March 22, 2004

RAM Item No. - CAL-01 **Closed: Y**

Description of Issue - Quarantine components or other material from the RPV head and CRDM nozzle penetrations that are deemed necessary to fully address the root cause of the occurrence of degradation of the leaking penetrations. Prior to implementation, plans for further inspection and data gathering to support determination of the root cause will be provided to the NRC for review and comment.

Description of Resolution - Per the CAL update issued on July 17, 2003, this item is closed and the old RPV head released from quarantine upon shipment of the samples specified in the CAL item to Battelle Northwest Laboratory (BNL). On July 17, 2003, these samples left the site by truck bound for BNL. As noted in the July 17, 2003 CAL update, the quarantine is lifted following removal of the material and its shipment to BNL. Therefore, this CAL item is closed.

Reference Material - See CAL update letters dated December 24, 2002 (ADAMS Accession No. ml023600267), January 21, 2003 (ADAMS Accession No. ml030220165) and July 17, 2003 (ADAMS Accession No. ml031990082).

RAM Item No. - CAL-02 **Closed: Y**

Description of Issue - Determine the root cause of the degradation around the RPV head penetrations, and promptly meet with the NRC to discuss this information after you have reasonable confidence in your determination.

Description of Resolution - This CAL item was closed by update letter E issued to the licensee on September 19, 2003.

Reference Material - Confirmatory Action Letter Update E dated September 19, 2003 (ADAMS Accession No. ml032650662).

March 22, 2004

RAM Item No. - CAL-03 **Closed: Y**

Description of Issue - Evaluate and disposition the extent of condition throughout the reactor coolant system relative to the degradation mechanisms that occurred on the RPV head.

Restart Checklist Item: 2.c

Description of Resolution - The NRC conducted two inspections into the licensee's extent of condition program. The inspections were documented in reports 50-346/2002-009 and 50-346/2002-012. While Inspection Report 50-346/2002-012 concluded that the "Davis-Besse Containment Health Assurance Plan" was effectively implemented, three unresolved items associated with corrective actions on components potentially affected by boric acid corrosion were identified. These unresolved items were associated with the licensee's corrective actions for corrosion of electrical conduit, the bottom nozzles on the reactor vessel, and the containment air coolers. Additionally, at that time, the licensee's staff had completed apparent cause determinations with designated corrective actions for only a small number of the components potentially affected by boric acid corrosion.

Subsequently, inspections were performed to evaluate the effectiveness of the licensee's corrective actions to address the remaining components potentially affected by boric acid corrosion and resolve the three open unresolved items. The NRC's inspections noted that the three unresolved items related to the corrosion of electrical conduit, the bottom nozzles on the reactor vessel, and the containment air coolers had been effectively addressed to ensure that these components were operable and capable of performing their safety-related functions. The inspections also determined that all of the components potentially affected by boric acid corrosion had been appropriately addressed in the corrective action process and that the schedules for completion of the planned corrective actions were acceptable. The results of the inspections are documented in NRC Inspection Reports 50-346/2003-010, 50-346/2003-022, and 50-346/2003-023.

Reference Material - NRC Inspection Report Nos. 50-346/2002-009, 50-346/2002-012, 50-346/2003-010, 50-346/2003-022, and 50-346/2003-023.

March 22, 2004

RAM Item No. - CAL-04 **Closed: Y**

Description of Issue - Obtain NRC review and approval of the repair or modification and testing plans for the existing RPV head, prior to implementation of those activities. Prior to restart of the reactor, obtain NRC review and approval of any modification and testing activity related to the reactor core or reactivity control systems. If the reactor vessel head is replaced in lieu of repair or modification, the replacement must comply with appropriate Commission rules and industry requirements.

Restart Checklist Item: 7.a

Description of Resolution - NRC Inspection Report 50-346/02-07 (ADAMS Accession No. ml023370100) documented review of the non-destructive examinations performed at the Midland Michigan site on the replacement head and the American Society of Mechanical Engineers (ASME) Code data packages for the replacement head. Based on this inspection, NRC verified that the replacement head was designed and fabricated in conformance with ASME Code requirements and that the original ASME Code Section III N-stamp remained valid. This inspection also reviewed activities associated with the temporary containment access opening and restoration. NRC Inspection Report 50-346/03-05 (ADAMS Accession No. ml032230339) documented NRC review of the containment integrated leak rate test. This inspection concluded that containment integrity had been restored following replacement of the reactor head.

Leakage testing of the replacement head was evaluated in NRC Inspection Report 50-346/03-23 (ADAMS Accession No. ml033421074) and found acceptable. Inspection Report 50-346/04-02 will document inspection of DB-SC-03270, “Control Rod Assembly Insertion Time Test.” This activity was observed to evaluate proper control rod movement and alignment. This test was successfully completed on February 10, 2003. The inspection report is scheduled to be issued by the middle of March 2004.

Reference Material - NRC Inspection Report Nos. 50-346/02-07 (ADAMS Accession No. ml023370100), 50-346/03-23 (ADAMS Accession No. ml033421074), and 50-346/04-02.

March 22, 2004

RAM Item No. - CAL-05 **Closed: Y**

Description of Issue - Prior to the restart of the unit, meet with the NRC to obtain restart approval. During that meeting, we expect you will discuss your root cause determination, extent of condition evaluations, and corrective actions completed and planned to repair the damage and prevent recurrence.

Restart Checklist Item: 7.a

Description of Resolution - To support the request to restart the Davis-Besse Station, the licensee submitted its "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station" to the NRC on November 23, 2003. The report was updated by a submittal dated February 6, 2004. The licensee met with NRC management on February 12, 2004 to request approval for restart of the Davis-Besse Station. The licensee summarized completion of their Return to Service Plan, including root cause determination, extent of condition, and corrective actions taken to prevent recurrence. Upon submittal of the "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station" and presentation at the February 12, 2004, meeting, the licensee completed its actions to close this item.

The Panel concluded this item will be documented in the CAL Closure Letter, Enclosure 1 of the Restart Approval Letter, and considered closed upon issuance of the Restart Approval Letter.

Reference Material - Licensee presentation dated 2/12/2004 (ML0404302200), Integrated Readiness to Support Restart Report, dated November 23, 2003 (ADAMS Accession No. ml033360251), Supplemental Update to the Integrated Readiness to Support Restart Report, dated February 6, 2004 (ADAMS Accession No. ml040420223), and CAL Closure Letter, Enclosure 1 of the Restart Approval Letter.

RAM Item No. - CAL-06 **Closed: Y**

Description of Issue - Provide a plan and schedule to the NRC, within 15 days of the date of this letter, for competing and submitting to the NRC your ongoing assessment of the safety significance for the RPV head degradation.

Description of Resolution - Closed per CAL Update Letter dated December 24, 2002.

Reference Material - ADAMS Accession No. ml023600267