March 26, 2004

MEMORANDUM TO:	Davis-Besse Oversight Panel
FROM:	John A. Grobe, Chairman, Davis-Besse Oversight Panel /RA/
SUBJECT:	MINUTES OF INTERNAL MEETING OF THE DAVIS-BESSE OVERSIGHT PANEL

The implementation of the IMC 0350 process for the Davis-Besse Nuclear Power Station was announced on April 29, 2002. An internal panel meeting was held on January 30, 2004 Attached for your information are the minutes from the internal meeting of the Davis-Besse Oversight Panel, the approved RAM Closure Forms, and the "Open" Action Items List.

Attachments: As stated

- cc w/att:
- D. Weaver, OEDO J. Caldwell, RIII G. Grant, RIII S. Reynolds, DRP B. Clayton, EICS G. Wright, DRP
- DB0350

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MEETING MINUTES:	Internal IMC 0350 Oversight Panel Mee Davis-Besse Nuclear Power Station	
DATE:	January 30, 2004	
TIME:	1:00 p.m. Central	
ATTENDEES:		
A. Mendiola S. Thomas C. Lipa	B. Ruland R. Baker J. Strasma	M. Ph J. Sta

D. Passehl

J. Grobe

nillips ang

Agenda Items:

1. Discuss/Approve Today's Agenda

The Panel approved the agenda, but modified the order of presentations. **THE** APPROVED AGENDA REFLECTS THE ORDER LISTED IN THESE MINUTES.

2. Discuss Plant Status and Inspector Insights and Emergent Issues List

S. Thomas led a discussion of plant status and inspector insights and the emergent issues list. The plant is in Day 2 of a 72-hour Limiting Condition for Operation because of a casing steam leak on auxiliary feedwater pump #1. If the issue is not resolved, the Technical Specifications require that the unit be placed in Mode 4 (hot shutdown) by 1:20 pm (EST) on February 1. The licensee's problem solving and decision making team is currently evaluating several options, which include: evaluating a 'use as is' option [if the steam leak is determined not to impact the turbine lubricating oil or room environment], and cooldown to Mode 4 to repair the casing leak. The licensee should make a decision Friday, January 30, 2004, or Saturday, January 31, 2004.

3. Discuss New/Potential Licensing Issues

J. Hopkins led a discussion of new/potential licensing issues. Jon briefed the Panel on a restart issue involving a one-time extension of the Technical Specification 24-month fixed surveillance interval for Steam Generator inspection. The current interval expires on March 8, 2004. The licensee submitted License Amendment Request 03-0019, dated December 16, 2003. NRR subsequently submitted a Request for Additional Information and a response has been received. NRR is currently evaluating the issue.

Jon stated that a letter was issued to FirstEnergy Nuclear Operating Company (FENOC) regarding Davis-Besse reactor pressure vessel head sample pieces from the old reactor head. The NRC was interested in additional testing, including destructive testing, being performed on three sample pieces from the old Davis-Besse reactor pressure vessel head. The NRC intends to contract for the additional testing.

Jon also discussed the high pressure injection pump modification. Jon mentioned that an EDO highlight on the issue was sent by the technical staff to the Commission and the information was erroneously posted on NRC's web site.

Jon also mentioned that the final draft version of the Davis-Besse Restart Communication Plan was signed out today.

4. Discuss Allegations

D. Passehl stated that there are no new allegations received that must be resolved prior to restart. There remains one allegation required to be resolved prior to restart. In addition, the Panel approved the criteria for allegations needing to be resolved prior to restart as:

"The criterion for requiring an allegation to be resolved prior to restart is whether the concern raises a significant safety issue involving specific information that substantively calls into question the operability of a component required per the plant's Technical Specifications; management's competence, integrity, or conduct related to plant operations; or the adequacy of program implementation that could impact safety of the plant."

5. Discuss Restart Action Matrix Items

M. Phillips led a discussion of Restart Action Matrix items. **RESTART ACTION MATRIX ITEMS APPROVED BY THE PANEL ARE ATTACHED TO THESE MINUTES.**

6. Discuss Restart Coverage Inspection Plan

S. Thomas led a discussion of his draft restart coverage inspection plan. The Panel had a few comments and suggestions. These changes will be incorporated and the final inspection plan will be presented at a future Panel meeting.

7. <u>Discuss the Format & Use of an Inspection Results Memo to Document Closure of</u> <u>Restart Checklist Items</u>

D. Passehl led a discussion of the proposed format and use of an inspection results memo to document closure of restart checklist and restart action matrix items. Because the inspection report for some inspections will likely not be issued prior to the restart decision by the Oversight Panel, at the conclusion of the inspection the inspectors will issue an "inspection results" memorandum to the Oversight Panel Chairman. The memorandum will state the scope of the inspection and findings, state any impediments to restart, and which restart action matrix items and/or Restart Checklist Items should be closed.

8. <u>Discuss Guidelines for Dispositioning Future Correspondence Received from Special</u> Interest Groups/Individuals

J. Strasma led a discussion of the guidelines for dispositioning future correspondence received from special interest groups and/or individuals. The NRC plans to continue to read and send responses as additional correspondence is received. Regarding

correspondence recently received, the Panel decided to wait on responding to correspondence until after a restart decision was made by the Panel.

9. Discuss End of Cycle Report

D. Passehl led a discussion of the schedule for distributing the 2003 End-of-Cycle Report.

10. <u>Discuss Documentation of NRR Review of Licensee's Integrated Readiness for Restart</u> <u>Report/Supplemental Update to the Integrated Readiness for Restart Report</u>

A. Mendiola led a discussion of the outline for proposed NRC evaluation criteria for review of the licensee's Integrated Readiness for Restart Report/Supplemental update.

11. Discuss Action Items

The Panel reviewed the open Action Items. The following changes were made to the Action Item List:

(Closed) Action Item 197: Develop a communication plan with restart Qs and As.

The Davis-Besse IMC 0350 Oversight Panel Final Draft Restart Communication Plan was completed and has been assigned Accession #ML040340621. The Panel decided this item is closed.

(Closed) Action Item 212: Determine whether the Communication Team has received all electronic and written correspondence from external sources. If there is reasonable confidence that the Communication Team has all the correspondence then develop a set of bullets explaining why there is reasonable confidence.

The following is the set of bullets:

DB-Communication Plan Processes

- Development of a matrix that tracks 3rd party communications until they are finally dispositioned.
- Assembled a team with the knowledge, background and skills necessary to address the concerns that are being raised.
- Merge old databases with the matrix in order to have a universal depository of Davis-Besse 3rd party communications
- Setup of an e-mail account for members of the staff to forward e-mails or let the team know of an existing communication that requires the team's involvement
- Weekly meetings to discuss the disposition of e-mails received in the e-mail account as well as new communications received by other means such as letters.

- Development of rules to disposition the issues.
- Updated matrix and meeting summaries sent to the members of the team for information, completeness and accuracy.
- □ Follow up of the issues with the person working on the response until the formal response was sent.
- Document the formal response in the matrix in order to close the issue.
- □ Hard copies of e-mails sent by the region were reviewed by Headquarters and the ones that weren't in the matrix were scanned and sent to the e-mail account for disposition.
- Development of a message that was sent in the NRR "Have I Got News For You" explaining the purpose of the Davis-Besse Communication Team and asking the staff to forward any communication related to Davis-Besse to the team.
- Other office's directors including the Region III forwarded the message to members of their staff.
- Uniquely identify each E-Mail that can be traced to the Matrix and the Disposition summaries.
- □ Incoming E-Mails sent to ADAMS (Ongoing Project)
- Response E-Mails sent to ADAMS (Ongoing Project)
- DB-Communication Note-Book established with Hard copies of the DB-Comm plan, meeting summaries, disposition notes, E-Mails and the DB-Comm Matrix.

The Panel decided that this item is closed.

(Closed) Action Item 220: Develop inspection plan requirements which include review of post restart security program effectiveness.

D. Passehl and C. Lipa met earlier this week with J. Creed to discuss the plans for review of post restart security program effectiveness. The Panel decided this item is closed.

(Open) Action Item 224: Rewrite the proposed IN on TSP to be generic and reflect attainable plant conditions and what information should be disseminated to the industry concerning Boric Acid Corrosion Control Programs.

A draft of the proposed Information Notice should be send to B. Ruland shortly.

(Closed) Action Item 236: Review the Dec 31, 2003 revision of NRC Inspection Manual Chapter 0350 against current Panel Process Plan and brief Panel on results.

D. Passehl briefed the Panel on the revision, reporting that there were no significant differences between the current Panel Process Plan and the revised IMC 0350. One requirement not captured in the current process plan was to obtain concurrence for restart from the Deputy Executive Director for Reactor Programs. The Process Plan will be updated and the Panel decided this item is closed.

(Closed) Action Item 238: Draft a Memo from John Grobe to Caldwell, Dyer, and Collins to accompany and discuss sensitivity of information in DRAFT Restart Comm Plan.

The Davis-Besse IMC 0350 Oversight Panel Final Draft Restart Communication Plan was completed and has been assigned Accession #ML040340621. Transmittal memo was signed and the Draft Restart Communication Plan forwarded. The Panel decided that this item is closed.

(Closed) Action Item 239: Coordinate with OEDO to determine what appropriate response is required for the 1/16/04 Lochbaum Email on Commission interest in Davis-Besse

This Action Item is already being captured by the Communication Team. The Panel decided that this item is closed to the Communication Team.

(Closed) Action Item 240: Develop recommendations for revising the Panel's criteria for determining if an allegation is a restart issue to focus on safety concerns.

The recommendation was presented and approved at Panel today. The revised criterion for requiring an allegation to be resolved prior to restart is "whether the concern raises a significant safety issue involving specific information that substantively calls into question the operability of a component required per the plant's Technical Specifications; management's competence, integrity, or conduct related to plant operations; or the adequacy of program implementation that could impact safety of the plant." The Panel decided that this item is closed.

(Closed) Action Item 241: Meet with J. Strasma and determine policy dispositioning of future letters received from special interest groups/individuals.

The NRC plans to continue to read and send responses as additional correspondence is received. Regarding correspondence recently received, the Panel decided to wait on responding to correspondence until after a restart decision was made by the Panel. The Panel decided that this item is closed.

12. Discuss Punch List

C. Lipa led a discussion of the Panel Punch List.

13. <u>Discuss/Update Milestones and Commitments</u>

The Panel reviewed and discussed upcoming milestones and commitments.

RAM Item No. - L-53

Closed: Y

Date of Letter - 7/15/02

Author - Lochbaum

Description of Issue - Did FENOC perform an extent-of-condition assessment for its containment insulation specification problem?

Description of Resolution - Yes. The licensee reviewed the extent-of-condition of containment coatings in preparation for restart. The details of the licensee review results are discussed in NRC Inspection Report No. 50-346/03-17. Specifically, Calculation C-NSA-049.02-26, Revision 01, documents the NPSH licensing basis analysis for the low pressure injection pumps and the containment spray pumps. Of interest for this inspection, was the maximum NPSH margin allotted for ECCS strainer fouling. This calculation documented that the available margin for the most limiting component was 2.5 feet-water.

The current licensee inventory of Non-DBA qualified protective coatings located in containment was tabulated in calculation C-CSS-100.05-001, "Service Level 1 Non-DBA Qualified Protective Coating Application Inventory," Revision 03. This calculation documented the quantity of non-DBA qualified protective coating material present in containment and tracked that quantity against a permissible amount established by an ECCS sump debris loading analysis.

Calculation C-NSA-049.02-032, "Davis-Besse Emergency Sump Strainer Head Loss," Revision 00, determined the pressure drop across the ECCS emergency sump screens due to the accumulation of debris following a postulated loss of coolant accident. The calculation described the limiting scenario as a hot leg break on top of the steam generator located in the east D-ring. The information provided, pertaining to unqualified coatings, for this scenario was:

- Inorganic Zinc 9260 square feet
- Epoxy 9260 square feet
- Alkyds 3500 square feet

Based on this information and additional information on other qualified material that would impact ECCS sump strainer head loss post accident (fiber, reflective metallic insulation, dirt/dust, rust flakes, and other miscellaneous material), a fouled screen head loss value of 1.6 feet-water was obtained at the maximum low pressure injection pump and containment spray pump flow rates. Since the fouled strainer head loss of approximately 1.6 feet-water was less than the limiting margin of 2.5 feet-water, the calculation concluded that adequate NPSH margin was provided to the low pressure injection and containment spray pumps with the new ECCS sump strainer installed.

Calculation C-CSS-100.05-001 was recently revised to include updated information regarding the non-DBA qualified inventory in containment. This reevaluation documented the following changes:

- Inorganic Zinc 0 square feet
- Powder Coating 199 square feet
- Epoxy 7170 square feet (two layers)
- Alkyd 4439 square feet

Additionally, the licensee has decreased the amount of fibrous insulation and increased the amount of reflective metallic insulation that was used as inputs for calculation C-NSA-049.02-032, "Davis-Besse Emergency Sump Strainer Head Loss," Revision 00. At the time this report was issued, the revision to this calculation, which will incorporate the above changes, was in progress. The inspectors reviewed two letters prepared by the licensee contractor performing the calculation revision. These letters documented a preliminary assessment of the "impact of reduced fiber insulation debris on strainer head loss" and the "impact of revised unqualified coatings estimates on strainer head loss." These letters stated, pending completion of the formal calculation, that the current calculation, in regards to fibrous insulation was conservative and that the NPSH margin may actually improve slightly due to the changes in unqualified coating estimates.

The inspectors determined that even though the current post accident NPSH margin that existed for the most limiting component was small (0.9 feet-water), the licensee's methods used to quantify and evaluate the unqualified coatings that remained in containment were adequate. This item is considered closed for restart.

<u>Reference Material</u> - NRC Inspection Report No. 50-346/03-17 (ADAMS Accession No. ml032721592).

RAM Item No. - L-54

Closed: Y

Date of Letter - 7/15/02

Author - Lochbaum

Description of Issue - If L-53 is yes, has the NRC verified its completeness and accuracy?

Description of Resolution - As part of the process to develop a containment transport analysis, the licensee evaluated the amount of material such as qualified coatings, unqualified coatings, reflective insulation, and fibrous insulation present in the containment building. The inspectors' review included an evaluation of how the licensee assessed and quantified each material and how the licensee used this information in the development of their containment transport analysis and, based on the results of the transport analysis, the ultimate impact of those materials on debris loading of the ECCS sump screen. The inspectors did verify that the licensee's debris loading analysis included insulation material located in containment, and that the conclusions for materials present in containment were reasonable. This item is considered closed for restart.

<u>Reference Material</u> - NRC Inspection Report No. 50-346/03-17 (ADAMS Accession No. ml032721592).

RAM Item No. - L-80

Closed: Y

Date of Letter - 12/07/02

<u>Author</u> - Gurdziel (G-16)

Description of Issue - Comments on FENOC changes to commitments, as documented in the licensee's letter dated November 18, 2002, "Regulatory Commitment Change Summary Report (May 18, 2000 - May 18, 2002)." Comments are either disagreement with the changes or comments that the changes are production oriented.

Restart Checklist Item: N/A

Description of Resolution - The NRC staff reviewed the licensee's summary report of changes to commitments referenced above. There were various reasons for the commitment changes including reflecting plant changes, reflecting changes to ASME Code requirements, relaxing or increasing preventive maintenance frequency based on plant experience, and reevaluation of the commitment. From its review, the staff concluded that the changes did not raise safety or regulatory concerns and the number of changes were not excessive. Therefore, no further action is required.

<u>Reference Material</u> - FENOC Regulatory Commitment Change Summary Report (ADAMS Accession No. ML023260058).

RAM Item No. - SUP-33

Closed: Y

Description of Issue - Assessment of Performance in the Reactor Safety Strategic Performance Area: Key Attribute - Design: Evaluate the interfaces between engineering, plant operations, maintenance, and plant support groups.

Description of Resolution - The restart readiness assessment team inspection conducted in December 2003 evaluated the interfaces between engineering, plant operations, maintenance, and plant support groups. Although the team noted problems where planned activities performed or controlled from the work control center were not properly coordinated with operations staff, none were significant from a plant or equipment safety standpoint. The team observed numerous interactions and interfaces between operations and other departments and noted that all the interactions were performed in a professional manner and support to operations was adequate.

Also, observations during rounds with non-licensed operators (NLOs) revealed a good working relationship between organizations. For example:

- Engineering Department was observed responding quickly and effectively to Operations Department issues discussed during the morning turnover meetings;
- Radiation Protection Department was observed providing the needed support to the NLOs;
- NLOs were observed providing input to the work control process; and
- NLOs in the field were observed appropriately challenging the maintenance staff particularly regarding work being completed in rooms containing protected equipment.

The inspection team also observed that system engineers showed an appropriate level of involvement in plant activities based on observed attendance at daily meetings and

communication of technical information. The system engineering and design engineering organizations effectively coordinated their tasks through meetings and the corrective action program. Based on observations of day-to-day activities, there appeared to be a good work relationship between operations and other departments.

<u>Reference Material</u> - Inspection Report No. 50-346/03-11 (ADAMS Accession No. ml040360097).

RAM Item No. - URI-01

Closed: Y

Description of Issue - An apparent violation of the Davis-Besse technical specification associated with operation of the plant with pressure boundary leakage from through-wall cracks in the RCS.

Description of Resolution - The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

To evaluate the technical nature of the issue, the NRC conducted an inspection into the licensee's organizational management programs and reactor operations.

Operation with pressure boundary leakage beyond the technical specification action statement was a direct result of the licensee's failure to identify the control rod drive mechanism leakage, as noted in the findings from the NRC's Augmented Inspection Team Follow-up report (50-346/02-08(DRS)). The licensee's evaluation concluded that the specific programmatic issues, as identified in Licensee Event Report 2002-002-00, were an inadequate Boric Acid Corrosion Control (BACC) program and inadequate implementation of the Inservice Inspection (ISI) program.

Corrective action for the inadequate BACC program is discussed in inspection reports 50-346/02-11 and 50-346/03-09. Inadequate implementation of the ISI program was addressed through Self-Assessment 2002-081 and a Phase 2 program review by the Plant Review Board. Based on a review of these programs, the inspector determined that this issue was properly addressed by the licensee's corrective action program. The NRC's assessment of the effectiveness of those corrective actions are documented in the Corrective Action Team Inspection (CATI) report, No. 50-346/03-10. This item is considered closed for restart.

Reference Material - NRC Inspection Report Nos. 50-346/02-08 (ADAMS Accession No. ml022750524), 50-346/02-11 (ADAMS Accession No. ml031880844), 50-346/03-09 (ADAMS Accession No. ml031880844), and 50-346/03-10 (ADAMS Accession No. ml040680070); Condition Report (CR) 02-00891, "Control Rod Drive Nozzle Crack Indication," Licensee Event Report 2002-002, Root Cause Analysis Report - "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head," Davis-Besse Technical Specification, Limiting Condition for Operation for Reactor Coolant System Operational Leakage, paragraph 3.4.6.2, and Procedure DB-OP-01200, "Reactor Coolant System Leakage Management," Revision 5.

RAM Item No. - URI-02

Description of Issue - Reactor Vessel Head Boric Acid Deposits.

Description of Resolution - The issue was the result of the licensee's failure to implement its corrective action and boric acid control programs. The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues. The inspectors examined the licensee's Root Cause Analysis Report on Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head. The causal factors for the issue were addressed on page 30 of the report and included:

- 1. less than adequate safety focus
- 2. less than adequate implementation of the corrective action program
- 3. no safety analysis performed for the existing condition

Corrective actions were addressed globally by the licensee's Management and Human Performance Improvement Plan and the Program Compliance Plan. These were spelled out as corrective actions to CR 02-00891. Among the corrective actions were:

- Changes in corporate and plant senor management;
- Development of a management field presence/involvement plan to improve management oversight;
- Development of a management monitoring process to monitor and trend the performance of specific management oversight activities;
- Case study training for site personnel to include how the event happened, what barriers broke down, and what must be different in the future;
- Formal assessment of the safety conscious work environment at the plant based on criteria and attributes derived from NRC policy and guidance;
- Establish corporate-wide policy emphasizing the station's industrial and nuclear safety philosophy; and
- Realignment of management incentives to place more reward for safety and safe operation of the station.

Corrective actions for the failure to properly implement the corrective action program or to perform requisite safety analyses were specified under CR 02-00891. These directed a complete overhaul and reinstitution of the corrective action program. To ensure that safety analyses were performed as needed, corporate standards for analyses of safety issues were established and the use of a safety precedence sequence for root cause analyses was mandated. This was confirmed by the inspectors and considered adequate.

The root cause report also identified other, more discrete issues associated with this apparent violation. These included:

- 1. addressing symptoms rather than causes
- 2. less than adequate cause determinations
- 3. less than adequate corrective actions

These were also addressed through corrective actions associated with CR 02-00891. Some of the corrective actions included a case study of this event with an emphasis on the need to find and address the causes of adverse conditions and the potential consequences of failure to do so, implementation of the Corrective Action Review Board to assess adequacy of actions and enforce higher standards for cause evaluations and corrective actions, mandating the use of formal root cause techniques coupled with independent reviews and self-assessments of cause evaluations, and improvements in effectiveness reviews with emphasis on verifying that causes have been properly addressed. These were confirmed by the inspectors.

The NRC's assessment of the licensee's effectiveness in implementing the revised corrective action program and the specific actions noted above is discussed in the CATI report (IR 03-10). This item is considered closed for restart.

<u>Reference Material</u> - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002, and the Root Cause Analysis Report, "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; and NRC Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

RAM Item No. - URI-03

Description of Issue - Containment Air Cooler Boric Acid Deposits.

Description of Resolution - See text for closure of URI-02 above. The resolution for this item is identical. This item is considered closed for restart.

<u>Reference Material</u> - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002, and the Root Cause Analysis Report, "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; and Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

RAM Item No. - URI-04

Description of Issue - Radiation Element Filters with Rust Deposits.

Description of Resolution - See text for closure of URI-02 above. The resolution for this item is identical. This item is considered closed for restart.

<u>Reference Material</u> - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002, and the Root Cause Analysis Report, "Failure to Identify Significant

Closed: Y

Closed: Y

Degradation of the Reactor Pressure Vessel Head"; and Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

RAM Item No. - URI-05

Closed: Y

Description of Issue - Service Structure Modification Delay

Description of Resolution - This unresolved item addressed the licensee's repeated deferral of the modification to install multiple access ports in the service structure to permit cleaning and inspection of the reactor head. Modification 90-0012 was initiated in March 1990 to accomplish this but was deferred twice and then canceled in 1993. The modification was reinitiated in May 1994 as 94-0025 and subsequently deferred four times before the head degradation was identified in 2002.

The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

The licensee has resolved one portion of the URI through installation of the modification. The repeated deferral has been broadly addressed through the Management and Human Performance Improvement Plan and the Program Compliance Plan. In addition, CR 02-00891 resulted in a revision to the charter of the Plant Review Committee, which is the organization responsible for modification approval. The revision incorporated a requirement to include nuclear safety in the considerations when reviewing a plant modification.

The inspector concluded that the issues associated with this unresolved item had been properly addressed by the licensee's corrective action program. This item is considered closed for restart.

Reference Material - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002; Root Cause Analysis Report "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; Request for Modification (RFM) 94-0025, "Install Service Structure Inspection Openings," Voided on August 31, 1999; EWR 01-0378-00, "Provide larger access holes to enable removal of boric acid," dated August 30, 2001; EWR 02-0138-00, "RV Service Structure Support Skirt Openings," dated April 11, 2002; and EWR 02-0217-00, "Replace Existing Reactor Vessel Head," dated June 4, 2002.

RAM Item No. - URI-06

Closed: Y

Description of Issue - Failure to follow the corrective action procedure and complete a prescribed corrective action for adverse trends in RCS unidentified leakage.

Description of Resolution - This unresolved item addressed the licensee's cancellation of a Mode 3 walkdown that was the proposed corrective action for an adverse trend in RCS unidentified leakage. Several months prior to the shutdown for the 2002 refueling outage the

licensee had been examining increases in RCS leakage and as part of an extensive investigation, a walkdown of the containment while the plant was at normal operating temperature and pressure had been specified.

The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

The inspectors evaluated the licensees root cause report and corrective actions taken to address the issues identified in that report. The licensee's root cause analysis report identified the following causal factors for this item:

- 1. less than adequate safety focus
- 2. less than adequate implementation of the corrective action program
- 3. less than adequate corrective actions

Corrective actions associated with the inadequate safety focus are addressed globally by the licensee's Management and Human Performance Improvement Plan and the Program Compliance Plan. These were spelled out as corrective actions to CR 02-00891. Among the corrective actions for these issues were:

- Changes in corporate and plant senor management;
- Development of a management field presence/involvement plan to improve management oversight;
- Development of a management monitoring process to monitor and trend the performance of specific management oversight activities;
- Case study training for site personnel to include how the event happened, what barriers broke down, and what must be different in the future;
- Formal assessment of the safety conscious work environment at the plant based on criteria and attributes derived from NRC policy and guidance;
- Establish corporate-wide policy emphasizing the station's industrial and nuclear safety philosophy; and
- Realignment of management incentives to place more reward for safety and safe operation of the station.

Corrective actions for the failure to properly implement the corrective action program or to perform requisite safety analyses were specified under CR 02-00891. These directed a complete overhaul and reinstitution of the corrective action program. To ensure that safety analyses are performed as needed, corporate standards for analyses of safety issues were established and the use of a safety precedence sequence for root cause analyses was mandated. This was confirmed by the inspectors and considered adequate.

The root cause report also identified other, more discrete issues associated with these apparent violations. These included:

- 1. addressing symptoms rather than causes
- 2. less than adequate cause determinations
- 3. less than adequate corrective actions

These were also addressed through corrective actions associated with CR 02-00891. Some of the corrective actions included a case study of this event with an emphasis on the need to find and address the causes of adverse conditions and the potential consequences of failure to do so, implementation of the Corrective Action Review Board to assess adequacy of actions and enforce higher standards for cause evaluations and corrective actions, mandating the use of formal root cause techniques coupled with independent reviews and self-assessments of cause evaluations, and improvements in effectiveness reviews with emphasis on verifying that causes have been properly addressed. These were confirmed by the inspectors.

The inspectors concluded that this issue had been properly addressed by the licensee's corrective action program. This item is considered closed for restart.

Reference Material - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002; Root Cause Analysis Report - "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; NOP-ER-3001, "Problem Solving and Decision Making Process," Revision 0; CR-01-2862, "Containment Inspection Plan Not Fully Implemented"; DB-OP-01200, "Reactor Coolant System Leakage Management," Revision 5; and NRC Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

RAM Item No. - URI-07

Closed: Y

Description of Issue - The licensee's failure to have a boric acid corrosion control (BACC) program procedure appropriate to the circumstances.

Description of Resolution - The AIT follow-up inspection and the licensee's root cause report identified multiple deficiencies in the plant's BACC program procedure which contributed to the degradation of the reactor head.

The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

As part of the licensee's Program Compliance Plan, the BACC program procedure was completely revised and subjected to a phase 2 PRB review. The Program Compliance Plan, the PRB review, and the revised BACC program procedure were inspected and accepted by NRC inspectors; this inspection is documented in inspection reports 50-346/02-11 and 50/346/3-09.

The inspectors concluded that this issue has been properly addressed by the licensee's corrective action program. This item is considered closed for restart.

Reference Material - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002; Root Cause Analysis Report, "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; Inspection Report 50-346/02-11 (ADAMS Accession No. ml031880844); and Inspection Report 50-346/03-09 (ADAMS Accession No. ml031880844).

RAM Item No. - URI-08

Closed: Y

Description of Issue - Failure to implement the boric acid corrosion control program procedure.

Description of Resolution - This unresolved item involved failure by the licensee engineering staff to follow a number of requirements of the boric acid corrosion control program procedure, most notably the requirement to remove all boric acid and examine the base metal underneath for signs of corrosion.

The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

The inspectors reviewed the sections of the licensee's root cause report which acknowledged these two issues, the section of the root cause report which outlined corrective actions, and the corrective action specified under CR 02-00891. To correct the failure to follow the boric acid corrosion control program procedure, the licensee developed these specific actions:

- provide training to applicable personnel and mangers on the need to remove boric acid from components, to inspect for signs of corrosion, and to perform inspections for signs of boric acid in component internals; and
- reinforce standards and expectations for procedure compliance and the need for work practice rigor.

These were part of the licensee's global approach to the organizational effectiveness issue as part of the Management and Human Performance Improvement Plan and the Program Compliance Plan.

In the root cause, the licensee acknowledged that condition reports associated with the reactor head and other boric acid conditions were categorized as relatively low, which resulted in the use of simple cause analysis techniques. To address this, the licensee developed two corrective actions:

• Establish and ensure that criteria for categorization of the significance of repeat equipment failures are appropriate and used by station personnel. Criteria were to be sufficient to elevate repeat problems to higher levels, which require use of more robust analyses; and

• Review existing long-standing issues for possible elevation to significant condition status, thus engaging formal root cause evaluation techniques to obtain resolution of the issues

As part of the program compliance inspection and the corrective actions team inspection, both of these actions were verified to have been satisfactorily completed. This item is considered closed for restart.

Reference Material - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002; Root Cause Analysis Report, "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; Inspection Report No. 50-346/02-11 (ADAMS Accession No. ml031880844); and Inspection Report No. 50-346/03-09 (ADAMS Accession No. ml031880844), and Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

RAM Item No. - URI-09

Closed: Y

Description of Issue - Failure to implement the corrective action program procedure.

Description of Resolution - This unresolved item involved failure by the licensee engineering staff to follow the guidance and examples for characterization of condition reports as significant, important, routine, or non-conditions adverse to quality and as a result repeatedly mischaracterized the conditions on the reactor head as routine.

The cause for this apparent violation remains under investigation. Any potential willful involvement in the apparent violation by an individual has been evaluated by NRC management and determined not to constitute an immediate safety issue. An NRR manager has been assigned to monitor the investigation and identify any potential safety issues.

The inspectors reviewed the sections of the licensee's root cause report which acknowledged these two issues, the section of the root cause report which outlined corrective actions, and the corrective action specified under CR 02-00891. To correct the failure to follow the boric acid corrosion control program procedure, the licensee developed these specific actions:

- provide training to applicable personnel and mangers on the need to remove boric acid from components, to inspect for signs of corrosion, and to perform inspections for signs of boric acid in component internals; and
- reinforce standards and expectations for procedure compliance and the need for work practice rigor.

These were part of the licensee's global approach to the organizational performance issue as part of the Management and Human Performance Improvement Plan and the Program Compliance Plan.

In the root cause, the licensee acknowledged that condition reports associated with the reactor head and other boric acid conditions were categorized as relatively low, which resulted in the

use of superficial cause analysis techniques. To address this, the licensee developed two corrective actions:

- Establish and ensure that criteria for categorization of the significance of repeat equipment failures are appropriate and used by station personnel. Criteria were to be sufficient to elevate repeat problems to higher levels, which require use of more robust analyses; and
- Review existing long-standing issues for possible elevation to significant condition status, thus engaging formal root cause evaluation techniques to obtain resolution of the issues

As part of the program compliance inspection and the corrective actions team inspection, both of these actions were verified to have been satisfactorily completed. This item is considered closed for restart.

Reference Material - CR 02-00891, "Control Rod Drive Nozzle Crack Indication," dated February 27, 2002; Root Cause Analysis Report, "Failure to Identify Significant Degradation of the Reactor Pressure Vessel Head"; Inspection Report No. 50-346/02-11 (ADAMS Accession No. ml031880844); and Inspection Report No. 50-346/03-09 (ADAMS Accession No. ml031880844), and Inspection Report No. 50-346/03-10 (ADAMS Accession No. ml040680070).

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST					
ltem Number	Action Item (Date generated)	Assigned to	Comments	Due Date	
197	Develop a communication plan with restart Qs and As. (06/17)	J. Stang	6/24-Lead changed; 08/21-Lead changed; 09/30-Discussed, list of Q & As is being gathered for review and forwarding to RA; 10/14-Discussed, J. Shea is compiling the list of Q & As for review by the Panel and results will be forwarded to the RA; 10/21- Brainstorming session to occur 10/23 to final presentation to Panel; 11/20- The list of Q&As will be inserted to the Comm Matrix today; 12/15-Discussed, Plan with Panel Chairman; 12/30- Discussed, major rework in progress and plan will need to go back into concurrence; 1/26-Discussed, the revised Comm Plan is being routed for concurrence with the final Q&As to be emailed to the region by 1/28.	02/02/04	
208	Evaluate the need to call back CI regarding Allegation RIII-2002-A-0177 (D-B) after the OI Investigation is complete (08/21)	M. Phillips	10/14-Investigation is still ongoing; 12/23-Discussed, awaiting DOJ Investigation.	TBD	
212	Determine whether the Communication Team has received all electronic and written correspondence from external sources. If there is reasonable confidence that the Communication Team has all the correspondence then develop a set of bullets explaining why there is reasonable confidence. (09/23)	J. Stang	10/14-Discussed, Set of bullets still under development; item will be discussed at next Panel meeting on 10/16; 11/04 -Discussed, J. Stang is adding to Comm. Matrix; 11/20-Only remaining is the documented criteria for proof of reasonable confidence; 12/15-Discussed, all inputs received from panel members-closure memo to document completeness confidence in draft and will go to Panel next week; 12/30-Discussed, Bullets in review and NRR will forward to Region; 1/06- Discussed, List of Bullets in final review and will be disseminated 1/09/04; 1/20- Discussed, List of Bullets will be sent to Region for review at next Panel; 1/26- Discussed, the final list of bullets will be emailed to the region by 1/29; 1/30- Discussed, Bullets sent to Panel. Panel decided that this item is Closed.	01/20/04	

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST						
ltem Number	Action Item (Date generated)	Assigned to	Comments	Due Date		
220	Develop inspection plan requirements which include review of post restart security program effectiveness. (10/28)	D. Passehl	11/20-The plan is being developed and supplemented from baseline requirements; 12/15-Discussed, draft plan in final; 01/13-Discussed, decided this action item refers to only security inspections; 1/26-Discussed, Jim Creed will update region Panel members prior to Panel on 01/30/04; 1/30-Discussed, Jim Creed updated regional Panel members before Panel Meeting. Panel decided that this item is Closed.	02/02/04		
224	Rewrite the proposed IN on TSP to be generic and reflect attainable plant conditions and what information should be disseminated to the industry concerning Boric Acid Corrosion Control Programs. (12/09)	D. Hills	12/15-Discussed, D. Hills is working; 12/23-Discussed, this issue will be discussed internally in RIII and brought to Panel on 1/06/03 for a final decision on how to proceed; 1/20-Discussed, revised IN is with Panel Chairman for review; 1/30-Discussed, Chairman's comments were sent to J. Lara.	02/15/04		
228	Place all Email requests sent throughout Agency, responses received, and issue resolutions in ADAMS package for documentation. (12/16)	M. Mitchell	1/06-Discussed, will verify ADAMS package is in place to support collection of emails and responses- email requests will be resent due to small response to date; 1/30- Discussed, will verify and update Panel on 2/3/04.	01/23/04		
231	As soon as the final RRATI report is issued, Email a copy to Rick Jacobs at INPO. (12/23)	D. Passehl	1/20-Discussed, expect report to be complete by 01/30/04.	02/09/04		
232	Track the status of the response on App. R TIA due 01/09/04. (12/30)	J. Stang	12/30-Discussed, J. Dyer briefed on 12/29/03; J. Caldwell brief scheduled for 12/31/03; 01/13-Discussed, due date extended until 01/16/04; 01/15- Discussed, the due date extended for final draft, by agreement with Region to 01/23/04; 1/26-Discussed, expect final response from Tech review by end of the week, 1/30.	01/23/04		

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST						
ltem Number	Action Item (Date generated)	Assigned to	Comments	Due Date		
234	Develop protocol paper for NRC representative on DOJ committee interface with 0350 Panel for updates. (01/06)	W. Ruland	10/15/04-Discussed, protocol paper regarding decision making being drafted as a letter from Sam Collins to Bruce Boger and includes criteria for Immediate Action; 1/20-Discussed, the draft has been sent to B. Boger for DOJ comments; 1/26-Discussed, B. Boger is reviewing with senior management.	01/16/04		
235	Advise panel on need for post-restart inspection, based on review of our Greenpeace 2.206 petition and the immediate action response letter we issued on Nov 26, 2003 (01/08)	J. Jacobson	01/13-Discussed, will contact Jacobson for when a brief will be provided to the Panel; 1/30-Discussed, Brief will be provided to Panel at 2/5/04 meeting.	02/05/04		
236	Review the Dec 31, 2003 revision of NRC Inspection Manual Chapter 0350 against current Panel Process Plan and brief Panel on results. (01/13)	D. Passehl	1/20-Discussed, review in progress and Panel will be briefed on 01/30/04; 1/30-Discussed, Panel was briefed on minor changes which will be incorporated into the Process Plan update. Panel decided that this item is Closed.	01/30/04		
238	Draft a Memo from John Grobe to Caldwell, Dyer, and Collins to accompany and discuss sensitivity of information in DRAFT Restart Comm Plan. (01/15)	A. Mendiola	1/20-Discussed, draft memo will be sent to J. Grobe by the end of the week 1/23; 1/26-Discussed, draft emailed to J. Grobe for review; 1/30-Discussed, draft memo is finalized. Panel decided that this item is Closed.	01/21/04		
239	Coordinate with OEDO to determine what appropriate response is required for the 1/16/04 Lochbaum Email on Commission interest in Davis-Besse (01/26)	W. Ruland	1/30-Discussed, this will be addressed through the Comm Team and tracked on the Matrix. Panel decided this item is Closed.	02/05/04		
240	Develop recommendations for revising the Panel's criteria for determining if an allegation is a restart issue to focus on safety concerns. (01/26)	C. Lipa	1/30-Discussed, Recommendation presented to Panel and Panel approved. Panel decided this item is Closed.	02/03/04		

January 30, 2004

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST						
ltem Number	Action Item (Date generated)	Assigned to	Comments	Due Date		
241	Meet with J. Strasma and determine policy dispositioning of future letters received from special interest groups/individuals. (01/26)	R. Baker	1/30-Discussed, J. Strasma present process for handling in-coming correspondence to Panel. Panel decided this item is Closed.	02/03/04		
242	Review MC 0350 and philosophy on which documentation is required for public dissemination and which should be retained following plant restart. (01/26)	D. Passehl		02/05/04		