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Anthony J. Vitale Site Vice President

PNP 2014-100

November 19, 2014

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

Subject: Cancellation of Licensee Event Report (LER) 2004-002, Leak Path Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations

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

Reference: LER 2004-002, Leak Path Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations, dated December 9, 2004 (ML043560278)

Dear Sir or Madam:

By letter dated December 9, 2004, Nuclear Management Company (NMC) transmitted Palisades Nuclear Plant LER 2004-002, "Leak Path Indications Identified in Reactor Pressure Vessel Head Nozzle Penetrations." The LER described the discovery of leak path indications in two reactor pressure vessel head control rod drive mechanism nozzle penetrations. Metallurgical examinations were not performed on the indications. Based on industry experience at that time, the cause of the identified indications was believed to be primary water stress corrosion cracking (PWSCC). As a result, LER 2004-002 was submitted in accordance with 10 CFR 50.73(a)(2)(ii)(A) as a condition that resulted in a principle safety barrier being seriously degraded.

Since 2004, six reactor vessel head examinations have been performed in accordance with NRC Order EA-03-009, Revision 1, or ASME Code Case N-729-1. Using improved ultrasonic examination techniques during subsequent examinations of reactor pressure vessel head nozzle penetrations resulted in the discovery of additional indications, similar to those identified in 2004. However, based on analysis of the examination data, the indications found after the initial 2004 examination were determined to be embedded welding indications, caused by the original welding process. The indications identified since 2004 have been recorded and tracked. The size of those indications has not changed. These types of manufacturing irregularities are not uncommon in PNP 2014-100 Document Control Desk Page 2

reactor pressure vessel heads and have been identified in newly manufactured replacement reactor pressure vessel heads.

Based on a recently completed engineering evaluation, produced by LPI Inc. and accepted by Entergy Nuclear Operations, Inc., that compared the indications found in 2004 to the indications identified in subsequent examinations, it was determined the indications originally discovered in 2004 were embedded welding indications, caused by the original welding process.

If the indications found in 2004 had been caused by PWSCC, it is highly likely additional indications caused by PWSCC would have been discovered during subsequent inspections. The lack of new flaw discovery, and no change in the size of the indications identified since 2004, supports the analytical conclusion that the original indications found in 2004 were not caused by PWSCC.

As a result of the determination that the indications identified in 2004 were not caused by PWSCC, future examinations of the Palisades' reactor vessel pressure head will be performed every other refueling outage, as allowed by Code Case N-729-1.

Since the indications identified in 2004 were not caused by PWSCC, serious degradation of a principle safety barrier did not exist. Consequently, the reporting criterion of 10 CFR 50.73(a)(2)(ii)(A) is not applicable. Therefore, LER 2004-002 is being canceled.

This letter contains no new commitments and no revisions to existing commitments.

Sincerely,

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AJV/tad

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