- CR-PLP-2015-06067, Blueberry Sample Not Obtained, September 8, 2015
- CR-PLP-2016-01337, Additional Groundwater Monitoring Wells, March 17, 2016
- CR-PLP-2016-01560, Direct Radiation Outer Ring, March 31, 2016
- CR-PLP-2016-01564, Gamma Isotopic of Environmental Airborne Samples, March 31, 2016
- CR-PLP-2016-01781, Upward Trends in Tritium Levels for TW-15 and TW-1, April 14, 2016
- CR-PLP-2016-01783, 2016 Offsite Dose Calculations Using the 2015 Land Use Census Data
- EN-CY-111, Radiological Groundwater Monitoring Program, Revision 6
- Gas Meter Test and Repair, Various Dates
- Offsite Dose Calculation Manual, Appendix A, Revision 18

- Offsite Dose Calculation Manual, Revision 26
- WO 52587642, Meteorological Tower Bi-Annual Instrument Calibration and Tree Trimming Review, July 27, 2015
- WO 52624720, Meteorological Tower Bi-Annual Instrument Calibration and Tree Trimming Review, January 29, 2016

4OA1 Performance Indicator Verification

- CR-PLP-2015-05969, N2 Station #5 Pressure at 72 psig, December 2, 2015
- EN-LI-114, Regulatory Performance Indicator Process, Revision 7
- NRC PI Technique/Data Sheet, Safety System Functional Failures (MS05), July 2015 through April 2016
- NRC PI Technique/Data Sheet, Unplanned Power Changes per 7000 Critical Hours (IE03), April 2015 through March 2016
- SOP-19, Instrument Air System, Revision 65

4OA2 Problem Identification and Verification

- CR-PLP-2015-04242, PS-1220, Containment Instrument Air Pressure Switch, Calibration Could Not be Performed Due to Leak By on Isolation Valve MV-611CAS, September 24, 2015
- CR-PLP-2015-05560, Unable to Clear the Low Flow Alarm After Placing C-8A, 'A' Isophase Bus Cooler Fan in Service, November 8, 2015
- CR-PLP-2015-05681, Received Alarm EK-0518, 2400V Bus 1C, 1D and/or 1E Ground Unexpectedly, November 17, 2015
- CR-PLP-2015-05747, The Lower Oil Level in Primary Coolant Pump, P-50A, Motor is Showing a Rising Trend, Work Request Needed to Troubleshoot, November 19, 2015
- CR-PLP-2015-06342, Received Alarm EK-1101, Containment Instrument Air Low Pressure Unexpectedly and Cleared Within Approximately 2 to 3 Seconds, December 30, 2015
- CR-PLP-2015-06353, Instrument Air Compressor Unload Time has Lowered from About 45 Seconds to 36 Seconds During the Last 3 Weeks, December 31, 2015
- CR-PLP-2016-00294, Breaker 52-2535, Diesel Generator 1-1 Room Ventilation Fan V-24A, was Found to be Tripped During Feedwater Rounds, January 15, 2016
- CR-PLP-2016-00812, Generate a Work Request to Install Temporary Pressure Indication Close to the Location of Containment Instrument Air Low Pressure Switch, PS-1220, February 13, 2016
- CR-PLP-2016-00883, No Light Indication on Breaker 42-2535, Control Switch for V-24A, Diesel Generator Supply Fan, February 19, 2016
- CR-PLP-2016-01266, Generate a Work Order to Inspect the Internals of the Station Power Transformer 1-2 Terminal Box for Evidence of Recent Water Intrusion, March 11, 2016
- CR-PLP-2016-01386, Generate a Work Request to Perform Tan Delta Testing on the Cables Between the 2400V Safeguards Bus and Breakers 152-203 and 152-302, March 21, 2016
- CR-PLP-2016-01643, Observed CV-0608, Heater Drain Pump Discharge, to be 60% Open and Not Moving, April 5, 2016
- CR-PLP-2016-02060, Attempted to Start P-54C, 'C' Containment Spray Pump but It Immediately Tripped, May 3, 2016
- CR-PLP-2016-02131, Low Cooling Air Flow Alarm Came in on U-10, 'A' Isophase Bus Cooler, Alarm Panel When Placing the 'A' Isophase Bus Cooler in Service During Monthly Equipment Rotation, May 8, 2016
- CR-PLP-2016-02537, Palisades 2016-01 Safety Review Committee Executive Summary Issue: (New) Equipment Reliability is Excellent and High Critical Component Failures are Low,

However in Some Cases, Lapses in Organizational Behaviors Supporting Continued High Levels of Equipment Performance are Occurring, May 26, 2016

- EN-LI-102, Corrective Action Program, Revision 26
- EN-LI-121-01, Trend Codes, Revision 7
- EN-MA-125, Troubleshooting Control of Maintenance Activities, Revision 18
- LO-PLPLO-2016-00022, Troubleshooting Benchmark Snapshot Assessment, March 7, 2016
- Plant Health Committee Meeting Packages
- PR-PRHQN-2016-00030, Complete a Change to EN-MA-125, Troubleshooting, that Includes Required Actions if a Cyber Attack is Suspected as a Cause of a CDA Failure or Inappropriate Response, January 14, 2016
- WO 434286, C-8A; Unable to Clear Low Air Flow Alarm – Troubleshoot and Repair
- WO 445386, C-8A; 'A' Isophase Bus Cooler Fan Low Flow Alarm
- WT-WTPLP-2016-00038, Palisades 2016 Excellence Plan: Leadership and Teamwork, January 7, 2016

40A3 Follow-Up of Events and Notices of Enforcement Discretion

- CR-PLP-2016-01442, Door-15, Mechanical Equipment Room Missile Shield/Radiation Door, Will Not Close, March 24, 2016
- LER 2016-002-00, Both Control Room Ventilation Filtration Trains Declared Inoperable, May 23, 2016

40A5 Other Activities

- Apparent Cause Evaluation, 50.9 Violation of Relief Request 4-18, Revision 3
- Corrective Action Record (Structural Integrity Associates Inc.) CAR-15-005, 1200895.306 Revision 0 Hot Leg D Drain Nozzle Weld Residual Stress Analysis and Circumferential Crack Stress Intensity Factor Determination, Revision 1
- CR-PLP-2015-03441, Traditional Enforcement Severity Level III Violation of 10 CFR 50.59 Related to Inaccurate Information Provided to the NRC, August 18, 2015
- Letter 1400669-2015-001, Structural Integrity Associates Inc., Evaluation of Postulated Flaws in the Hot Leg Drain Line Nozzle and Bounding Cold Leg Branch Line Nozzle Dissimilar Metal Welds in Support of Palisades Nuclear Plant's Relief Request RR 4-21, June 2, 2015
- Letter PNP 2014-015, Relief Request Number RR 4-18 — Proposed Alternative, Use of Alternate ASME Code Case N-770-1 Baseline Examination, February 25, 2014
- Letter PNP 2015-037, Relief Request Number RR 4-21 - Proposed Alternative, Use of Alternate ASME Code Case N-770-1 Baseline Examination, May 22, 2015
- Letter PNP 2015-078, Reply to an Apparent Violation in Inspection Report 2015012, EA-15-171, October 17, 2015
- Letter PNP 2015-088, Reply to an Apparent Violation in Inspection Report 2015012, EA-15-171, Revision 1, October 28, 2015
- Procedure EN-HU-104, Engineering Task Risk and Rigor, Revision 7
- Quality Assurance Audit Report QA-4-2016-PLP-1, Engineering Design Control, April 11, 2016
- Quality Assurance Audit Report QA-8-2016-PLP-1, Engineering Programs, April 21, 2015

LIST OF ACRONYMS USED

AC	Alternating Current
ADAMS	Agencywide Document Access Management System
AFW	Auxiliary Feedwater
ASM	Air Start Motor
ASME	American Society of Mechanical Engineers
AV	Apparent Violation
CAP	Corrective Action Program
CR	Condition Report
CFR	Code of Federal Regulations
DG	Diesel Generator
EFPY	Effective Full Power Years
EP	Emergency Preparedness
HVAC	Heating, Ventilation, and Air Conditioning
IP	Inspection Procedure
IR	Inspection Report
LER	Licensee Event Report
NEI	Nuclear Energy Institute
NOV	Notice of Violation
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
PARS	Publicly Available Records System
PI	Performance Indicator
SSC	System, Structure, and Component
TS	Technical Specification
TSO	Transmission System Operator
UFSAR	Updated Final Safety Analysis Report
WO	Work Order

July 25, 2016

EA-15-171

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

SUBJECT: PALISADES NUCLEAR PLANT—NRC INTEGRATED INSPECTION REPORT
05000255/2016002

Dear Mr. Vitale:

On June 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Palisades Nuclear Plant. On July 7, 2016, the NRC inspectors discussed the results of this inspection with yourself and other members of your staff. The enclosed report documents the results of this inspection.

Based on the results of this inspection, no findings of significance were identified.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records System (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA James Cameron Acting for/
Eric Duncan, Chief
Branch 3
Division of Reactor Projects

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Letter to A. Vitale from E. Duncan dated July 25, 2016

SUBJECT: PALISADES NUCLEAR PLANT—NRC INTEGRATED INSPECTION REPORT
05000255/2016002

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