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PNP 2013-072

October 14, 2013

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

SUBJECT: Palisades Nuclear Plant Report of Changes, Tests and Experiments and  
Summary of Commitment Changes

Palisades Nuclear Plant  
Docket 50-255  
License No. DPR-20

Dear Sir or Madam:

Entergy Nuclear Operations, Inc. (ENO) is submitting the Palisades Nuclear Plant (PNP) Report of Facility Changes, Tests, and Experiments for the time period of September 30, 2011, through September 30, 2013. This report is submitted in accordance with the requirements of 10 CFR 50.59(d)(2) and 10 CFR 72.48(d)(2). During this period, there was one change to the facility, but no tests or experiments, made pursuant to 10 CFR 50.59, and no changes, tests, or experiments made pursuant to 10 CFR 72.48.

Attachment 1 contains a description of the change to the facility, and a summary of the evaluation performed for the change, in accordance with 10 CFR 50.59.

Attachment 2 contains a summary of fourteen regulatory commitment changes requiring NRC notification that were made from September 30, 2011, through September 30, 2013. The summary includes a justification for the change per Nuclear Energy Institute (NEI) Guideline NEI 99-04, "Guidelines for Managing NRC Commitment Changes," and NRC Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff."

This letter contains no new commitments.

Sincerely,

A handwritten signature in black ink, appearing to be 'OWG/JSE', with a long horizontal stroke extending to the right.

owg/jse

Attachment(s):      1. Palisades Nuclear Plant Report of Changes, Tests, and Experiments  
                             2. Palisades Nuclear Plant Commitment Change Summary Report

cc:      Administrator, Region III, USNRC  
         Project Manager, Palisades, USNRC  
         Resident Inspector, Palisades USNRC

**ATTACHMENT 1**

**PALISADES NUCLEAR PLANT  
REPORT OF CHANGES, TESTS, AND EXPERIMENTS**

Two Pages Follow

# **Palisades Nuclear Plant**

## **Report of Changes, Tests, and Experiments**

**Document Number and Title:** Engineering Change (EC) 27518, “Replace MCC Breaker Buckets on MCCs 1, 2, 7, 8”

### **Activity Description:**

This EC replaced the 119 motor control center (MCC) buckets in MCCs 1, 2, 7, and 8. These MCCs supply safety-related loads as well as augmented quality loads. Components were replaced with equivalent components, with the exception of additional interposing relays being installed for each contactor coil and additional fuses installed on the primary side of replaced control power transformers (CPTs) for National Electrical Manufacturers Association (NEMA) size 3 and larger starters. The systems affected by the EC include safety-related systems that are required to mitigate an accident or plant transient.

The installation of additional relays and fuses requires review in a 50.59 evaluation per Example 1 in Section 4.3.2 of NEI 96-07, “Guidelines for 10 CFR 50.59 Implementation,” Revision 1.

### **Summary of Evaluation:**

The addition of the interposing relays adds additional potential failure points to circuits for important to safety systems, but will not result in more than a minimal increase in the likelihood of a malfunction of a SSC important to safety. The relays will be procured as safety-related, and will be seismically qualified and rugged, designed for heavy-duty operation. All applicable design and functional requirements will continue to be met. Each interposing relay is dedicated to a specific contactor coil, so no new potential common mode failures involving multiple contactor coils will be created. Additionally, the failure of an interposing relay has the same effect as the failure of a contactor, so no new failure consequences are created. The additional interposing relays improve voltage margins on the 480V distribution system.

The addition of the CPT primary side fuses for the size 3 starters, which supply the boric acid pumps, adds additional potential failure points to circuits for important to safety systems. However, the fuses will not result in more than a minimal increase in the likelihood of a malfunction of a SSC important to safety. The fuses will be procured as safety-related and seismically qualified, and all applicable design and functional requirements will be met. The new fuses will be dedicated to individual cubicles, so no new potential common mode failures involving multiple cubicles will be created. Additionally, the failure of a fuse has the same effect as the failure of the existing CPT secondary side fuse. The additional fuses provide additional protective features for load control circuits.

## **Palisades Nuclear Plant**

### **Report of Changes, Tests, and Experiments**

There are no new system or component interfaces created by the change. The EC does not change component functional or testing frequency. Additionally, divisional separation is maintained per design and licensing basis requirements.

The proposed activity will not negatively impact the components credited to mitigate a malfunction evaluated in the Final Safety Analysis Report (FSAR) in terms of component operating modes and functions, response times, or design basis limits. The proposed activity will not change, prevent or degrade the effectiveness of actions described or assumed in malfunctions discussed in the FSAR. Additionally, onsite dose levels, including dose to the control room, and radiological offsite release paths, are not impacted by the activity. The proposed activity does not alter assumptions made in evaluations of radiological accidents described in the FSAR. The failure modes and consequences of failures for the new interposing relays and CPT primary side fuses are the same as the existing contactors and CPT secondary side fuses.

The changes implemented by the EC will not result in an increase in likelihood of occurrence of any accidents or malfunctions, will not result in more than a minimal increase in the consequences of an accident or a malfunction of a system, structure, or component (SSC) important to safety, will not create a possibility for an accident of a different type or a malfunction of a SSC important to safety with a different result, will not result in a design basis limit for a fission product barrier being exceeded or altered, and will not result in a departure from a method of evaluation used in establishing the design bases or in the safety analyses.

**ATTACHMENT 2**

**PALISADES NUCLEAR PLANT**

**COMMITMENT CHANGE SUMMARY REPORT**

Six Pages Follow

## Palisades Nuclear Plant

### Commitment Change Summary Report

COMMITMENT NUMBER	DATE OF ORIGINAL COMMITMENT	CHANGED DATE	DESCRIPTION
1012704	12/1/1986	7/19/2013	<p><b>Original text:</b> ATTACH 3 - CCW (CMT #68): Modify surveillance procedure to start pump locally periodically.</p> <p><b>Revised text:</b> Cancel commitment 1012704 to commitment 1014029.</p> <p><b>Summary of justification:</b> This commitment remains in place, but is completed by commitment 1014029. Verify control of buses 1C and 1D from switchgear periodically.</p>
1012720	12/1/1986	8/5/2013	<p><b>Original text:</b> ATTACH 4 – QA Audit Program Findings (Cmt# 384): Housekeeping task force is writing facility condition standards.</p> <p><b>Revised text:</b> Cancel commitment.</p> <p><b>Summary of Justification:</b> This commitment is no longer necessary to be retained as ongoing. The standard was issued as required. Cleanliness standards have evolved since 1986, and remain in place as required by site and fleet procedures, and industry practices.</p>
1012721	12/1/1986	8/5/2013	<p><b>Original text:</b> ATTACH 4 – QA Audit Program Findings (Cmt# 385): Housekeeping task force is writing employee conduct standards regarding plant material condition standards.</p> <p><b>Revised text:</b> Cancel commitment.</p> <p><b>Summary of Justification:</b> This commitment is no longer necessary to be retained as ongoing. The standard was issued as required. Cleanliness standards have evolved since 1986, and remain in place as required by site and fleet procedures, and industry practices.</p>

1012722	12/1/1986	8/5/2013	<p><b>Original text:</b> ATTACH 4 – QA Audit Program Findings (Cmt# 386): Housekeeping task force is writing admin procedure on periodic inspection.</p> <p><b>Revised text:</b> Cancel commitment.</p> <p><b>Summary of Justification:</b> This commitment is no longer necessary to be retained as ongoing. The standard was issued as required. Cleanliness standards have evolved since 1986, and remain in place as required by site and fleet procedures, and industry practices.</p>
1012968	12/1/1986	7/19/2013	<p><b>Original text:</b> ATTACH 2, SFE – CCS (CMT# 121): Surveillance procedures will be modified to start pump locally periodically.</p> <p><b>Revised text:</b> Cancel commitment 1012968 to commitment 1014029.</p> <p><b>Summary of Justification:</b> This commitment remains in place, but is completed by commitment 1014029: Verify control of Buses 1C and 1D from switchgear periodically.</p>
2000744	2/1/1991	8/13/2013	<p><b>Original text:</b> Modify alarm response procedure ARP-8 to readily notify the operator that abnormal leakage may be due to the containment air coolers and that they should be sensitive to the coolers as a contributor to the sump level.</p> <p><b>Revised text:</b> Cancel commitment.</p> <p><b>Summary of Justification:</b> Commitment is no longer necessary. FSAR Section 4.7 and Technical Specification 3.4.15 include leak detection information related to the containment air coolers. The commitment is not necessary to maintain implementation of this requirement.</p>
2011149	7/8/1980	1/12/2012	<p><b>Original text:</b> The turbine sump and dirty waste sump are composite sampled and full radwaste batch analysis is performed on a monthly composite.</p> <p><b>Revised text:</b> The turbine sump is composite sampled and full radwaste batch analysis is performed on a quarterly basis.</p> <p><b>Summary of Justification:</b> Currently, the Offsite Dose Calculation Manual specifies that Sr-89 and Sr-90 analyses be performed on both batch and continuous liquid waste streams quarterly composites, and specifies batch quarterly composite Fe-55 and Ni-63 analyses</p>



			<p>as well.</p> <p>In addition, Regulatory Guide 1.21, Revision 1, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Appendix A specifies that Sr-89 and Sr-90 analyses be performed on quarterly composites. NUREG-1301, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors," Table 4.11-1, specifies that Sr-89, Sr-90, and Fe-55 analyses be performed on quarterly composites.</p> <p>Changing the commitment from monthly to quarterly batch analyses aligns the frequency of the analyses with these existing plant and regulatory guidance documents.</p>
2011473	12/11/2012	9/24/2013	<p><b>Original Text:</b>  Entergy will perform appropriate actions to meet ASME Section XI Code Case N-770-1 baseline examinations for those dissimilar metal welds not meeting the examination coverage requirements during the 2012 refueling outage prior to startup from the planned fall 2013 refueling outage. These actions include:  1) compliance with N-770-1 requirements, or  2) removal of the subject locations from the scope of ASME Section XI Code Case N-770-1.</p> <p><b>Revised Text:</b>  Entergy will perform appropriate actions to meet ASME Section XI Code Case N-770-1 baseline examinations for those dissimilar metal welds not meeting the examination coverage requirements during the 2012 refueling outage prior to startup from the refueling outage 1R23. These actions include:  1) compliance with N-770-1 requirements, or  2) removal of the subject locations from the scope of ASME Section XI Code Case N-770-1.</p> <p><b>Justification:</b>  Refueling outage 1R23 was moved from October 2013, to January 2014.</p>
2011475	7/17/2012	9/24/2013	<p><b>Original Text:</b>  ENO will correct the adverse condition related to cracking of the concrete support structure around the ceiling of the control room, which could lead to water intrusion, prior to restart from the 2013</p>

			<p>refueling outage.</p> <p><b>Revised Text:</b> ENO will correct the adverse condition related to cracking of the concrete support structure around the ceiling of the control room, which could lead to water intrusion, prior to restart from refueling outage 1R23.</p> <p><b>Justification:</b> Refueling outage 1R23 was moved from October 2013, to January 2014.</p>
2011554	10/31/2012	9/24/2013	<p><b>Original Text:</b> Enhancements identified within the assessment (Attachment 1) will be further developed as implementation progresses. Alternate approaches will be utilized if prudent (e.g., alternate/new technology, improved capability, cost savings, etc.). These enhancement commitments are subject to change as a result of Diverse and Flexible Coping Strategies (FLEX) developments, advances in technology, and progress in the manner of addressing the need for these enhancements.</p> <p><b>Revised Text:</b> The commitment text remains the same. The original due date for this commitment was by the end of refueling outage 1R24 (scheduled Spring 2015). The due date will now be by the end of refueling outage 1R24.</p> <p><b>Justification:</b> Refueling outage 1R23 was moved from October 2013, to January 2014. The dates for 1R24 will change as well.</p>
2011556	11/27/2012	9/24/2013	<p><b>Original Text:</b> ENO will perform walkdowns for equipment that could not be inspected as identified in Section 6.3 of the Seismic Walkdown Report, by the end of the next refueling outage, which is planned to begin in October 2013.</p> <p><b>Revised Text:</b> ENO will perform walkdowns for equipment that could not be inspected as identified in Section 6.3 of the Seismic Walkdown Report, by the end of refueling outage 1R23.</p> <p><b>Justification:</b> Refueling outage 1R23 was moved from October 2013, to January 2014.</p>
2011557	11/27/2012	9/24/2013	<p><b>Original Text:</b> ENO will submit an updated Seismic Walkdown Report as identified in Section 6.3 of the Seismic</p>

			<p>Walkdown Report. Report will be submitted within three months of the end of the next refueling outage, which is planned to begin in October 2013.</p> <p><b>Revised Text:</b> ENO will submit an updated Seismic Walkdown Report as identified in Section 6.3 of the Seismic Walkdown Report. Report will be submitted within three months of the end of refueling outage 1R23.</p> <p><b>Justification:</b> Refueling outage 1R23 was moved from October 2013, to January 2014.</p>
2011575	9/6/2012	6/3/2013	<p><b>Original Text:</b> At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), must be available when LCO 3.0.8a is used.</p> <p><b>Revised Text:</b> At least one AFW [auxiliary feedwater] train (including a minimum set of supporting equipment required for its successful operation), or some alternative means of core cooling, not associated with the inoperable snubber(s), must be available when LCO 3.0.8a is used.</p> <p><b>Summary of Justification:</b> TSTF-IG-05-03, Revision 1, "Implementation Guidance for TSTF-372, Revision 4, Addition of LCO 3.0.8, Inoperability of Snubbers," Section 3, "Discussion of Safety Evaluation Conditions," recommends changing the standard commitment which was listed in the NRC issuance letter for Technical Specification Amendment 251, "Palisades Nuclear Plant - Issuance of Amendment to Revise Technical Specifications to Add Limiting Conditions for Operation 3.0.8 on the Inoperability of Snubbers (TAC NO. ME9502)," to better allow application during MODE 5, shut down operations. The implementation guidance further states that this change has been evaluated as a commitment change not requiring NRC approval prior to implementation, per NEI 99-04, "Guidelines for Managing NRC Commitments Changes."</p>
2011577	12/20/2010	1/25/2012	<p><b>Original text:</b> Entergy Nuclear Operations, Inc. (ENO) will perform a volumetric inspection of the reactor vessel beltline region welds during the 2012 refueling outage.</p> <p><b>Revised text:</b> Entergy Nuclear Operations, Inc. (ENO) will perform a volumetric inspection of the reactor vessel beltline</p>

			<p>region welds during the 2013 refueling outage.</p> <p><b>Summary of Justification:</b>  Palisades' pressurized thermal shock (PTS) evaluation submittal dated December 20, 2010, committed to perform a volumetric inspection of the reactor vessel beltline region welds during the 2012 refueling outage.</p> <p>This commitment was made because, at the time of the submittal, Palisades' reactor vessel (RV) limiting welds were projected to reach the PTS screening criterion limit in 2014. This required that RV beltline weld inspections be conducted during the 2012 refueling outage due to the scheduler requirements of 10 CFR 50.61a. 10 CFR 50.61a requires that an assessment of RV beltline materials, based in part on inspection results, be performed and submitted at least three years prior to reaching the PTS screening criteria. To meet this requirement, the RV inspection would have had to be performed during the 2012 refueling outage and the site would have had to request relief from the three year requirement.</p> <p>With NRC approval of the updated PTS evaluation, the screening criteria will now be reached in 2017. This allows the RV beltline inspections to be moved from the 2012 refueling outage to the 2013 refueling outage, while still meeting the 10 CFR 50.61a requirement to submit the RV beltline materials assessment three years prior to reaching the PTS screening criterion.</p> <p>NRC approval of the updated PTS evaluation, in a safety evaluation report (SER) dated December 7, 2011, was not contingent on inspection of RV beltline materials during the 2012 refueling outage. The SER makes no mention of RV inspections during the 2012 refueling outage.</p>
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