July 24, 2003

Mr. Lew W. Myers
Chief Operating Officer
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION
NRC SPECIAL INSPECTION -MANAGEMENT AND HUMAN PERFORMANCE
ROOT CAUSE ASSESSMENT - REPORT NO. 50-346/2002018(DRP)

Dear Mr. Myers:

On June 13, 2003, the NRC completed a Special Inspection at your Davis-Besse Nuclear Power Station. This inspection reviewed your actions to resolve Items 1.b and 4.a of the NRC's Restart Checklist, Revision 3, associated with the adequacy of organizational effectiveness and human performance. Specifically, this inspection included our continuing review of your activities to identify and correct the management and human performance deficiencies which contributed to the reactor pressure vessel head degradation. Further, the inspection reviewed your implementation of the identified corrective actions to address the deficiencies. Our review included an evaluation of your staff's root cause assessment methods, and the appropriateness and implementation of identified corrective actions. The enclosed report presents the results of our review.

The NRC's Davis Besse Oversight Panel determined that a special inspection of the management and human performance area was warranted. The overall inspection plan was designed to assure that an appropriate root cause analysis had been completed (Phase 1), that appropriate corrective actions had been identified and implemented (Phase 2), and that the effectiveness of those corrective actions was assessed (Phase 3). The attached inspection report completes our review of the first two phases of the overall plan. No findings were identified during this inspection.

During the current inspection, we completed our review of your staff's assessments in the areas of operations, engineering, corporate oversight, Company Nuclear Review Board, and the Collective Significance Overview. Based on those reviews and our previous reviews of quality assurance and management and human performance assessments (reference Inspection Report 50-346/2002015), we have concluded that FirstEnergy Nuclear Operating Company's (FENOC) overall assessment was of appropriate depth and breadth to develop actions to correct and prevent recurrence of the management and human performance deficiencies associated with the reactor head degradation. We have also concluded, based on our review of selected corrective actions, that if properly implemented and monitored, the corrective actions will appropriately address the issues identified in the assessments. Furthermore, we have concluded that the scheduling and implementation of the corrective actions have been appropriate.

While not part of the Phase 1 and 2 inspection plan, the team also reviewed portions of the "Safety Culture Evaluation of the Davis-Besse Nuclear Power Station" report, performed by Performance, Safety, and Health Associates, Inc. for FirstEnergy Nuclear Operating Company as part of the Phase 3 inspection that will be documented in Inspection Report 50-346/2003012. That report indicated increased attention to a number of organizational factors, including communications, alignment, accountability, and integration of safety into the organization, along with the organization's ability to learn from its own and others' experiences, is needed to ensure the corrective actions' long term viability. Therefore, while the effectiveness of currently identified corrective actions may be acceptable to address the restart checklist item, activities beyond those identified in the Management and Human Performance Plan appear to be necessary to sustain the improvements in the Safety Culture at Davis-Besse.

Based on the results of this inspection and the Davis-Besse Oversight Panel's review, Restart Checklist Items No. 1.b. and 4.a. regarding the adequacy of the root cause evaluations and the appropriateness of the identified corrective actions associated with organizational and human performance are considered closed, as documented in sections 2.c and 3.c of the attached report. Restart Checklist Item 4.b., regarding the effectiveness of the corrective actions will be evaluated following completion of Phase 3 of the inspection plan.

In accordance with 10 CFR 2.790 of the USNRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

John A. Grobe, Chairman
Davis-Besse Oversight Panel

Docket No. 50-346
License No. NPF-3

Enclosure: Inspection Report 50-346/02-18

See Attached Distribution

cc w/encl: The Honorable Dennis Kucinich
B. Saunders, President - FENOC
Plant Manager
Manager - Regulatory Affairs
M. O'Reilly, FirstEnergy
Ohio State Liaison Officer
R. Owen, Ohio Department of Health
Public Utilities Commission of Ohio
President, Board of County Commissioners
Of Lucas County
Steve Arndt, President, Ottawa County Board of Commissioners
D. Lochbaum, Union Of Concerned Scientists

While not part of the Phase 1 and 2 inspection plan, the team also reviewed portions of the "Safety Culture Evaluation of the Davis-Besse Nuclear Power Station" report, performed by Performance, Safety, and Health Associates, Inc. for FirstEnergy Nuclear Operating Company. That report indicated increased attention to a number of organizational factors, including communications, alignment, accountability, and integration of safety into the organization, along with the organization's ability to learn from its own and others' experiences, is needed to ensure the corrective actions' long term viability. Therefore, while the effectiveness of currently identified corrective actions may be acceptable to support unit restart, activities beyond those identified in the Management and Human Performance Plan appear to be necessary to ensure your efforts to improve the Safety Culture at Davis-Besse are successful.

Based on the results of this inspection and the Davis-Besse Oversight Panel's review, Restart Checklist Items No. 1.b. and 4.a. regarding the adequacy of the root cause evaluation and the corrective action associated with organizational and human performance are considered closed, as documented in sections 2.c and 3.c of the attached report. Restart Checklist Item 4.b., regarding the effectiveness of the corrective actions will be evaluated following completion of Phase 3 of the inspection plan.

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Sincerely,

John A. Grobe, Chairman
Davis-Besse Oversight Panel

Docket No. 50-346
License No. NPF-3

Enclosure: Inspection Report 50-346/02-18

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-346
License No:	NPF-3
Report No:	50-346/02-18
Licensee:	FirstEnergy Nuclear Operating Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5501 North State Route 2 Oak Harbor, OH 43449-9760
Dates:	October 10, 2002, through June 13, 2003
Inspectors:	G. Wright, Team Leader J. Lara, Senior Resident Inspector, Kewaunee R. Pelton, Human Factors Specialist, NRR J. Jacobson, Senior Inspector, NRR
Approved by:	John A. Grobe, Chairman Davis Besse Oversight Panel

SUMMARY OF FINDINGS

IR 05000346-02-18, FirstEnergy Nuclear Operating Company, on 10/10/02 to 06/13/03, Davis-Besse Nuclear Power Station. Special Inspection.

This report covers a special inspection continuing the NRC's review of the licensee's root cause evaluation and corrective actions for the management and human performance aspects of the reactor coolant system pressure boundary leakage and degraded reactor vessel head. The inspection was conducted by Region III and NRR inspectors.

The licensee's root cause analysis in the Management & Human Performance area was comprised of seven individual assessments:

1. "Root Cause Analysis, Failure to Identify Significant Degradation to the Reactor Pressure Vessel Head," 8/13/02;

2. "Root Cause Analysis, Failure in Quality Assurance Oversight to Prevent Significant Degradation of the Reactor Vessel Head," 9/10/02;

3. "Root Cause Analysis, Lack of Operations Centrality in Maintaining, Assuring, and Communicating the Operational Safety Focus of Davis-Besse and Lack of Accountability of Other Groups to Operations in Fulfilling that Role," 11/22/02;

4. "Root Cause Analysis, Assessment of Engineering Capabilities," 1/3/03;

5. "Evaluation of FENOC Company Nuclear Safety Review Board," 8/13/02;

6. "Evaluation of Corporate Management Issues," 12/18/02; and

7. "Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse," 3/17/03 .

Based on the review of items 3 through 7 combined with the previously reviewed items 1 and 2 (NRC Inspection Report 50-246/2002-015), and review of corrective actions listed in the Management & Human Performance Improvement Plan, the team concluded:

- The overall assessment of the management and human performance causal factors for the vessel head degradation condition was of appropriate depth and breath to develop meaningful corrective actions to correct and prevent recurrence of the management and human performance deficiencies associated with the reactor head degradation.

- The corrective actions associated with the individual assessments appropriately addressed the issues identified in the assessments.

- The classification of corrective action implementation as pre or post restart was in a majority of the cases appropriate.

- A majority of the corrective actions were being appropriately implemented.

- The practice of rolling condition reports (CR) into other CRs was identified as a concern. While only one example was identified where the original issue had not been addressed, the team determined that there were no mechanisms in place to preclude the problem from recurring. This issue has been provided to the NRC's Corrective Action Team for further evaluation (Inspection 50-346/2003-010).

- In a few instances, the corrective action closure packages exhibited a lack of attention to detail. The team identified a few corrective actions which were reported as being complete; however, the included documentation did not by itself support the closure. In addition, in a few cases, the licensee modified the corrective actions without noting that a change had been made and without addressing whether the final actions were consistent with the originally documented corrective actions; the team's review determined that in all cases the final actions taken were at least equivalent to the originally identified actions.

Based on the results of this inspection and the Davis-Besse Oversight Panel's review of the results, Restart Checklist Items No. 1.b. and 4.a. regarding the adequacy of the root cause evaluation and the corrective action associated with management and human performance are considered closed. Refer to Sections 2.c and 3.c of this report.

REPORT DETAILS

1.0 Overall Inspection Scope and Methodology

a. Inspection Scope

The overall inspection plan (plan) for the management and human performance area was comprised of three phases. Phase 1 was to evaluate the root cause analyses, phase 2 was to evaluate the appropriateness and implementation of corrective actions, and phase 3 was to assess the effectiveness of the corrective actions. This inspection completed phase 1 of the plan by reviewing the additional licensee analyses identified below and phase 2 of the plan by reviewing selected corrective actions and their implementation. Specifically, this inspection evaluated the licensee's root cause(s) assessments of its failure to identify reactor coolant system pressure boundary leakage and significant degradation of the reactor pressure vessel head. Further, the inspection evaluated the licensee's actions to correct and prevent recurrence of the conditions which allowed the leakage and degradation to go undetected.

The inspection did not assess the licensee's root cause of the technical issues associated with the cracking of the reactor vessel head nozzles or the vessel head corrosion mechanisms. Furthermore, this inspection did not assess the circumstances surrounding the licensee's request to delay inspection of the control rod drive nozzles from December 31, 2001 to February 16, 2002.

The licensee's root cause analysis was comprised of the following assessments:

- "Failure to Identify Significant Degradation to the Reactor Pressure Vessel Head;"
- "Failure in Quality Assurance Oversight to Prevent Significant Degradation of the Reactor Vessel Head;"
- "Lack of Operations Centrality in Maintaining, Assuring, and Communicating the Operational Safety Focus of Davis-Besse and Lack of Accountability of Other Groups to Operations in Fulfilling that Role;"
- "Evaluation of FENOC Company Nuclear Safety Review Board;"
- "Assessment of Engineering Capabilities;"
- "Evaluation of Corporate Management Issues;" and
- "Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse."

The inspection team's evaluation of the first two assessments, "Failure to Identify Significant Degradation to the Reactor Pressure Vessel Head," and "Failure in Quality Assurance Oversight to Prevent Significant Degradation of the Reactor Vessel Head," was documented in NRC Inspection Report 50-346/2002015.

b. Inspection Methodology

In performing its inspection, the team reviewed information supporting the licensee's assessments and corrective actions, including:

- selected condition reports;
- selected corrective action documents;
- identified assessment documents; and
- documentation supporting corrective actions.

In addition, the team interviewed licensee employees and observed selected training activities.

The inspection team used guidance contained in Inspection Procedure 95002, "Inspection For One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area," in evaluating the acceptability of the licensee's analyses including:

- Was a systematic method used to identify root and contributing causes?

- Was the root cause evaluation conducted to a level of detail commensurate with the significance of the problem?

- Did the evaluation consider prior occurrences and knowledge of prior operating experience?

- Did the evaluation consider potential common causes?

- Were appropriate corrective actions specified?

- Were the corrective actions prioritized with consideration of risk significance and regulatory compliance? and

- Was a schedule for corrective action implementation established?

2.0 Assessment of the Licensee's Evaluations:

a. Inspection Scope

This portion of the inspection reviewed assessments which had not been ready for review during inspection 50-346/2002015 and followed up on the issues identified in the same Inspection Report. Specifically the team reviewed the following:

Finalized Evaluations:

"Lack of Operations Centrality in Maintaining, Assuring, and Communicating the Operational Safety Focus of Davis-Besse and Lack of Accountability of Other Groups to Operations in Fulfilling that Role;" and

"Evaluation of FENOC Company Nuclear Safety Review Board."

New Evaluations:

”Assessment of Engineering Capabilities;”

“Evaluation of Corporate Management Issues;” and

“Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse.”

b. Observations

b.1 Review of Licensee Assessment Not Available During Inspection 50-346/2002015.

The team reviewed the final Operation’s Department and Company Nuclear Review Board assessments. The team concluded that the assessments were appropriate and identified a number of areas for improvement.

The operation’s review supported the less than adequate nuclear safety focus conclusions from the licensee’s Management and Human Performance assessment and identified additional contributing causes in the areas of staffing, expectations for licensed personnel, and safety conscious work environment.

The evaluation of the Company Nuclear Review Board (CNRB) likewise identified a number of areas for improvement. The areas included, for example, re-focus on safety issues, clear expectation of CNRB’s function, a reduction in production type presentations, concentration of providing an independent safety audit function, and including as a major input to its activities information from Quality Assurance and Corrective Action Programs.

b.2 Review of Licensee’s Actions to Address Issues Identified in Inspection Report 50-346/2002-015

The following items were identified by the NRC during inspection 50-346/2002015:

a. the existing root cause analyses did not sufficiently cover issues in the engineering area;

b. the existing root cause analyses did not cover corporate influences or lack of corporate oversight;

c. the existing root cause analyses did not used an integrated approach; and

d. the existing analyses and associated corrective actions did not cover the importance of following NRC regulations (including Appendix B to 10 CFR Part 50).

To address these items, the licensee:

a. conducted an assessment of engineering capabilities;

b. performed a corporate oversight evaluation;

c. performed a collective review of the causal factors associated with the reactor vessel pressure head degradation; and

d. incorporated the role of the NRC's regulations in maintaining safe operation into Case Study training.

The licensee's engineering assessment was conducted by a highly qualified team of industry executives and identified numerous weaknesses within the Davis-Besse engineering organization. Among the weaknesses identified were the need to fill key management and staff positions in the organization, a lack of clarity regarding engineering roles and responsibilities, a large backlog of design deficiencies, and insufficient oversight of vendor produced engineering work.

The licensee's corporate management review consisted of compilation of previously identified corporate oversight issues and actions taken to strengthen corporate oversight. For example, FENOC has added three new executive level positions to provide leadership and oversight of its nuclear facilities, including a Vice President of Oversight reporting directly to the FirstEnergy Board of Directors.

The licensee's collective review captured the common threads among the licensee's various assessments dealing with Management and supervisory methods, corrective actions, and work practices. In addition, the review identified issues in the areas of written procedures and documents, technical competency, and cross organizational effectiveness which had not been highlighted in other assessments. The licensee concluded that existing corrective actions were board enough to cover the additional items.

The role of NRC regulations in maintaining safe operations was incorporated into all Case Study training sessions. The team observed Case Study training for Engineering, Operations, Quality Assurance, and Radiation Protection/Chemistry and independently verified that the subject was adequately addressed.

c. Conclusion

Based on its reviews, the team concluded that the individual assessments had been conducted using systematic methods appropriate for the complexity of the area and that the level of detail was commensurate with the significance of the problem. Further, the assessments looked for prior occurrences, common causes, and identified appropriate correction actions.

In addition, based on the reviews conducted during this inspection, combined with the results from Inspection 50-246/2002-015, the team concluded that the overall assessment of the management and human performance causal factors for the vessel

head degradation condition was of appropriate depth and breadth to develop meaningful actions to correct and prevent recurrence of the performance deficiencies associated with the reactor head degradation. This conclusion also reflects that Restart Checklist Item 1.b., "Adequacy of Root Cause Determinations for Organizational, Programmatic and Human Performance Issues," was discussed with the Davis-Besse Oversight Panel, is considered closed.

For additional information on the licensee's Quality Assurance and CNRB reviews, refer to NRC Inspection Reports 50-346/2002-011; 50-346/2003-009.

3.0 Appropriateness and Implementation of Corrective Actions in Relation to Licensee Root Cause Evaluations

a. Inspection Scope

This portion of the inspection evaluated the appropriateness of the licensee's proposed corrective actions to address the issues identified in the individual analyses and evaluated the appropriateness of the classification of the corrective actions as either needing to be completed pre-restart or post-restart. The inspection also reviewed the licensee's implementation of selected corrective actions.

In Inspection Report 50-346/2002-015, the NRC team concluded that the licensee's proposed corrective actions were sufficiently comprehensive to address the issues raised in the assessments that had been completed. During this inspection, the team reviewed proposed corrective actions associated with the additional assessments performed by the licensee.

The licensee documented 200 corrective actions in its Management and Human Performance Improvement Plan (Revision 2); 122 were required to be completed prior to plant restart. The team reviewed 100 percent of the corrective actions which the licensee indicated were complete as of May 9, 2003. The review accounted for approximately 72 percent of all corrective actions and 90 percent of all restart actions assigned to the Management and Human Performance area. As part of the reviews, the team interviewed selected individuals responsible for implementing the corrective actions to enhance the team's understanding of the actions and to determine the responsible individuals understanding of the actions. The team also reviewed the corrective actions against the identified concern to independently assess the appropriateness of the actions.

b. Observations

b.1 Appropriateness of Proposed Corrective Actions

Representative corrective actions for the root causes included initiatives to improve the safety focus of the organization; improve implementation of the Corrective Action Program; improve use and integration of industry information and operating experience; and increase Boric Acid Corrosion Control (BACC) program compliance. Representative corrective actions for the contributing causes and related observations included improvements to the corrective action procedure, coordination of BACC

activities, improved training of inspectors and technicians, and increased management observations of field activities. The inspection team determined that the corrective actions appeared to appropriately address the identified causes and observations. The team also concluded that the proposed corrective actions, if properly implemented and monitored, would be sufficient to preclude recurrence of the original issue.

Refer to Attachment A to this report for a complete listing of corrective actions reviewed. The list is divided into sections associated with each Condition Report (CR) as follows:

- CR-02-00891 Head Degradation Root Cause Report
- CR-02-02578 Quality Assessment Root Cause Report
- CR-02-02581 Operation's Leadership Root Cause Report
- CR-02-07485 Corporate Nuclear Review Board Assessment
- CR-02-07525 Engineering Assessment
- CR-02-09069 Miscellaneous Corrective Actions

Notwithstanding the overall conclusion, one area of concern was identified during the corrective action review. The concern was that the licensee's corrective action program (CAP) allowed closing one condition report to another condition report without reviews to ensure the issue was properly translated to, and addressed by the new report. While only one example was identified where the original issue had not been addressed, the team determined that there were no mechanisms in place to preclude the problem from recurring. This issue has been provided to the NRC's Corrective Action Team for further evaluation.

b.2 Appropriateness of Corrective Action Restart Classification

The licensee's Restart Station Review Board, in accordance with procedure NG-VP-00100, "Restart Action Plan Process," classified items as either pre-restart or post-restart. The team reviewed the licensee's classification process as applied to the items that had been identified as part of its "Management and Human Performance Improvement Plan," dated February 18, 2003. In general, the team's review identified that the classifications were appropriate; however, the team was concerned with the classification of the 48 corrective actions discussed in the engineering assessment. Of the 48 corrective actions, only two were classified as plant pre-restart items. The team questioned whether issues such as inadequate staffing and a lack of clear roles and responsibilities for the engineering organization were appropriately prioritized as post-restart As a result of the team's questions, the licensee resubmitted the engineering issues to the board for further review. Based upon that review, the licensee re-classified 9 additional corrective actions as pre-restart with 2 additional items still under review.

The team also reviewed a number of corrective actions which had originally been classified as "pre-restart" and were subsequently changed to "post restart." Based on an independent assessment of the issues' relevance to restart, the team concluded that the reclassifications were appropriate.

b.3 Corrective Action Implementation

With few exceptions, the actions specified in the corrective action documents were accomplished as prescribed. In those instances where the actions taken were not consistent with the specified actions, the inspectors determined that actions taken were at least equivalent to the originally proposed actions. While the alternative actions were found to be equivalent, the team noted that the licensee had not documented or evaluated the difference until questioned by the team.

The inspection team identified some instances where the documentation to justify that the corrective action had been completed was not sufficient in itself to conclude that the action was completed. The licensee was able to provide additional information to resolve the issue. Improvements in the licensee's closure packages were noted as the inspection progressed.

The team observed Case Study training provided to Operations, Radiation Protection/Chemistry, Quality Assurance, and Engineering. The training was well received by each group, although the engineering presentations missed opportunities to re-enforce the messages by using current performance examples.

b.4 Corrective Action Tracking System

The team reviewed the licensee's tracking system for ensuring corrective actions were accomplished and concluded that the system was adequate.

c. Conclusions

Based on the reviews conducted during this inspection, combined with the results from Inspection 50-246/2002-015, the team concluded that the actions listed in the licensee's Management and Human Performance Plan, to address the management and human performance deficiencies, are appropriate to correct and prevent recurrence of the performance deficiencies associated with the reactor head degradation. This conclusion also reflects on Restart Checklist Item 4.a., "Adequacy of Organizational Effectiveness and Human Performance Corrective Action Plan," which was discussed with the Davis-Besse Oversight Panel and is considered closed.

In addition, the team, based on independent review and assessment activities, concluded that the corrective actions had been appropriately classified and scheduled, and were being properly implemented. The licensee's system for monitoring action status was also appropriate for their use.

4.0 Exit Meeting

The Team presented the inspection results to Mr. L. Myers and members of his staff on Friday, June 13, 2003. The licensee acknowledged the results presented. No proprietary information was identified.

KEY POINTS OF CONTACT

G. Becker, Regulatory Interface
M. Bezilla, Vice President, Davis Besse
D. Eshelman, Nuclear Engineering Services Director
R. Fast, Director, Organizational Development
J. Hirsch, Supervisor, Business Planning & Services
R. Huey, Manager, Employee Concerns Program
G. Leidich, Executive Vice President
S. Loehlein, Manager, Quality Assurance
P. McCloskey, Manager Regulatory Affairs
L. Myers, Chief Operating Officer
J. Powers, Director, Engineering
C. Price, Manager, Business Services
M. Roder, Manager, Operations
R. Schrauder, Director, Nuclear Support Services
T. Simonetti, Supervisor, Training

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
BACC	Boric Acid Corrosion Control
CA	Corrective Action
CATI	Corrective Action Team Inspection
CNRB	Company Nuclear Review Board
CR	Condition Report
DRP	Division of Reactor Projects
E&CF	Events and Causal Factors
FENOC	FirstEnergy Nuclear Operating Company
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
PARS	Publicly Available Records
CA	Corrective Action

DOCUMENTS REVIEWED DURING THE INSPECTION:

- "Root Cause Analysis, Failure to Identify Significant Degradation to the Reactor Pressure Vessel Head," August 13, 2002;
- "Root Cause Analysis, Failure in Quality Assurance Oversight to Prevent Significant Degradation of the Reactor Vessel Head," September 10, 2002;
- "Root Cause Analysis, Lack of Operations Centrality in Maintaining, Assuring, and Communicating the Operational Safety Focus of Davis-Besse and Lack of Accountability of Other groups to Operations in Fulfilling that Role," CR 2002-02581, November 22, 2002;
- "Root Cause Analysis, Assessment of Engineering Capabilities," CR 2002-07527, January 3, 2003;
- "Evaluation of FENOC Company Nuclear Safety Review Board," CR 2002-07485, August 13, 2002;
- "Evaluation of Corporate Management Issues" December 18, 2002; and
- "Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse," March 17, 2003.

The following attachment provides additional documents reviewed during the inspection. The documents are listed with the appropriate corrective action for ease of understanding.

Attachment A

Corrective Actions Associated with Condition Report 02-00891 "Head Degradation Root Cause Report"

CA NUMBER: 19

Include in the case study the missed opportunities to recognize RPV Head corrosion from Operating Experience evaluations

DOCUMENTS REVIEWED:

Case Study slides

Attendance at Engineering, Operations, Radiation Protection/Chemistry, Nuclear Quality Assurance Case Study sessions

COMMENTS:

Case Study presentation in Operations, Radiation Protection/Chemistry, and Quality Assurance went well. During the Engineering case study, opportunities to re-enforce messages with contemporary examples were missed.

CA NUMBER: 20

Perform Self-Assessments of the boric acid corrosion control and ISI/IST programs and revise as necessary.

DOCUMENTS REVIEWED:

Verified self assessment had been performed; SA # 2002-0077.

COMMENTS:

Technical adequacy was subject of Program review.

CA NUMBER: 22

Develop and implement a program for increased presence of management in the field both during outages and during normal operations to improve management oversight.

DOCUMENTS REVIEWED:

FENOC Change Management Guideline, Davis-Besse Observation Program, Revision 0, 10/24/2002

Performance Indicator Observation Program Expectations, Revision 0, 9/2002

COMMENTS:

None

CA NUMBER: 26

Review/revise charter and membership for the Project Review Committee.

DOCUMENTS REVIEWED:

DBPRC Charter Revision 03

COMMENTS:

None

Attachment A

CA NUMBER: 27

Augment the staff short term. Establish a plan to fill long-term needs.

DOCUMENTS REVIEWED:

DBE-0001 - Engineering Assessment Board Role/Policy in Support of the Return to Service Plan, Revision 2, 12/12/02.

COMMENTS:

None

CA NUMBER: 29

A restart review board will be put in place made up of independent industry experts to verify effectiveness of actions taken, and to ensure the management issues are fully developed and addressed prior to startup.

DOCUMENTS REVIEWED:

Restart Overview Panel Charter in the Return to Services Plan 6/6/2002
Davis-Besse Restart Overview Panel Charter, Revision 2, 12/3/2002

COMMENTS:

None

CA NUMBER: 32

Quality Assurance will increase oversight of engineering activities

DOCUMENTS REVIEWED:

Quality Field Observation: DB 12002584 10/25/2002
Quality Field Observation: DB 12002154 6/10-28/2002

COMMENTS:

Two full-time contractors hired to supplement QA engineering oversight

CA NUMBER: 36

Perform an assessment of the Corrective Action program.

DOCUMENTS REVIEWED:

Corrective Action Program Restart Implementation Plan, PR-IAP-3A-01, Revision 1, 3/3/2003

COMMENTS:

This corrective action is being performed in conjunction with the corrective Action Program Restart Implementation Plan (CAP-IAP). Two CRs have been written to support the CAP-IAP, CR 02-04884 and CR 02-04885. CR Number 02-04884 deals with human performance and implementation of the ineffective corrective action program (CAP). CR Number 02-04885 deals with the infrastructure and process of the ineffective CAP.

Attachment A

CA NUMBER: 40

The Senior Management Team shall review and endorse all root causes.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

None.

CA NUMBER: 41

Assess the Safety Conscious Work Environment of Davis-Besse based on criteria and attributes derived from NRC policy and guidance, develop recommended actions and implement the action plan to address any adverse conditions identified by the assessment.

DOCUMENTS REVIEWED:

FENOC SCWE Action Plan, updated 1/22/2003
New FENOC Policy On Safety Conscious Work Environment, 11/27/2002
Notice to All FENOC Employees from Robert Saunders SUBJECT: Nuclear Safety
Nuclear Operating Policy NOPL-LP-2004 "Nuclear Safety" Revision 0,
NOPL-LP-2003, "Policy for Maintaining a Safety Conscious Work Environment (SCWE) Revision 0, 11/21/02
Davis-Besse Business Practice DBBP-VP-0001 "Safety Conscious Work Environment Review Team Charter" Revision 0 11/19/2002
Nuclear Operating Business Practice, NOBP-LP-2003, "Employee concerns Program" Revision 0, 12/30/02
DBBP-LP-2004, "Differing Professional Opinion Disposition Process" Revision 0, 12/18/02
Training records for Safety Conscious Work Environment

COMMENTS:

The review conducted in this area was limited to an assessment of whether the specified corrective actions were accomplished.

CA NUMBER: 42

Extensive changes have been made in the officers, directors, and managers responsible for Davis-Besse, including establishment and appointment of a new Chief Operating Officer, Executive Vice President, and Vice President of Oversight; changes in the site Vice President; and changes in each of the directors.

DOCUMENTS REVIEWED:

Davis-Besse organizational charts

COMMENTS:

None

Attachment A

CA NUMBER: 44

Management will ensure standards of excellence are communicated, and monitoring will ensure these standards are upheld at all levels.

DOCUMENTS REVIEWED:

Case Study notes on Senior Management Team Standards
Attendance at Engineering, Operations, RP, NQA Case Study meetings.
Management Observations work sheets
FENOC Engineering Principles and Expectations NOPL-CC-0001, 7/10/2002
Davis-Besse Operations Section "Our Conduct for Excellence 'Leading the way'" Revision 3, 9/18/02

COMMENTS:

None

CA NUMBER: 45

A Management Monitoring Process will be implemented to monitor and trend the performance of specific management oversight activities taken on an individual basis.

DOCUMENTS REVIEWED:

Refer to CA 22 for Management Observation Program
Observed 2/25 Senior Management Team meeting
Fuel Handling Observation Schedule for 2/19-27/2003
List of Condition Reports generated from Observations Conducted Between 1/1/03 and 2/18/03.

COMMENTS:

Expectations for managers to be observing high profile activities was re-enforced by senior level individuals. Senior managers wanted to know what manager was assigned to the activity and the plan for oversight.

CA NUMBER: 46

Case Study training will be given, which will consist of a review of the timeline of the event with site personnel to ensure all personnel understand how the event happened, what barriers broke down, missed opportunities, lessons learned, and what needs to be different in the future. Testing will be required.

DOCUMENTS REVIEWED:

Refer to Case Study closure package

COMMENTS:

The inspectors observed Case Study training provided to operations, radiation protections/chemistry, Nuclear Quality Assurance, and engineering. The training was well received by each group, although the presentations to Engineering missed opportunities to re-enforce the messages by using current performance examples.

Attachment A

CA NUMBER: 47

The Program Compliance Plan includes a detailed review of the Corrective Action Program by outside consultants.

DOCUMENTS REVIEWED:

PR/CAP Report Distribution Matrix

COMMENTS:

CA 47 completed. The program review final report was issued September 21, 2002. Two root cause teams evaluated the implementation and infrastructure issues. A matrix was developed to categorize and disposition the CRs generated. Issues are tracked in CREST.

CA NUMBER: 48

Ensure that the case study training of this and other events includes emphasis on the need to find and address the causes of adverse conditions as it relates to 10CFR50, Appendix B Criterion XVI, "Corrective Action" and the potential consequences of failures to do so.

DOCUMENTS REVIEWED:

Case Study observation for Ops, QA, Engineering, RP/Chem confirmed the “Corrective Action” issue was addressed.

COMMENTS:

None

CA NUMBER: 49

The Corrective Action Review Board (CARB), which reviews select corrective action document evaluations, will be used to enforce higher standards for cause evaluations and effective corrective action.

DOCUMENTS REVIEWED:

Davis-Besse Corrective Action Review Board, DBBP-PI-2200, Revision 3, 12/13/2002
Root Cause Evaluation Quality metric

COMMENTS:

The site made a conscious decision to elevate chair to above the plant manager level

CA NUMBER: 50

Review and revise, as necessary, the criteria for CR categorization of repeat equipment failures to ensure they are appropriately categorized and utilized by station personal.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

NOP-LP-2001, Attachment 1, CR Category Descriptions incorporates guidance for ensuring categorization of CRs. Repeat component failures, design failures, and procedural failures are explicitly identified as SCAQs.

CA NUMBER: 52

Require the use of formal cause determination techniques for root and basic cause evaluations to ensure analytical rigor is applied to the analysis (i.e., revise CAP Guideline).

DOCUMENTS REVIEWED:

Condition Report Process, Revision 2, 11/27/2002

COMMENTS:

None

CA NUMBER: 55

Improve the CAP Guideline guidance on reviews of the effectiveness of corrective actions with focus on verifying that causes have been fixed, and provide training on the revised guidance.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003
NOP-LP-2007, Condition Report Process Effectiveness Review, Revision 1, March 1, 2003
Job task Analysis & Selected Tasks for Training Matrix, March 16, 2003

COMMENTS:

NOP-LP-2007, in the Applicability section requires mandatory adherence to this procedure for the conduct of effectiveness reviews. Section 3.0, Definitions, provides the five (5) attributes of Effective Corrective Actions and the definition of an Effectiveness Reviewer.
Training conducted a training needs analysis of NOP-LP-2007 and determined that the procedure can be performed without any implementation training for individuals designated to conduct effectiveness reviews

CA NUMBER: 56

Revise the CAP Guideline to require the use of the Safety Precedence Sequence for root cause and basic cause analyses. This step shall require the Safety Precedence Sequence for each corrective action.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

Attachment 8 of NOP-LP-2001, Revision 4 includes use of the Safety Precedence Sequence.

Attachment A

CA NUMBER: 58

Revise the trending program to require performance of trending of issues that occur only during outages. (e.g. boric acid found on reactor head in 10RFO, 11RFO and 12RFO) to provide management with an understanding of on-going outage related issues.

DOCUMENTS REVIEWED:

Quality Trending NG-NA-00711 Revision 3, 11/27/2002

COMMENTS:

None

CA NUMBER: 59

Establish policy for the use of external information that is specific. Develop and implement the FENOC Hierarchy of Documents for Davis-Besse to ensure consistent policies and standards for analyses of safety issues, similar to other FENOC plants.

DOCUMENTS REVIEWED:

NOPL-SS-3201, FENOC Document Hierarchy, Revision 0,
NOBP-SS-3401, FENOC Document Hierarchy, Revision 1, 11/6/02
Condition Report Process, Programmatic Guideline, Revision 2, 11/19/02
Operating Experience Reference Guide, Revision 3, 7/31/02
NOP-ER-1011, Continuous Equipment Performance Improvement, Revision 0
NOP-ER-3001, Problem Solving and Decision Making Process, Revision 0, 1//29/03

COMMENTS:

None

CA NUMBER: 60

Provide training to applicable personnel (BACC Inspectors and ISI/IST VT- 2 Inspectors) and managers 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.

DOCUMENTS REVIEWED:

Lesson Plan TST-BAI-1001, Boric Acid Corrosion Control Inspector, Revision 0, 1/21/2003
Lesson Plan QCT-MEC-1201.03, VT-2 System Pressure Testing Course Outline, Revision 3, 8/13/02
TSM-115, Job Familiarization Guideline, Boric Acid Corrosion Control Inspector, Revision 0 1/21/03
QCC-VT2, VT-2 System Pressure Testing Certification, Revision 0, 7/5/02
NA QC-07004, Certification of Nondestructive Examination Personnel, Revision 1, 10/3/00
DB-PF-00204, ASME Section XI Pressure Testing, Revision 4, 1/10/03

COMMENTS:

None

Attachment A

CA NUMBER: 61

Reinforce standards and expectations for procedure compliance and the need for work practice rigor with BACC Inspectors and ISI/IST VT-2 Inspectors.

DOCUMENTS REVIEWED:

TSM-115, Boric Acid Corrosion Control Inspector Program
DB-PF-00204, ASME Section XI Pressure Testing, Revision 4, 1/10/2003

COMMENTS:

None

CA NUMBER: 62

Establish the necessary guidelines or other implementing instruction for performing the hazard analysis addressed in the policy. Consider issuance of a FENOC policy that provides the expectations for performing hazard analysis.

DOCUMENTS REVIEWED:

NOP-ER-3001, Problem Solving and Decision Making, revision 0, January 29, 2003
Intra-company memo (DSO-03-00011) on Command Responsibilities from FENOC Senior Management to FENOC Shift Managers of January 30, 2003.

COMMENTS:

None

CA NUMBER: 63

Review, benchmark and revise the NOP and Corrective Action Program Guideline against industry standards.

DOCUMENTS REVIEWED:

Corrective Action Program procedures were reviewed from Entergy, Exelon, Florida Power and Light, Southern Nuclear Operating Company. Corrective Action Program plant procedures were reviewed at Palo Verde, Turkey Point, Salem/Hope Creek, Wolf Creek, Duke Power Company and Sequoyah.

COMMENTS:

None

CA NUMBER: 66

Provide training to personnel who perform ISI/IST and BACC inspections on the BACC Procedure and ASME Code IAW-5250, Item b requirements.

DOCUMENTS REVIEWED:

TST-BAI-1001.00, BACC inspector training
QCT-MEC-1201, BACC inspector training,
NA-QC-07004, Quality Assessment Procedure, Revision 1, 10/03/2000

COMMENTS:

None

Attachment A

CA NUMBER: 67

Provide training to the BACC Coordinator, ISI/IST and BACC inspectors to ensure they are aware of their responsibilities. Consider development of a BACC Coordinator JFG.

DOCUMENTS REVIEWED:

TSM-110, Job Familiarization Guideline, BACC Program, Revision 0, 8/23/2002

COMMENTS:

None

CA NUMBER: 68

Establish a Boric Acid Nuclear Operating Procedure for FENOC PWRs. The BACC Program Manual (NG-EN-00324) lists the CRDM nozzles as one of the probable locations of leakage.

DOCUMENTS REVIEWED:

EN-DP-01500, Reactor Vessel Inspection Procedure, Revision 4, 10/14/2002
NOP-ER-2001, Boric Acid Control Program, Revision 0, 11/20/2002
Plant Engineering Program Manual, Revision 1, 1/15/2003

COMMENTS:

This review concentrated on whether the stated corrective action had been accomplished. The detailed review of the BACC Program was conducted during the Program Review inspection.

CA NUMBER: 69

Complete the Program Compliance Plan detailed review of the ISI/IST Program by outside consultants and implement changes as necessary.

DOCUMENTS REVIEWED:

PR-IAP-3F-01, SI Program Implementation Action Plan, Revision 1, 1/10/2003

COMMENTS:

This review concentrated on whether the stated corrective action had been accomplished. The detailed review of the BACC Program was conducted during the Program Review inspection.

CA NUMBER: 70

Complete the Program Compliance Plan detailed review of the BACC Program by outside consultants and implement changes as necessary.

DOCUMENTS REVIEWED:

EN-DP-01501, Inspection of RCS Alloy 600 Components/Welds, Threaded/Bolted Connections and Targets, Revision 5, February 24, 2003
PR-IAP-3D-01, BACC Program Implementation Plan, Revision 1, March 3, 2003

COMMENTS:

This review concentrated on whether the stated corrective action had been accomplished. The detailed review of the BACC Program was conducted during a separate inspection.

Attachment A

CA NUMBER: 71

Review the Corrective Action Program Guideline to identify whether it contains appropriate provisions for ensuring the timely resolution of conditions, and revise the Program as appropriate.

DOCUMENTS REVIEWED:

Davis-Besse condition Report Process, Programmatic Guideline, Revision 2,
Operational Readiness Condition Report Investigation Timeliness metric
Operational Readiness Corrective Action Timeliness metric

COMMENTS:

This review concentrated on whether the stated corrective action had been accomplished. The detailed review of the BACC Program was conducted during the Program Review inspection.

CA NUMBER: 72

The Nuclear Quality Assurance organization is performing an assessment to determine the adequacy of its audits and surveillances, and it should revise its activities as appropriate.

DOCUMENTS REVIEWED:

CR 02-08895, corrective action 13.

COMMENTS:

This review concentrated on whether the stated corrective action had been accomplished.

CA NUMBER: 73

Perform a review of the CNRB effectiveness and make changes to the CNRB to improve the safety focus by providing less emphasis on status and LARs and more review of key technical and safety issues.

DOCUMENTS REVIEWED:

Assessment of the FENOC Company Nuclear Review Board, August 13, 2002
CR 02-07485

COMMENTS:

None

CA NUMBER: 74

Management incentives should be realigned to place more reward for safety and safe operation of the station when the management positions reside at the station (ie., Site VP and below).

DOCUMENTS REVIEWED:

Figure, Comparison of Nuclear Incentive Weightings for 2002 and 2003

COMMENTS:

FENOC corporate incentives for the FENOC President/Executive Vice President, FENOC chief operating Officer and FENOC Site Vice President have been modified to place increased emphasis on nuclear safety and a new item “Cultural Assessment Value.”

Attachment A

Management incentives for those management positions below the Site Vice President level have been modified to increase emphasis on nuclear safety.

CA NUMBER: 75

Establish a FENOC-level policy emphasizing the station industrial and nuclear safety philosophy

DOCUMENTS REVIEWED:

NOPL-LP-2003, Policy for Maintaining a Safety Conscious Work Environment (SCWE), Revision 0, November 21, 2002
NOPL-LP-2004, Nuclear Safety, Revision 0, undated
CR 02-00891, Corrective Action 127

COMMENTS:

A separate corrective action (CA 127) was written to address industrial safety for the sake of brevity and clarity of the nuclear safety message. The corrective action due date for CA 127 is July 20, 2003

CA NUMBER: 76

Integrate Operations into problem solving/decision-making and promote Operations ownership of problem resolution.

DOCUMENTS REVIEWED:

DBBP-OPS-0001, Operations Expectations and Standards, Revision 0, 11/15/2002
Training Tracking for 2/20/2003,
Problem Solving and Decision Making Process, Revision 0, 1/29/2003

COMMENTS:

None

CA NUMBER: 79

Evaluate an enhancement to the CAP NOP/Guideline to eliminate performing a basic cause analysis for an issue categorized as an SCAQ, relative to ensuring actions to prevent recurrence is effective.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

NOP-LP-2001 has been modified to require that SCAQ's receive a root cause evaluation. No other evaluation methods are allowed.

Attachment A

CA NUMBER: 80

Evaluate and revise, as necessary, the CAP NOP/Guideline to perform generic implication reviews for all basic cause evaluations.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

NOP-LP-2001 has been modified to remove the "basic cause" evaluation category. NOP-LP-2001 does require a generic implication review for all apparent and root cause evaluations. Effectively, generic implication reviews are now conducted at a level below the basic cause evaluation.

CA NUMBER: 83

Establish the FENOC decision-making process at Davis-Besse including hazard analyses (NOP-ER-3001).Review station processes and procedures to determine if entry into hazard analysis (including decision making) is required. Update processes and procedures determined to require performance of hazard analysis to reference the applicable policy/guidelines for implementation.

DOCUMENTS REVIEWED:

NOP-ER-3001, Problem Solving and Decision Making Process, Rev 0, 1/29//2003
CR 03-01472

COMMENTS:

CR 03-01472 was written to document inconsistencies in implementation of CA 83. Pending full CA for CR 03-01472, the previous procedure has been deleted and the new procedure is being used. Individuals tasked with implementing the process have only been using the new procedure.

CA NUMBER: 84

Assess the number of personnel that should be qualified and utilized to perform root cause analysis (e.g. a broad number of people [infrequent application], or a small-dedicated group [frequent application], or a combination of the two).

DOCUMENTS REVIEWED:

D-B assessment on number of individuals necessary.

COMMENTS:

None

CA NUMBER: 87

Provide independence of effectiveness reviews. Consider applying effectiveness reviews to basic cause evaluations.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003
NOP-LP-2007, Condition Report Process effectiveness Review, Revision 1, March 1, 2003
NOBP-LP-2008, Corrective Action Review Board, Revision 0, March 1, 2003

COMMENTS:

Revision 4 to NOP-LP-2001, the basic cause evaluation is no longer part of the CR program. The procedure requires an effectiveness review of all root cause evaluations. In addition, the MRB can direct performance of an effectiveness review for apparent cause evaluations.

CA NUMBER: 95

Formalize the 4C's meetings to meet on a periodic basis for set period of time to allow personnel to discuss safety issues.

DOCUMENTS REVIEWED:

4C's meeting Schedule
DBBP-VP-0004, 4C's Meetings procedure, Rev 0, 2/26/03

COMMENTS:

Observed 4C's meeting was consistent with procedure.

CA NUMBER: 100

Institute an Engineering Assurance Board to reinforce standards.

DOCUMENTS REVIEWED:

DBE-0001, Engineering Assessment Board, Role/Policy in Support of the Return to Service Plan, Revision 2, 12/12/2002

COMMENTS:

None

CA NUMBER: 101

Provide root cause evaluation teams with a formal charter of expectations.

DOCUMENTS REVIEWED:

NOP-LP-2001, Condition Report Process, Revision 4, March 1, 2003

COMMENTS:

Attachment 7 to NOP-LP-2001 requires that each root cause evaluation team have a Department Head sponsor appointed by the MRB. The sponsor is responsible for providing the root cause evaluation team with their formal charter of expectations.

CA NUMBER: 103

Revise the Morning Management Communications and Teamwork Meeting agenda to regularly discuss procedural compliance at the MCTM meetings.

DOCUMENTS REVIEWED:

Manager's Communications and Teamwork Meeting (MTCM) agenda, January 24, 2003
Manager's Communications and Teamwork Meeting (MTCM) agenda, February 14, 2003

COMMENTS:

Procedural compliance is now a regularly scheduled topic of discussion on the second Monday of each month.

CA NUMBER: 104

Conduct Case Study training to reinforce standards and expectations for procedure compliance and the need for work-practice rigor and the potential consequence of a failure to do so.

DOCUMENTS REVIEWED:

Training Tracking form 11/13/2002
NRC attendance at QA, Engineering, Ops, RP, and Chemistry Case Study sessions.
CR 02-09257
CR 02-09057
CR 02-08268

COMMENTS:

None

CA NUMBER: 105

Complete an evaluation of the current Directors and Managers to ensure adequate alignment with emphasis on 1) Safety, 2) People, and 3) Reliability prior to restart.

DOCUMENTS REVIEWED:

List of RHR International interviews with D-B personnel

COMMENTS:

RHR assessment performed on Operations, RP, Engineering, Work Management, and QA. Results were evaluated and actions are being put in place to develop improvement plans for individuals with less than optimal results in any area.

Areas assessed were Operating Culture, Personal Responsibility, Performance Management, Personal Characteristics, and Potential for self-development.

CA NUMBER: 106

Establish and implement a Periodic System Walk-down Program.

DOCUMENTS REVIEWED:

EN-DP-01501, Inspection of RCS Alloy 600 Components/Welds, Threaded/Bolted Connections and Targets, Revision 5, February 24, 2003
EN-DP-01506, Borated Water System Inspections (Outside Containment), Revision 2, November 14, 2002
FENOC - Davis Besse Power Station, Plant Engineering Program Manual, Boric Acid Corrosion Control Program, revision 4, March 19, 2003

COMMENTS:

EN-DP-01501, requires walkdown of containment once the unit reaches Mode 5 when reducing power and Mode 3 or Mode 5 when increasing power (Phase 1); as scaffolding is erected and insulation removed (phase 2); and at senior management request during refueling, forced, or maintenance outages.

The Boric Acid Corrosion Control Program requires the BACC Program Owner or Backup Owner to participate in Mode 3 or 5 walkdowns. This walkdown will include a random sampling of areas not visited during the initial walkdown. Results of the Phase 1 walkdown will be documented on a CR.

EN-DP-01506 does not require inspections on any frequency as the areas to be inspected are inspected on a daily basis by Operations Department personnel.

CA NUMBER: 107

Establish and implement a Periodic Engineering Program Review Process.

DOCUMENTS REVIEWED:

NG-EN-00386, Program Assessment, Ownership, and Development, Revision 0, March 15, 2003

COMMENTS:

NG-EN-00386 provides management expectations and facilitates the creation and preservation of strong programs that exceed regulatory and industry requirements. Sixty-five programs are currently in the list to be assessed and fourteen programs to be developed are also on the list. Three of the programs on the list are assessed on an annual basis.

CA NUMBER: 108

Re-baseline Standards and Expectations in the Plant/Station Department and issue policies/handbook stating the standards/expectations.

DOCUMENTS REVIEWED:

DBBP-OPS-0001, Operations Standards and Expectations, Revision 3, March 6, 2003
Conduct of Operations for the Radiation Protection Department, Revision 0, August 29, 2002
DBBP-CARP-1002, Human Performance/Safety Plan for the Radiation Protection and Chemistry Section, Revision 0, November 12, 2002
DB-OP-0000, Conduct of Operations, Revision 6, February 28, 2003
DBBP-TRAN-0009, Nuclear Training Expectations and Standards, Revision 0, 5/20/2003
Conduct of Operations for Chemistry, Revision 0, March 7, 2003
FENOC Integrated Training System Successful Completions Report, 4/21/2003

COMMENTS:

Operations portion of this CA completed. CR 02-02581, CA 12 specifically discusses Operations Standards and Expectations. According to the package for CR 02-02581, CA 12, Operations training was completed on 2/5/2003.

Training portion of this CA completed.

RP portion of this CA not completed. Conduct of Operations for the Radiation Protection Department provides standards and expectations for department personnel.

Chemistry portion of this CA not completed. Conduct of Operations for Chemistry provides standards and expectations for department personnel.

CR 03-03186 written to document inappropriate closure. Per FENOC Integrated Training System Successful Completions Report dated 4/21/2003, not all personnel in the RP and Chemistry departments have completed training.

CA NUMBER: 109

Re-baseline Standards and Expectations in the Quality Assessment Department and issue policies/handbook stating the standards/expectations.

DOCUMENTS REVIEWED:

Training attendance list 11/8/2002
Nuclear Quality Assessment, Standards and Expectations

COMMENTS:

NQA working with other sites to issue as standard document.

CA NUMBER: 110

Re-baseline Standards and Expectations in the Work Management Department and issue policies/handbook stating the standards/expectations.

DOCUMENTS REVIEWED:

My Conduct for Excellence
Maintenance Fundamentals
Training/Workshop Completion Record 2/4/03
Training/Workshop Completion Record 2/5/03

COMMENTS:

None

CA NUMBER: 111

Re-baseline Standards and Expectations in the Support Services Department and issue policies/handbook stating the standards/expectations.

DOCUMENTS REVIEWED:

DBBP-NA-0001, Support services, Principles and Expectations, Revision 0, 1/6/2003
Training/Workshop Completion Record 1/21/03
Quiz given at completion of 1/21 training

COMMENTS:

None

CA NUMBER: 112

Re-baseline Standards and Expectations in the Technical Services/Nuclear Engineering Department and issue policies/handbook stating the standards/expectations.

DOCUMENTS REVIEWED:

FENOC Engineering Principles and Expectations, NOPL-CC-0001

COMMENTS:

None

Attachment A

CA NUMBER: 113

Utilize organizational development/effectiveness consultants to assist in developing actions for the Management and Human Performance Excellence Building Block.

DOCUMENTS REVIEWED:

Organizational Development Plans for: Engineering and Work Management

COMMENTS:

None

CA NUMBER: 115

Revise CAP to not permit closing MODE restraints to WOS (work order system).

DOCUMENTS REVIEWED:

Condition Report Process, Programmatic Guideline, Revision 2, 11/19/02

COMMENTS:

None

Attachment A

Corrective Actions Associated with
Condition Report 02-02578
"Quality Assessment Root Cause Report"

CA NUMBER: 3

Create a new position of Vice President, OPID, reporting outside the station organization.

DOCUMENTS REVIEWED:

Davis-Besse Organization Chart, 9/22

COMMENTS:

None

CA NUMBER: 4

Develop a Standards and Expectations handbook detailing the roles and responsibilities of NQA personnel in providing independent, intrusive, nuclear safety focused oversight of FENOC activities.

DOCUMENTS REVIEWED:

Nuclear Quality Assessment, Standards and Expectations

COMMENTS:

None

CA NUMBER: 5

Communicate to FENOC NQA personnel the standards and expectations.

DOCUMENTS REVIEWED:

Nuclear Standards and Expectations attendance list, 11/8/2002
Davis-Besse Reactor Head Case Study attendance list, 11/1/2002

COMMENTS:

None

CA NUMBER: 6

Develop and conduct a case study based training session for D-B NQA personnel based on the D-B reactor vessel head degradation event providing specific focus to NQA oversight activities and missed opportunities.

DOCUMENTS REVIEWED:

Davis-Besse Reactor Head Case Study attendance list, 11/1/2002
Attendance at NQA Case Study meeting.

COMMENTS:

None.

Attachment A

CA NUMBER: 7

Develop and implement an ongoing training/communication process for FENOC NQA personnel to ensure periodic review and reinforcement of the Standards and Expectations.

DOCUMENTS REVIEWED:

QA Staff Meeting Agenda, March 7, 2003

COMMENTS:

NQA Standards and Expectations added to standard agenda. Meeting of NQA staff normally conducted monthly.

CA NUMBER: 10

Establish and communicate an expectation that addresses FENOC NQA's commitment to ensure that ALARA principles will be complied with to the extent practicable.

DOCUMENTS REVIEWED:

E-mail Steve Loehlein to NQA staff dated 10/23/2002
Nuclear Quality Assessment, Standards and Expectations

COMMENTS:

None

CA NUMBER: 11

Develop and implement a systematic approach to sharing lessons learned from this investigation with both Beaver Valley and Perry organizations.

DOCUMENTS REVIEWED:

Attendance sheets for Case Study at Beaver Valley 11/1/2002
Attendance sheets for Case Study at Perry 11/11/02

COMMENTS:

None

CA NUMBER: 12

Integrate INPO Warning Flags for declining station performance into measures for evaluating station performance.

DOCUMENTS REVIEWED:

CA rolled over to CR 02-08895 addressing the NQA program review.

COMMENTS:

None.

CA NUMBER: 13

Establish an expectation for the allocation of assessment resources during planned outages that reflects the need to dedicate NQA (OPID) resources to oversight activities prior to committing to support of line activities.

DOCUMENTS REVIEWED:

Memorandum QAD-02-80018, 10/9/02

COMMENTS:
None

CA NUMBER: 14
Establish a Policy whereby FENOC Executive Management endorses NQA standards and expectations for all FENOC sites.
DOCUMENTS REVIEWED:
NOPL-LP-2001, FENOC Quality Assurance Organization Responsibilities and Authorities Policy, Revision 1.
NOPL-LP-2002, FENOC Nuclear Quality Assurance Program Policy, Revision 0.
COMMENTS:
None

CA NUMBER: 15
Communicate the Policy established in CA# 14 to all levels of the organization.
DOCUMENTS REVIEWED:
12/12/02 memorandum from Robert F. Saunders to all First Energy personnel.
COMMENTS:
None

CA NUMBER: 17
Establish a process to ensure that FENOC NQA evaluates and incorporates lessons learned from significant events into the NQA oversight program.
DOCUMENTS REVIEWED:
Rolled over to CR 02-08895 addressing programmatic changes to the QA program.
COMMENTS:
None

CA NUMBER: 18
Ensure that the FENOC NQA program provides oversight of the sites Operating Experience (OE) program including receipt, evaluation, and incorporation and training as appropriate on this information.
DOCUMENTS REVIEWED:
Rolled over to CR 02-08895 addressing programmatic changes to the QA program.
COMMENTS:
None

CA NUMBER: 19
Work with the Company Nuclear Review Board (CNRB) to develop an improved methodology for CNRB oversight of the FENOC oversight function.

Attachment A

DOCUMENTS REVIEWED:

Rolled over to CNRB CR 02-07485 CA's 6 and 18.

COMMENTS:

None

CA NUMBER: 4

Establish a FENOC Policy that affirms the regulatory required authority, independence and organizational freedom of the NQA organization.

DOCUMENTS REVIEWED:

NOPL-LP-2001, FENOC Quality Assurance Organization Responsibilities and Authorities Policy. 10/31/02

NOPL-LP-2002, FENOC Nuclear Quality Assurance Program Policy, 10/31/02

COMMENTS:

None

CA NUMBER: 25

Review and revise the Master Assessment Plans to incorporate appropriate INPO Performance Objectives and Criteria such that the assessment of behaviors is included in the NQA oversight process.

DOCUMENTS REVIEWED:

Rolled over to CR 02-08895 addressing programmatic changes to the QA program.

COMMENTS:

None

CA NUMBER: 26

Each NQA section review the ISE function to ensure that OE reviews are fulfilling the commitments made to NUREG-0737.

DOCUMENTS REVIEWED:

Rolled over to CR 02-08895 addressing programmatic changes to the QA program.

COMMENTS:

None

Attachment A

Corrective Actions Associated with
Condition Report 02-02581
"Operations Leadership Root Cause Report"

CA NUMBER: 1

Senior management is demonstrating support for Operations' leadership role.

DOCUMENTS REVIEWED:

FENOC Self-Assessment Report 2003-0001, Operations Self-Assessment Report
Davis-Besse Organization chart dated January 30, 2003
Operations Leadership Plan, Revision 2, December 5, 2002
Intra-company, 2003, memorandum (DSO-03-00005) dated January 22, 2003, to all shift managers at all FENOC sites.

COMMENTS:

The position of Manager-Operations Effectiveness has been established to help Operations establish proper standards and behaviors. The Operations Leadership Plan incorporates actions for Operations to become the plant leaders. In addition, memorandum DSO-03-00005 provides expectations and standards presumed present for all Shift Managers. These actions are constantly monitored using the NQA continuous assessment process.

CA NUMBER: 2

A declaration from the chief executives will be issued and communicated to site personnel delineating Operations' leadership role.

DOCUMENTS REVIEWED:

Intra-company memorandum (DSO-03-00005) dated 1/22/2003 to all shift managers at all FENOC sites.

COMMENTS:

Memo defines the roles, responsibilities, and authorities of FENOC shift managers, communicates corporate expectations for the command responsibilities of the shift managers, and communicates to site personnel Operations leadership role.
The Operations Manager discussed the memo at All-Hands meetings conducted 1/27/2003 and subsequently posted in the plant.

CA NUMBER: 5

Continue hiring new personnel to be trained as equipment operators and continue training of RO and SRO candidates.

DOCUMENTS REVIEWED:

CR 03-00507, Tracking Condition Report to Track Operations Functional Area Readiness

COMMENTS:

Corrective action addresses continued hiring and training of RO and SRO candidates, plans to populate other departments with personnel maintaining active licenses, and plans for future license classes.

CR 03-00507 written to address Operations staffing associated with this corrective action. CR 03-00507 contains two corrective actions, one has been initiated to address

the staffing levels and manning for the Operations Support staff and the other has been initiated to provide for proper manning to support a 5 shift rotation for the SRO position.

CA NUMBER: 6

Analyze the tasks currently assigned to Operations. Identify additional activities that Operations must perform to continue re-establishing and to maintain leadership.

DOCUMENTS REVIEWED:

DBBP-OPS-0001, Operations Standards and Expectations, Revision 3, March 6, 2003
DBBP-OPS-0004, Operations Continuous Improvement, Revision 0, 3/11/2003
WPG-2, Work process Guideline - 2, Operations Equipment Issues, Revision 5, 2/21/2003
CR 03-00426, Operations leadership Plan - CREST Tracking of Actions Assigned to Operations
CR 03-00508, Tracking CR for Operations Functional Area Readiness Review/Performance Indicators

COMMENTS:

Corrective action requires (1) tasks assigned to Operations to be analyzed and to identify additional activities Operations must perform to re-establish and maintain leadership, (2) determine the number of personnel and qualifications required to perform the activities, and (3) develop and implement short-term compensatory measures for any identified staffing shortfalls.

Operations states that "Operator tasks have been analyzed and actions assigned to improve performance." No mention is made of additional activities that must be performed. Corrective action does not describe the "number of personnel nor the qualifications required to perform the activities." Corrective action does not describe short-term compensatory measures for staffing shortfalls.

Most recent operator task list was not reviewed to ascertain date completed.

CR 03-00426 written to address Operations actions associated with this corrective action.

CA NUMBER: 7

Address Operations' compensation, as necessary, to ensure retention of current staff. Improve the station's competitive position in attracting desirable applicants.

DOCUMENTS REVIEWED:

COMMENTS:

Corrective action discusses a portion of the required actions, namely current activities to develop and implement plans for Operations personnel to ensure that career paths are identified and the future leaders will be available and prepared ti assume leadership roles. The discussion by the implementing organization does not discuss how the facility intends to "ensure retention of current staff" or improve the "station's competitive position in attracting desirable applicants."

Attachment A

CA NUMBER: 8

Implement corrective actions for staffing needs identified in other station organizations to ensure staff capabilities exist to support Operations' priorities.

DOCUMENTS REVIEWED:

DBBP-VP-0002, Restart Readiness Review Extended Plant Outage, Revision 3, April 2, 2003

COMMENTS:

None

CA NUMBER: 9

Prior to restart, Operations and management personnel from other station organizations will receive corporate training regarding the roles, responsibilities and authorities of licensed personnel.

DOCUMENTS REVIEWED:

FENOC Integrated Training System Successful Completions Report, 4/21/2003
Lesson Plan - OPS-IER-I031, Current Events for Cycle 03-01, 1/16/2003
Power Point Presentation, Legal Responsibilities of Licensed Operators, November 2002
Intra-company memo (DSO-03-00011) on Command Responsibilities from FENOC Senior Management to FENOC Shift Managers of January 30, 2003.

COMMENTS:

None

CA NUMBER: 10

The Site Vice President will continue to make himself available to the Duty Shift Manager to assist in ensuring that personnel in other station organizations understand his expectation that they are accountable to the Duty Shift Manager and to Operations personnel and must support Operations' leadership role.

DOCUMENTS REVIEWED:

Intra-company memo (DSO-03-00011) on Command Responsibilities from FENOC Senior Management to FENOC Shift Managers of January 30, 2003.

COMMENTS:

None

CA NUMBER: 12

An Operations Standards and Expectations document has been issued to address, in detail, expectations, job standards, and responsibilities of Operations Department personnel.

DOCUMENTS REVIEWED:

DBBP-OPS-001, Operations Standards and Expectations, Revision 3, March 6, 2003

Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, Operations Standards and Expectations (DBBP-OPS-001), 2/20/2003

COMMENTS:

Operations Standards and Expectations is a business practice that establishes common standards and expectations for Operations personnel. By definition, Davis-Besse operators have the "leadership role" in all activities. To maintain the leadership role, operators are tasked with performing their licensed duties, demonstrating FENOC values, and meet the standards and expectations of the business practice. Responsibilities of each member of the Operations section are described.

As a result of these corrective actions, Operations Standards and Expectations contains four new sections:

Problem Solving and Decision Making Process
Operations Leadership
Operations Field Observation Program
Operating Experience Program

All members of the Operations Section had successfully completed training on the Operations Standards and Expectations Business Practice on 2/5/2003.

CA NUMBER: 13

A memo signed at the highest level defining the Shift Manager's role, responsibilities and authorities will be issued and conspicuously posted in selected areas throughout the site. This memo will be revised and reissued on an annual basis.

DOCUMENTS REVIEWED:

Intra-company memorandum (DSO-03-00005) dated 1/22/2003 to all shift managers at all FENOC sites.

COMMENTS:

Memo defines the roles, responsibilities, and authorities of FENOC shift managers, communicates corporate expectations for the command responsibilities of the shift managers, and communicates to site personnel Operations leadership role.

Memo has been posted throughout the plant.

CA NUMBER: 14

The Operations Leadership Plan will be reviewed and approved by senior management.

DOCUMENTS REVIEWED:

Operations Leadership Plan, Revision 2, 12/5/2003

COMMENTS:

The Operations Leadership Plan is a document intended to guide the Operations Department leadership to ensure a sustainable high level of performance. Senior plant management approved revision 2 to the Operations Leadership Plan.

CA NUMBER: 16

Licensed personnel will fully commit to resuming the leadership role.

DOCUMENTS REVIEWED:

DBBP-OPS-001, Operations Standards and Expectations, Revision 3, March 6, 2003
Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, Operations Standards and Expectations (DBBP-OPS-001), 2/20/2003

COMMENTS:

Refer to CR 02-02581 CA # 12 above.

Upon completion of the Operations Standards and Expectations Business Practice training, operators were examined and signed statements "…adopting these Expectations and Standards as my own."

CA NUMBER: 17

The Operations Standards and Expectations document will address the chilling effect in Operations by including expectations for Operations personnel to raise any operational concerns.

DOCUMENTS REVIEWED:

DBBP-OPS-001, Operations Standards and Expectations, Revision 3, March 6, 2003
Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, Operations Standards and Expectations (DBBP-OPS-001), 2/20/2003

COMMENTS:

Refer to CR 02-02581 CA # 12 above.

The Operations Standards and Expectations Business Practice establishes the expectation that Operations Department personnel will address operational issues and pursue the issue until it is resolved.

CA NUMBER: 18

Licensed operators will be delegated management authority for addressing and resolving safety concerns that are identified to them by other station personnel.

DOCUMENTS REVIEWED:

DBBP-OPS-001, Operations Standards and Expectations, Revision 3, March 6, 2003
Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, Operations Standards and Expectations (DBBP-OPS-001), 2/20/2003

COMMENTS:

Refer to CR 02-02581 CA # 12 above.

The Operations Standards and Expectations Business Practice outlines Operations authority to stop work whenever a nuclear or industrial safety concern exists.

Attachment A

CA NUMBER: 19

Consistent with their leadership role, Operations personnel at all levels will be given training in maintaining a safety conscious work environment to ensure that their leadership and oversight of station activities performed by personnel in other departments is conducted in accordance with management expectations.

DOCUMENTS REVIEWED:

DBBP-OPS-001, Operations Standards and Expectations, Revision 3, March 6, 2003
Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, Operations Standards and Expectations (DBBP-OPS-001), 2/20/2003

COMMENTS:

Refer to CR 02-02581 CA # 12 above.

As part of the Operations Standards and Expectations Business Practice training, Operators received training on Safety Conscious Work Environment (SCWE) and Operations role in maintaining SCWE.

CA NUMBER: 21

Operations personnel and managers in all station organizations will comply with senior management requirements and NRC expectations for ensuring that a safety conscious work environment is maintained.

DOCUMENTS REVIEWED:

Trainee Tracking, FENOC Integrated Training System, Training Needed Report for FEN-SCWE training, 2/7/2003

COMMENTS:

Individuals needing FEN-SCWE training are not part of the Operations Department.

CA NUMBER: 22

Reports from site-wide surveys and assessments of the safety conscious work environment in Operations will be provided to the Plant and Operations Managers, and any weaknesses identified will be promptly addressed and resolved.

DOCUMENTS REVIEWED:

DBBP-VP-0001, Safety Conscious Work Environment Review Team Charter, Revision 0, 11/19/2002

COMMENTS:

None

CA NUMBER: 23

Davis-Besse will complete implementation of the Safety Conscious Work Environment Action Plan as part of the Management and Human Performance Improvement Plan.

DOCUMENTS REVIEWED:

Previous NRC review of CR 02-00891, CA 41.

Attachment A

COMMENTS:

Completion package states “similar to CR 02-00891, CA 41.” Reviewed actions taken for CA 41.

Attachment A

Corrective Actions Associated with
Condition Report 02-07485
"CNRB Assessment"

CA NUMBER: 2

Revise the CNRB meeting agenda to allow adequate time for the key areas requiring focus.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.3.1

COMMENTS:

None.

CA NUMBER: 3

Increase the number of meetings per year for each station.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.1.1

COMMENTS:

None

CA NUMBER: 4

Strengthen the attendance role of the Operations Section at all CNRB meetings to ensure that the CNRB meetings maintain focus on nuclear safety.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.3.1

COMMENTS:

While Operations is not required to attend all meetings of the CNRB, the procedure requires that for issues affecting plant operations, Operations personnel should be in attendance as applicable.

CA NUMBER: 5

Realign the Subcommittee structure to focus on the major functions of the stations: Operations, Maintenance, Engineering, and Regulatory & Oversight.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.7.1

COMMENTS:

Two additional Subcommittees have been created, License Amendment Request Review and 50.59 Evaluation Review.

Attachment A

CA NUMBER: 6

Ensure the CNRB maintains additional focus on the Nuclear Quality Assessment (NQA) Section, since the Chairman of the CNRB has NQA line responsibilities and this approach has inherent conflicts.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.3.1, 4.7.2

COMMENTS:

None

CA NUMBER: 7

Ensure that presentations to the CNRB are directed towards operational, technical, or safety issues challenging the station.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.4.1

COMMENTS:

None.

CA NUMBER: 8

Ensure that CNRB Subcommittee Chairmen have prior actual plant experience in the key plant discipline where they serve.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.1.2.10

COMMENTS:

None.

CA NUMBER: 9

Increase the use of peer-to-peer support for the CNRB.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.1.1

COMMENTS:

None.

CA NUMBER: 10

Do not allow CNRB required reviews (e.g., technical specification changes) to be a major distraction to the technical or safety focus of the CNRB meeting.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.4.1, 4.5.3, 4.7.5

COMMENTS:
None

CA NUMBER: 11
Empower the Subcommittee Chairman the flexibility to establish the agenda for the Subcommittee day, that is, the one day before the Full CNRB meeting.
DOCUMENTS REVIEWED:
NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.3, 4.7.1
COMMENTS:
None.

CA NUMBER: 12
Require the Subcommittees to be in the plant for every meeting and function as a Team.
DOCUMENTS REVIEWED:
NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.7.1
COMMENTS:
None

CA NUMBER: 13
Require the full CNRB to periodically review progress on the Davis-Besse Return to Service effort, and in particular, to conduct a formal review of the Readiness to Restart.
DOCUMENTS REVIEWED:
NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.6.1
COMMENTS:
None

CA NUMBER: 14
The process used by the CNRB to approve an item should be reconsidered and realigned to better follow current industry practice.
DOCUMENTS REVIEWED:
NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.4.2
COMMENTS:
None.

CA NUMBER: 15

The process of assigning actions should not be allowed to become an administrative burden, since the stations already have a rigorous process for tracking actions, and the CNRB itself should certainly be able to establish its own follow-up actions.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.4.2, 4.7.1

COMMENTS:

None.

CA NUMBER: 16

It is recommended that minutes of CNRB meetings be greatly reduced and written more focused on important issues from the meeting.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.5

COMMENTS:

None.

CA NUMBER: 17

Require external CNRB members to remain free of other station work activities, in order to maintain an independent audit function and ensure the integrity of the CNRB process.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.4.2

COMMENTS:

None.

CA NUMBER: 18

Ensure that information reviewed by the CNRB includes principal findings of NQA and the Corrective Action program process and the effectiveness of these organizations are reviewed on an ongoing basis.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.4.5, 4.7.2

COMMENTS:

None.

CA NUMBER: 19

Reinforce that the CNRB is primarily a safety-focused organization and not a management unit of the station.

Attachment A

DOCUMENTS REVIEWED:

Opening Remarks, Company Nuclear Review Board, Perry Meeting Minutes, 9/26/2002

COMMENTS:

Reinforced with CNRB members that CNRB is primarily a safety-focused organization and not a management unit of the company.

CA NUMBER: 20

Ensure that all CNRB members recognize that the CNRB function failed to provide the expected level of safety protection at the station.

DOCUMENTS REVIEWED:

Memo from CNRB Chairman to file (QAD-03-80002), "Condition Report 02-07485, Corrective Action 20," dated 2/26/2003,

COMMENTS:

None.

CA NUMBER: 21

Require membership from each of the other stations at every Subcommittee meeting.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.3.11, 4.4.4

COMMENTS:

None.

CA NUMBER: 24

Institutionalize corrective actions via business practice, procedure, charter, etc. that clarifies the roles and responsibilities of the CNRB.

DOCUMENTS REVIEWED:

NOP-LP-2006, Company Nuclear Review Board (CNRB), Revision 0, 4/4/2003, Section 4.2.2.1, 4.2.2.2

COMMENTS:

None.

Attachment A

Corrective Actions Associated with
Condition Report 02-07525
"Engineering Assessment"

CA NUMBER: 5
Recruit and fill key manager and supervisory positions in the engineering organization.
DOCUMENTS REVIEWED:
FENOC engineering organization chart (draft)
COMMENTS:
None

CA NUMBER: 11
Develop communication plan on the revised engineering roles and responsibilities.
DOCUMENTS REVIEWED:
Communication plan for engineering changes 1/14/03 (draft)
COMMENTS:
None

CA NUMBER: 12
Approve communication plan for revised FENOC roles and responsibilities.
DOCUMENTS REVIEWED:
Communication Plan for FENOC Engineering Dept Changes 1/27/03
COMMENTS:
None

CA Number: 14
Fill open position for Engineering Training Instructor.
DOCUMENTS REVIEWED:
FENOC Organization Chart
COMMENTS:
None

CA NUMBER: 25
Capture and trend the results of EAB reviews for use by line management to develop corrective action to address these deficiencies.
DOCUMENTS REVIEWED:
EAB Report issued 1/30/03
COMMENTS:
None

CA NUMBER: 27

Develop a plan for the transition of the EAB to station personnel and the evaluation of EAB membership.

DOCUMENTS REVIEWED:

DBE-0001, Engineering Assessment Board, Revision 3

Comments:

None

Attachment A

Corrective Actions Associated with
Condition Report 02-09069
"Miscellaneous Corrective Actions"

CA NUMBER: 1

Conduct Town Hall style meetings.

DOCUMENTS REVIEWED:

Town Hall Meetings Vision, Mission and Agenda statements
Town Hall Meeting speaking points for 8/1/02, 10/03/02, 12/19/02, and 1/30/03

COMMENTS:

Speaking points are organized and appear to be able to be used by anyone to conduct a meeting.
Meetings are scheduled to run for at least one hour, are to be casual, and are to allow for open discussion between management and staff.

CA NUMBER: 3

Implement the Corrective Action Review Group (CARG) to provide a quality review of select cause analyses.

DOCUMENTS REVIEWED:

DBBP-PI-2--5, Cause Analysis Review Group, Revision 0, 2/7/2003

COMMENTS:

Originator suggested implementation of a "Corrective Action Review Group (CARG)." To minimize confusion with Corrective Action Review Board (CARB), name of the new group was changed to Cause Analysis Review Group.

CA NUMBER: 4

Create a Restart Senior Management Team.

DOCUMENTS REVIEWED:

Davis-Besse Senior Management Team, Charter for Restart Review Meetings, Revision 2, 12/3/02

COMMENTS:

Revision 0 of the Charter implemented 11/12/02. Revision 1 changed the membership requirements and deleted the requirement for quality records. Revision 2 changed the title of the team to Senior Management Team and revised the SMT membership. Revision 2 membership appears appropriate.

CA NUMBER: 5

Perform Select Management/Supervisor Evaluations using behavioral based interviewing.

DOCUMENTS REVIEWED:

Refer to CR - 02-00891, CA 105.

COMMENTS:

See COMMENTS for 02-00891, CA 105.

CA NUMBER: 6

Improve the Operations Standards by the addition of an Operations Oversight Executive.

DOCUMENTS REVIEWED:

First Energy Technical Competence organization chart for Davis-Besse Nuclear Power Station dated 1/30/2003

COMMENTS:

Manager – Operational Effectiveness position added. Individual in position has been a Plant Manager, Operations Manager, and was formerly licensed as an SRO at a B&W facility outside First Energy.

CA NUMBER: 7

Perform a Functional Area Review for Operations.

DOCUMENTS REVIEWED:

FENOC Self Assessment 2003-0001, Operations Self-Assessment Report (Functional Area Review)

COMMENTS:

The assessment was based on the INPO performance objectives and criteria. The self-assessment addressed three areas, management standards and behaviors for nuclear safety and performance, management monitoring of performance, and activities to promote continuous learning and improvement.

Seven strengths and two areas for improvement (staff resources and performance monitoring) were identified. CRs (CR 03-00507 and CR 03-00508) were written for areas of improvement.

CA NUMBER: 8

Perform a Functional Area Review for Chemistry/RP.

DOCUMENTS REVIEWED:

FENOC Self Assessment 2003-0003, Functional Area Review [Radiation Protection and Chemistry],

COMMENTS:

The assessment was based on the INPO performance objectives and criteria. The self-assessment was conducted to ensure Radiation Protection and Chemistry performance and processes support safe operation and to promote excellence.

No strengths were identified.

One noteworthy item and eleven areas for improvement were identified.

The recommendations from this self-assessment are documented in CR 03-01388.

CA NUMBER: 9

Perform a Functional Area Review for Maintenance.

DOCUMENTS REVIEWED:

FENOC Self Assessment 2002-0099, Maintenance Self-Assessment Report (Functional Area Review)

COMMENTS:

The assessment was based on the INPO performance objectives and criteria. The self-assessment was to ensure that Maintenance performance, programs, and processes support safe and reliable plant operations and to review readiness for restart.

Three strengths, one noteworthy item (not quite an area for improvement but not up to standards), and eight areas for improvement were identified. Five CRs were written based on the areas for improvement and three previously written CRs are referenced: CR 02-04884, CR 02-05991, CR 02-07042, CR 03-00275, CR 03-00276, CR 03-00279, CR 03-00281, CR 03-00282.
The Maintenance Department corrective actions for CR 02-04884 and CR 02-05991 have been completed. The Maintenance Department corrective actions for CR 03-00275 have been identified. The Maintenance Department corrective actions for CR 02-07042, CR 03-00276, CR 03-00279, CR 03-00281, CR 03-00282 have not been identified. CR 02-07042 was written 9/30/2002. The five new CRs were written 1/15/2003.

CA NUMBER: 10

Perform a Functional Area Review for Work Management.

DOCUMENTS REVIEWED:

FENOC Self Assessment Report OMWC 2002-0001, Work Control Functional Area Review

COMMENTS:

Based on questions from the inspector, the initial assessment was subjected to a peer review by the licensee. The review resulted in a number of changes being made to the report to clarify the issues. The final assessment was based on the INPO performance objectives and criteria. The self-assessment was performed to assess the operational readiness of the Work control organization in support of the Human Performance Excellence Plan.

One strength was identified and two areas for improvement were identified

The recommendations from the self-assessment were documented in CR 03-00483 and CR 02-05991.

CA NUMBER: 11

Develop and issue Operations Shift Manager Roles letter.

DOCUMENTS REVIEWED:

Intra-company memorandum (DSO-03-00005) dated 1/22/2003 to all shift managers at all FENOC sites.

COMMENTS:

Memo defines the roles, responsibilities, and authorities of FENOC shift managers, communicates corporate expectations for the command responsibilities of the shift managers, and communicates to site personnel Operations leadership role.
The Operations Manager discussed the memo at All-Hands meetings conducted 1/27/2003 and subsequently posted in the plant.

CA NUMBER: 12

Improve operability reviews

DOCUMENTS REVIEWED:

Operability Determinations, NG-DB-00018, Revision 3

COMMENTS:

None

CA NUMBER: 7

Develop and publish Ownership Expectations for Engineering Programs.

DOCUMENTS REVIEWED:

NOPL-CC-0001, FENOC Engineering Principles and Expectations, 7/10/2002

COMMENTS:

None

CA NUMBER: 18

Leadership in Action revision and continuing training.

DOCUMENTS REVIEWED:

Trainee Tracking, FENOC Integrated Training System, Successful Completion Report, LIA Update (Changes to FEN-LIA-1001 Rev 4) Unknown date
Lesson plan FEN-SCT-03-03 12/2/2002

COMMENTS:

Changes to the competencies of the Leadership in Action (LIA) and Foundations of Leadership courses were incorporated into revision 4 of the LIA training module FEN-LIA-1001, Leader Expectations. A continuing training lesson (FEN-SCT-03-01) was prepared to address the changes to FEN-LIA-1001, Revision 3 and FEN-LIA-1001, Revision 4.

All Davis-Besse Supervisors and above attended a six-hour FEN-SCT-03-01 training session and passed a quiz with a score of 80% or greater between 12/2/02 and 1/22/03.

CA NUMBER: 19

Revised Ownership for Excellence for directors and managers.

DOCUMENTS REVIEWED:

FENOC Ownership for Excellence, FENOC Performance Rating Summary Sheet
FENOC Ownership for Excellence, Elements and Standards

COMMENTS:

None.

CA NUMBER: 21

Issue Weekend duty requirements for duty team.

DOCUMENTS REVIEWED:

Expectations for Duty Managers
Lesson plan FEN-SCT-03-03 12/2/2002

COMMENTS:

Expectations for Duty Managers are posted on the Emergency Response Organization Information web page on the DBWEB.

Duty managers are now expected to: spend at least 2 hours per day (minimum) on-site on Saturday, Sunday, and holidays; review the Daily plant status report, progress of scheduled activities, and condition reports of interest; and attend the 0800 meeting.

CA NUMBER: 22

Perform a collective cause review of the various documents / Root Cause reports associated with the head degradation.

DOCUMENTS REVIEWED:

Collective Significance Review of the Causal Factors Associated with the Reactor Pressure Vessel Head Degradation at Davis-Besse, Revision 0, 3/17/2003

COMMENTS:

None.