



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
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LISLE, IL 60532-4352

November 8, 2012

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

THRU: Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

FROM: Charles A. Casto /RA/
Regional Administrator

SUBJECT: REQUEST FOR DEVIATION TO THE REACTOR OVERSIGHT
PROCESS ACTION MATRIX TO PROVIDE HEIGHTENED NRC
OVERSIGHT AT THE PALISADES NUCLEAR PLANT

This memorandum requests your approval to deviate from the Reactor Oversight Process (ROP) Action Matrix for the Palisades Nuclear Plant to provide heightened NRC oversight throughout calendar year (CY) 2013. Palisades will transition to the Licensee Response column of the ROP Action Matrix following successful completion of a supplemental inspection in accordance with Inspection Procedure (IP) 95002, "Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area." Although IP 95002 requires that the licensee identify performance issues and plan or take appropriate corrective actions to prevent recurrence, it does not require that all corrective actions be implemented by the end of the inspection. Therefore, some of the corrective actions to improve the organization and strengthen the safety culture at the site had not been fully implemented at the time of the inspection. The site continued to exhibit some human performance (HP) issues as evidenced by Substantive Cross Cutting Issues (SCCIs). In addition, several ongoing technical issues warrant additional inspection to provide assurance that they will not lead to a more significant concern. Due to the concerns stated above, there is a need to perform inspections above the baseline inspection program to provide assurance of the continued safe operation of the Palisades Nuclear Plant. This approach is consistent with underlying concepts of Inspection Manual Chapter 0305, "Operating Reactor Assessment Program." This deviation would not change the Action Matrix column assignment for the Palisades Nuclear Plant.

Background

Palisades Nuclear Plant will be issued an Assessment Follow-up Letter to transition them to the Licensee Response Column of the NRC's Action Matrix following the successful completion a supplemental inspection using IP 95002. Palisades had been in the Degraded Cornerstone Column since the fourth quarter of 2011 due to one Yellow finding and one White finding in the Initiating Events Cornerstone. The Yellow finding was associated with the loss of one direct current bus that occurred on September 25, 2011, which resulted in a complicated reactor trip. The White finding was associated with the failure of service water pump 'P-7C' due to intergranular stress corrosion cracking that occurred on a pump shaft coupling on August 9, 2011. In addition, as documented in the Palisades Mid-Cycle Assessment

Letter (ML12248A318) dated September 4, 2012, a SCCI in HP with themes in the components of Conservative Assumptions (H.1(b)) and Oversight (H.4(c)) have remained open for two consecutive assessment cycles.

Also, over the last year, the NRC has noted a number of technical issues for which initial NRC review identified no immediate safety concerns. However, it is essential that the cause of these issues and the licensee's planned corrective actions are reviewed in order to provide reasonable assurance that these issues will not lead to more significant safety concerns. These technical issues include portions of Primary Coolant Pump 'P-50C' impeller being susceptible to tearing under certain operational conditions (Inspection Report 05000255/2012003) and through-wall leaks in three areas: Control Rod Drive Mechanism (CRDM), Safety Injection Refueling Water Tank (SIRWT), and Service Water (SW). The pressure boundary leakage from CRDM-24 was identified on August 12, 2012, and was the subject of a Special Inspection. In addition, minor leakage from the area surrounding the SIRWT was first identified in May 2011. On June 12, 2012, the plant was shut down when the leakage exceeded the administrative limit of 31 gallons per day. The site restarted on July 10, 2012, with a smaller amount of leakage still occurring in the area surrounding the tank. There is a possibility that this leakage is coming from the SIRWT or from residual water in the sand base below the tank that accumulated from previous leaks or rainwater. A Confirmatory Action Letter (CAL) (ML12199A409) was issued on July 17, 2012, which confirms the licensee's commitments on monitoring of the tank and the roof area above the control room. Finally, a pinhole leak was identified on a service water valve on September 20, 2012. The NRC reviewed Palisades' initial assessment of the leak and their conclusion that it does not interfere with the system's ability to perform its function (PNO-III-12-012). Although the NRC's initial assessment is that there is no immediate safety concern, Region III believes that a more detailed review of the licensee's actions to address all technical issues mentioned above is warranted to ensure that the licensee is taking adequate steps to address them.

Deviation Basis

The ROP Action Matrix includes a range of licensee and NRC actions for each column of the Action Matrix. However, as discussed in Inspection Manual Chapter 0305, there may be instances in which other actions not prescribed by the Action Matrix may be appropriate. In the case of Palisades, the staff considers it appropriate to apply increased inspection focus to specific areas given the importance of 1) ensuring that the licensee implements the remaining corrective actions to improve the organization and strengthen the safety culture on site, and 2) assessing the sustainability of these actions. In addition, although resources for following up on the CAL and other technical issues are provided by the ROP, the nature of these technical issues warrants additional inspection and assessment activities beyond those provided by the ROP. This deviation would provide additional inspection and assessment resources to accomplish the reviews. Based on this, even though the licensee has taken actions that allow transition to the Licensee Response Column of the Action Matrix, the staff considers it appropriate to apply a heightened level of oversight at the Palisades Nuclear Plant in two specific areas. First, increased inspection is needed to ensure that the licensee is implementing appropriate corrective actions to improve the organization and strengthen the safety culture on site, as well as assessing the sustainability of these actions. Second, additional inspection is needed to ensure that planned corrective actions are effective, such that these issues will not lead to more significant safety concerns.

Planned Actions**1. Deviation Request**

NRC Region III requests your approval to deviate from the ROP Action Matrix to increase regulatory oversight at the Palisades Nuclear Plant for CY 2013 for the following two areas:

- Conduct follow-up inspections on outstanding corrective actions that have not yet been implemented as they relate to performance improvement efforts on site. The inspectors will also focus on the activities taken to address the outstanding SCIs in oversight and conservative assumptions. Inspections may also be conducted in the programs at the site to ensure corrective actions are sustainable.
- Conduct focused inspections using the guidance in IP 71152, "Problem Identification and Resolution" (PI&R). These inspections will focus on the resolution of technical issues that have been referenced in this memo. It would also consider possible technical issues that have not been identified through the licensee's corrective action program.

The additional inspection effort will involve some regional augmentation of the resident inspectors at Palisades and additional PI&R inspections. Further, the staff expects to conduct enhanced communication with the communities in southwest Michigan regarding NRC's mission, the status of site improvement initiatives and resolution of technical issues. Based on current projections, the additional inspections can be accommodated within the existing reactor program budget for CY 2013. The proposed efforts associated with these additional inspections are estimated to require an additional 1.0 FTE (approximately 1040 hours) through CY 2013, which can be directed from existing regional resources.

2. Deviation Closure Criteria

- If all additional inspections are completed and corrective actions are acceptable, the staff expects to return to normal NRC inspection levels consistent with the Action Matrix by the end of CY 2013.

Consistent with the SRM dated May 27, 2004, a copy of this Deviation Memorandum will be provided to the Commission and will be discussed at the next Agency Action Review Meeting.

Approve/Disapprove: /RA by Michael R. Johnson for / 11/8/12
R. W. Borchardt Date

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See Previous Concurrence ADAMS :ML12306A367

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