

December 28, 2006

Mr. Mark B. Bezilla
Site Vice President
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 PROBLEM
IDENTIFICATION AND RESOLUTION INSPECTION REPORT
NO. 05000346/2006007

Dear Mr. Bezilla:

On November 17, 2006, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Davis-Besse Nuclear Power Station. The enclosed report documents the inspection findings that were discussed on November 17, 2006, with you and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating license. Within these areas, the inspection involved a selected examination of procedures and representative records, observation of activities, and interviews with personnel.

On the basis of the samples reviewed, the NRC concluded, overall, that problems entered in the corrective action program were properly identified, evaluated, and corrected. Audits and self-assessments were effective in identifying deficiencies, and recommendations were appropriately captured. The use of operating experience was adequate. The NRC did not identify any weaknesses in the Employee Concerns Program (ECP) that contributed to recent station performance deficiencies or adversely impacted the establishment of a Safety Conscious Work Environment (SCWE).

Based on the results of this inspection, one finding of very low safety significance that involved a violation of NRC requirements was identified. However, because the finding was of very low safety significance and because the issue was entered into your corrective action program, the NRC is treating this violation as a non-cited violation (NCV) in accordance with Section VI.A.1 of the NRC's Enforcement Policy.

If you contest the subject or severity of this non-cited violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Davis-Besse facility.

In accordance with 10 CFR 2.390 of the NRC'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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Eric R. Duncan, Chief
Branch 6
Division of Reactor Projects

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

Enclosure: Inspection Report 05000346/2006007
w/Attachment: Supplemental Information

cc w/encl: The Honorable Dennis Kucinich
G. Leidich, President and Chief
Nuclear Officer - FENOC
J. Hagan, Senior Vice President of
Operations and Chief Operating Officer
Richard Anderson, Vice President
Director, Plant Operations
Manager - Site Regulatory Compliance
D. Pace, Senior Vice President of
of Fleet Engineering
J. Rinckel, Vice President, Fleet Oversight
D. Jenkins, Attorney, FirstEnergy
Manager - Fleet Licensing
Ohio State Liaison Officer
R. Owen, Administrator, Ohio Department of Health
Public Utilities Commission of Ohio
President, Lucas County Board of Commissioners
President, Ottawa County Board of Commissioners

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-346
License Nos: NPF-3

Report No: 05000346/2006007

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Davis-Besse Nuclear Power Station

Location: 5501 North State Route 2
Oak Harbor, OH 43449-9760

Dates: October 30 - November 17, 2006

Inspectors: R. Lerch, Project Engineer
R. Smith, Resident Inspector
G. O'Dwyer, Reactor Engineer
F. Ramírez, Reactor Engineer

Approved by: E. Duncan, Chief
Branch 6
Division of Reactor Projects

Enclosure

SUMMARY OF ISSUES

IR 05000346/2006007; 10/30/2006 - 11/17/2006; Davis-Besse Nuclear Power Station; Problem Identification and Resolution.

The inspection was conducted by the Davis-Besse resident inspector and three region-based inspectors. One Green finding and an associated non-cited violation (NCV) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process (SDP)." Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Identification and Resolution of Problems

The inspectors concluded that, overall, problems were properly identified, evaluated, and corrected. Generally, licensee personnel properly prioritized and evaluated issues. However, the inspectors identified numerous examples in which degraded manual declutch operators associated with safety-related motor-operated valves (MOVs) were not identified in the corrective action program for resolution. Root cause evaluations for significant problems were appropriately detailed. Corrective actions to address problems were generally adequate. Audits and self-assessments were effective in identifying deficiencies and recommendations were appropriately captured. The use of operating experience was adequate. The inspectors did not identify any weaknesses in the Employee Concerns Program (ECP) that contributed to station performance deficiencies or adversely impacted the establishment of a Safety Conscious Work Environment (SCWE).

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified a finding of very low safety significance and an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," when licensee personnel failed to generate condition reports or notifications to identify deficiencies associated with safety-related equipment. In particular, the inspectors identified eight instances between April 2006 and November 2006 in which licensee personnel failed to document degraded declutch operators associated with safety-related MOVs although personnel were aware of the condition. As part of the licensee's immediate corrective actions, notifications and/or condition reports were generated to ensure that the identified deficiencies were entered into the corrective action program.

The inspectors determined that the finding was more than minor because the issue was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that the issue was of

very low safety significance because the finding did not represent an actual loss of a safety function of a system. The cause of the finding was related to the corrective action program aspect of the cross-cutting area of Problem Identification and Resolution because the implementation of the licensee's corrective action program did not identify declutch operator degradation completely, accurately, and in a timely manner commensurate with the safety significance of the issue. (Section 40A2.1.a)

B. Licensee-Identified Violations

No findings of significance were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Identification and Resolution of Problems (71152B)

The inspectors conducted a review of the licensee's processes for identifying and correcting problems. Although this was a biennial inspection, a Problem Identification and Resolution inspection was conducted in the fall of 2005. Therefore, this inspection reviewed licensee activities associated with the implementation of their corrective action program for a period of about 1 year. The inspectors reviewed selected licensee documents for the period from July 31, 2005, to November 17, 2006, such as NRC inspection report findings, corrective action documentation, Oversight audits, self-assessments, operating experience reports, and trend analyses. The inspectors also conducted plant walkdowns to determine whether equipment problems were identified at an appropriate threshold and were resolved in a timely manner.

.1 Corrective Action Program

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors conducted a review of the licensee's processes for identifying and initiating corrective actions for issues. The inspectors reviewed previous NRC inspection report findings and selected corrective action documentation to determine if issues were entered into the licensee's corrective action program at an appropriate threshold. In particular, the inspectors reviewed 33 notifications generated from July 31, 2005, to October 15, 2006, that were associated with safety-related equipment. The inspectors determined if any of the issues identified in these notifications represented a condition adverse to quality (CAQ), which required the generation of a condition report, and if so, whether a condition report was generated. The inspectors also conducted plant walkdowns to determine whether equipment problems were identified at an appropriate threshold and were resolved in a timely manner.

(2) Observations and Findings

The inspectors concluded that, in general, issues were entered into the licensee's corrective action program at an appropriate threshold. In the fall of 2005, the condition reporting and notification processes were separated. The revised process prescribed that a notification be generated to initiate a work order and track repair, whereas a condition report was to be generated to identify a CAQ. During this inspection, the inspectors identified the following finding of very low safety significance and other minor examples in which licensee personnel failed to initiate condition reports or notifications to identify deficiencies.

Failure to Initiate Condition Reports for Equipment-Related CAQs

Introduction: A finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified by the inspectors when licensee personnel failed to generate condition reports or notifications to identify deficiencies associated with safety-related equipment. In particular, the inspectors identified eight instances between April 2006 and November 2006 in which licensee personnel failed to adequately document degraded declutch operators associated with safety-related motor-operated valves (MOVs), although personnel were aware of the condition.

Description: The inspectors conducted plant walkdowns to determine whether equipment problems were identified at an appropriate threshold and were resolved in a timely manner. During these walkdowns, the inspectors observed deficiency tags that identified degraded declutch operators associated with high pressure injection system and low pressure injection system safety-related MOVs. However, through followup interviews, the inspectors determined that there were seven additional degraded declutch operators associated with safety-related MOVs in which neither a notification nor a condition report was generated, and one other degraded declutch operator for which a condition report had not been generated although a notification existed. Specifically, the inspectors identified that during refueling outage 14 (RFO14), which was completed in April 2006, licensee personnel identified eight safety-related MOVs with manual declutch levers that would not remain in the manual operating position, as designed, to operate the valve manually, but required that the declutch lever be held in the manual operation position. As a result, during an event in which these valves could not be operated remotely and licensee personnel were required to operate these valves locally, operators may not recognize the need to hold these declutch levers in the manual position to successfully operate these valves. All of these examples were required by NOP-LP-2001, "Corrective Action Program," to have been identified through a notification and a condition report.

Specifically, licensee personnel failed to generate a required condition report for the following notification:

- Notification 600288650; HP-2B Will Not Stay in Manual; dated March 3, 2006. This notification identified that the manual declutch lever associated with MOV HP-2B, "High Pressure Injection Line 2-2 Isolation Valve," would not remain in the manual operating position as designed to operate the valve manually without being held in the declutch position.

The following notifications with associated condition reports were initiated after licensee personnel realized that they had not been initiated as required by NOP-LP-2001 when a degraded declutch operator was originally identified by plant personnel during RFO14:

- Notification 600345105; DH-9B, [Decay Heat Pump 1 Suction from the Emergency Sump] Will Not Stay in Manual; dated November 3, 2006

- Notification 600345027; DH-1A [Decay Heat Pump 2 Discharge to the Reactor Coolant System Isolation Valve] Will Not Stay in Manual; dated November 3, 2006
- Notification 60035616; FW-601 [Main Feed Containment Isolation Valve (Stop Valve) for Steam Generator #1] Will Not Stay in Manual; dated November 6, 2006
- Notification 600346018; HP-2A [High Pressure Injection Line 2-1 Isolation Valve] Will Not Stay in Manual; dated November 7, 2006
- Notification 600346019; MS-106 [Main Steam Line 1 to Auxiliary Feedwater Pump Turbine Isolation Valve] Will Not Stay in Manual; dated November 7, 2006
- Notification 600347645; MS-603 [Containment Isolation Valve for Blowdown of the #2 Steam Generator] Will Not Stay in Manual; dated November 14, 2006
- Notification 600347670; RC-11 [Block Valve for the Pilot Operated Relief Valve (PORV)] Will Not Stay in Manual; dated November 14, 2006

Licensee personnel subsequently identified one case in which the use of a degraded declutch lever to manually re-position a valve was referenced in an Abnormal Operating Procedure.

As part of the licensee's immediate corrective actions, the notifications and/or associated condition reports referenced above were generated to ensure that the identified CAQs were entered into the licensee's corrective action program.

Analysis: The inspectors determined that the failure to generate condition reports and/or notifications to identify degraded declutch operators associated with eight safety-related MOVs was a performance deficiency warranting a significance evaluation. The inspectors concluded that the finding was greater than minor in accordance with Appendix B, "Issue Screening," of IMC 0612, "Power Reactor Inspection Reports," because the finding was associated with the Equipment Performance attribute of the Mitigating Systems cornerstone, and adversely affected the cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences.

The inspectors completed a significance determination of this issue using Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," of IMC 0609, "Significance Determination Process (SDP)," dated November 22, 2005. The inspectors determined that this finding: 1) was not a design deficiency or qualification deficiency; 2) did not represent an actual loss of safety function of a system; 3) did not represent an actual loss of safety function of a single train for greater than its technical specification (TS) allowed outage time; 4) did not represent an actual loss of safety function of one or more non-TS trains of equipment designated as risk significant; and 5) did not screen as potentially risk significant due to seismic, flooding, or a severe weather initiating event. Therefore, the finding screened as Green and was considered to be of very low safety significance.

The cause of the finding was related to the corrective action program aspect of the cross-cutting area of Problem Identification and Resolution because the implementation of the licensee's corrective action program did not identify issues associated with degraded declutch operators completely, accurately, or in a timely manner commensurate with the safety significance of the issue.

Enforcement: 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," required, in part, that activities affecting quality shall be prescribed by documented instructions or procedures of a type appropriate to the circumstances and shall be accomplished in accordance with those instructions or procedures. NOP-LP-2001, "Corrective Action Program," a quality-related procedure, required that condition reports be generated for conditions adverse to quality and be entered into the corrective action program. Contrary to the above, between April 2006 and November 2006, condition reports were not generated to identify the failure of eight declutch operators associated with safety-related MOVs, that were conditions adverse to quality. However, because the finding was determined to be of very low safety significance and was entered into the licensee's corrective action program (Condition Report (CR) 06-10042, CR 06-10081, CR 06-10085, CR 06-10086, CR 06-10087, CR 06-10089, CR 06-10091, CR 06-10092, and CR 06-10093), this violation is being treated as an NCV consistent with Section VI.A of the NRC Enforcement Policy (NCV 05000346/2006007-01).

Other Observations Regarding the Effectiveness of Problem Identification

No findings of significance were identified. The inspectors concluded that, in general, issues were entered into the licensee's corrective action program at the proper threshold. The inspectors determined that condition reports that were identified to involve CAQs were appropriately characterized and corrective actions were implemented to address these issues were appropriate with the exception of the following issues that were considered minor in nature:

- Notification 600287152; N2 [Nitrogen] Bottle for SW1356 Needs to be Replaced; dated March 12, 2006, identified that during the performance of Work Order 2000120731 to replace a nitrogen bottle, nitrogen system leaks were identified. The inspectors determined that licensee personnel had not generated a condition report to identify this condition adverse to quality. Licensee personnel subsequently generated CR 06-10011 to enter this issue into the corrective action program.
- The inspectors identified the following examples in which licensee processes and practices for informing the operations staff of equipment deficiencies were not effective or timely:
 - ▶ As discussed above, the inspectors identified eight instances between April 2006 and November 2006 in which licensee personnel failed to document degraded valve declutch operators. As a result, the operations staff was not informed of the deficiencies.

- ▶ As discussed in NRC Inspection Report 05000346/2006003, a finding of very low safety significance was identified when, with the plant shut down for a planned refueling outage, an uncontrolled 10 degree Fahrenheit heatup of the reactor coolant system occurred over a period of about 1 hour. Licensee personnel had remotely closed a degraded air-operated valve to isolate cooling water flow to the in-service decay heat cooler to control plant heatup. However, because the valve was degraded, it could not be remotely opened to control the heatup. The onshift operating crew was unaware that the valve had been identified as degraded and inoperable by a previous operating crew.
- ▶ Licensee personnel were unaware that a valve that was utilized to perform a plant evolution had been previously identified as stroking slowly. This resulted in the unexpected draining of the makeup tank to the borated water storage tank.
- ▶ A containment/annulus differential pressure gage that had been identified as inoperable following calibration was not reflected on the main control room annunciator panels although a condition report had been generated and the condition had existed for more than 2 weeks.
- The inspectors identified that licensee personnel, on occasion, generated a single condition report to identify multiple examples of an issue. The inspectors determined that this practice could adversely impact the licensee's ability to trend and analyze data since all of the occurrences of a problem in a single condition report may not be recognized.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors assessed the prioritization and evaluation of a sample of condition reports in the areas of Operations, Engineering, Maintenance, Radiological Protection, Emergency Preparedness and Security. The inspectors reviewed selected issues identified in previous NRC inspection reports and licensee-identified condition reports which had been identified since August 2005 to verify that the issues were appropriately characterized and prioritized. The inspectors assessed the completeness of root and apparent cause analyses, including the consideration of extent of condition, generic implications, common causes, previous occurrences, and the adequacy of planned corrective actions. Additionally, the inspectors attended several condition report screening meetings during which condition reports were discussed and assigned a significance level.

(2) Observations and Findings

No findings of significance were identified. The inspectors determined that licensee personnel properly categorized and evaluated the issues that were reviewed. In general, root cause and apparent cause evaluations were thorough and planned corrective actions to address root and contributing causes were adequate.

However, the inspectors identified that in some cases it was difficult to locate documentation that explained how an issue was resolved. Other cases were identified in which no documentation existed. An inconsistent cross-referencing between condition reports and notifications was a contributing cause.

c. Effectiveness of Corrective Action

(1) Inspection Scope

The inspectors reviewed selected condition reports to determine whether the licensee had implemented appropriate corrective actions in a timely manner to address identified issues. The inspectors also determined whether corrective actions were properly documented, assigned, and tracked to ensure they were implemented. Where possible, the inspectors independently determined whether the corrective actions were properly implemented. The inspectors also determined whether common causes and generic concerns were appropriately addressed. In addition, the inspectors reviewed and evaluated the adequacy of the corrective actions for a sample of findings identified in previous NRC inspection reports.

(2) Observations and Findings

No findings of significance were identified. The inspectors determined that corrective actions were appropriately developed and implemented in a timely manner commensurate with the safety significance of the problem.

.2 Operating Experience

a. Inspection Scope

The inspectors evaluated the licensee's process for the review and use of operating experience (OE). In particular, the inspectors reviewed the operating experience review procedure, program assessments, and open item backlog. The inspectors also reviewed selected 10 CFR Part 21 reports, NRC Information Notices, and other generic correspondence to determine if the program had adequately assessed issues for applicability at the site. Additionally, the inspectors discussed the implementation of the OE program with the Fleet OE specialist and the Davis-Besse OE Coordinator.

b. Observations and Findings

No findings of significance were identified and the inspectors concluded that the licensee had adequately implemented a program to collect and review operating experience information.

The specific aspects of the OE program discussed below were reviewed:

- The operating experience program as described in NOP-LP-2100, "Operating Experience Program," Revision 1, prescribed that licensee personnel screen incoming operating experience and determine if additional analysis was necessary. If the results of the screening identified a potential reportability or

operability concern, then NOP-LP-2100 required that the Shift Manager or Shift Engineer be immediately notified and a condition report be generated. The inspectors did not identify any examples in which licensee personnel failed to notify required operations personnel or generate a condition report when required by the OE program.

- NOP-LP-2100 required that a condition report be generated if any OE reviewer identified an adverse condition. The inspectors did not identify any examples in which licensee personnel failed to generate a condition report to identify an adverse condition contained in OE information.
- Of the OE documents reviewed, the inspectors did not identify any that had been classified incorrectly. The inspectors also noted that for the OE screenings classified as not requiring any further action, OE coordinators had the option to provide the OE documents to plant personnel for information only. The distribution included a brief summary of the operating experience as well as a hyperlink to obtain additional information. The distribution also included a reminder that if at any time during the review process, plant personnel identified that additional actions may be necessary, a notification or condition report should be generated.
- NOP-LP-2100 required the initiation of an Evaluation Review Required order for all new Significant Operating Experience Reports (SOERs), Significant Event Reports (SERs), Significant Event Notices (SENs), Operations and Maintenance Reminders (O&MRs), Topical Reports (TRs), NRC Information Notices (INs) addressed to nuclear power reactors or dry fuel storage licensees, and evaluation-required OE Reports. The inspectors did not identify any cases in which orders were not written as required for these operating experience documents.

The inspectors also noted that an October 2006 licensee self-assessment concluded that appropriate discussions of operating experience were included in pre-job briefings.

.3 Self-Assessments and Audits

a. Inspection Scope

During this inspection, the inspectors reviewed selected self-assessments and audits performed by the Oversight group, line organizations, and external sources, to determine whether the licensee had demonstrated the capability to identify performance issues before they resulted in actual events or undesired consequences. The inspectors evaluated management support of the self-assessment and audit process through a review of the staffing of the Oversight organization, management response to self-assessment and audit findings, and the contributions of the Oversight organization to performance improvements. The inspectors reviewed self-assessments and Oversight audits of activities in the areas of Operations, Maintenance, Engineering and Emergency Preparedness.

b. Observations and Findings

No findings of significance were identified. The inspectors determined that self-assessments and audits of the corrective action program had effectively identified areas for improvement. Areas identified as needing attention were entered into the licensee's corrective action program and appropriate corrective actions were identified and implemented.

The following issues that were considered minor in nature were identified:

- The overall conclusions discussed in some assessments were more positive than what was suggested by the assessment findings; and
- The number of samples used to assess the performance in an area was sometimes small for the scope of the activity evaluated.

.4 Assessment of Safety-Conscious Work Environment

a. Inspection Scope

The inspectors reviewed the licensee's Employee Concerns Program (ECP) to determine whether licensee personnel were willing to raise safety concerns and whether safety significant concerns entered into the ECP received appropriate attention. In particular, the inspectors reviewed documentation and interviewed individuals to determine whether weaknesses, if any, in the ECP had contributed to previously identified performance deficiencies; whether additional safety issues existed that had not been adequately captured in the licensee's corrective action program; and whether weaknesses, if any, in the ECP had a negative impact on the site's safety conscious work environment (SCWE). In particular, the inspectors reviewed the results of the most recent Davis-Besse SCWE survey and interviewed licensee employees to independently assess the SCWE at Davis-Besse. The interviews were conducted using the guidance provided in Appendix 1 of NRC Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R [Problem Identification and Resolution] Issues." The inspectors also reviewed licensee procedures and policies associated with the SCWE program, the ECP, and the Differing Professional Opinion Program. Licensee actions to publicize the corrective action and ECP programs were also reviewed.

b. Observations and Findings

No findings of significance were identified. The inspectors did not identify any weaknesses in the ECP that contributed to station performance deficiencies or adversely impacted the establishment of a SCWE. The nuclear safety concerns that had been identified through the ECP were appropriately addressed through the licensee's corrective action program.

The inspectors identified that ECP procedures failed to reference 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing

Facilities,” where actions to address CAQs were prescribed. Licensee personnel generated notifications to identify this issue.

4OA6 Exit Meeting Summary

On November 17, 2006, the inspectors presented the inspection results to Mr. M. Bezilla and other members of the licensee’s staff. The licensee acknowledged the findings presented. The inspectors confirmed that proprietary information was not provided or examined during this inspection.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

M. Bezilla, Site Vice-President
B. Boles, Director, Site Maintenance
K. Byrd, Manager, Design Engineering
J. Grabnar, Director, Station Engineering
L. Harder, Manager, Radiation Protection
R. Hruby, Manager, Nuclear Oversight
V. Kaminskas, Director, Plant Operation
C. Price, Manager, Regulatory Compliance
R. Schrauder, Director, Performance Improvement
M. Trump, Manager, Training

NRC Personnel

E. Duncan, Chief, Branch 6, Division of Reactor Projects, Region III
J. Rutkowski, Senior Resident Inspector, Davis-Besse Site

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000346/2006007-01	NCV	Failure to Initiate a Condition Report for Conditions Adverse to Quality
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Closed

None.

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

Procedures

NOBP-LP-2100, FENOC [FirstEnergy Nuclear Operating Company] Operating Experience Reference Guide, Revision 1
NOP-LP-2100, Operating Experience Program, Revision 1
DB-PF-00004, Equipment Failure Trending, Revision 0
DB-HP-01109, High Radiation Access Control, Revision 22
NOP-WM-1002, Work Management Screening Process, Revision 1
NOP-WM-1003, Work Identification Process (Notification), Revision 1
NOBP-LP-2019, Corrective Action Program Supplemental Expectations and Guidance, Revision 4
NOP-SS-8001, FENOC Activity Tracking, Revision 1
NOP-LP-2001, Corrective Action Program, Revision 14
NOBP-LP-2602, Human Performance Success Clocks, Revision 2
DB-OP-01002, Component Operation and Verification, Revision 3
DB-OP-02501, Serious Station Fire, Attachments 2, 45, 49, 50, 53, 54, 55 and 71; Revision 11
DB-OP-02519, Serious Control Room Fire, Attachments 2, 4, and 8; Revision 10
DB-PF-09301, Preventive Maintenance for Type SMB Limitorque Operators, Revision 3
NOP-WM-9001, FIN [Fix-It-Now]/Minor/Toolpouch Maintenance Processes, Revision 2
NOBP-LP-2005, Employee Concerns Program Staff Manual, Revision 1

Condition Reports Reviewed

CR 02-00784, Collective Review of the Nuclear Fuel Related CRs for Common Causes
CR 02-09359, SHRR - Continued Seat Leakage on DH2733
CR 03-04171, DH-2733 Leaks By
CR 03-05399, Tornado Differential Pressure & Seismic Analyses of Masonry Walls
CR 04-02704, DC [Direct Current] Ground - 125/250 VDC [Volts Direct Current] MCC [Motor Control Center] 1
CR 05-03226, IPA (RAS-05-00254) PIU Perform Additional Monitoring of CAP [Corrective Action Program] Implementation
CR 05-03382, OpEx [Operating Experience] - Perry IR [Inspection Report] 2005-5 Findings 4 and 5 Confirmatory Screening
CR 05-05349, Moisture Trap Check Valve Found
CR 05-05127, Cycle 14 Fuel Defect Met Expected Discovery Mode
CR 05-04006, IN 2005-19 - Effect of Plant Configuration Changes on the Emergency Plan
CR 05-01172, Armed Response Position
CR 05-05694, HELB [High Energy Line Break] Door Blocked Open
CR 05-04292, 2005 Davis-Besse Mid-Cycle SCWE Survey
CR 06-02013, Breaker ACD2 Failure to Close

CR 06-02132, Maintenance Rule (a)(1) Evaluation for Medium Voltage AC [Alternating Current] System
CR 06-02268, Maintenance Rule (a)(1) Evaluation for Fuel Defects
CR 06-02277, Revision to Medium Voltage AC Maintenance Rule (a)(1) Action Plan
CR 06-08623, Valve Seat Damage DH13A
CR 06-01697, Decline in Site Radiation Protection Performance During 14RFO [Refueling Outage 14]
CR 06-01458, NPS Worker Seconded to Areva Received Dose Alarm
CR 06-01497, Dose Alarms for RWP [Radiation Work Permit] 2006-6021
CR 06-01565, Worker Receives Dose Alarm
CR 06-01790, Dose Rate Alarm, RP [Radiation Protection] Worker, Decant HIC [High Integrity Container] High Radiation Area
CR 06-01655, Potential Trend in Human Performance Contributing High Radiation Area Violations
CR 06-02481, Radiation Protection Integrated Performance Assessment
CR 06-02767, E-Plan [Emergency Plan] Drill 6-22-06 DB [Davis-Besse] Oversight Comments Following Critique in OSC [Operations Support Center]
CR 06-02661, EP [Emergency Preparedness] Drill - OSC Critiqued Items
CR 06-02684, Incomplete Implementation of Corrective Action on Four Condition Reports
CR 06-02766, RA-EP-00100, Emergency Plan Training Program Procedure Deficiency
CR 06-02742, Training Performed in Manner Different Than Required by Emergency Plan
CR 06-02776, Drill - TSC [Technical Support Center] Documents
CR 05-05205, IS-DP-04920, Revision 6, Nuclear Security Weekly Operability Testing Issues
CR 06-01794, Security Procedure and Security Plan Alignment
CR 06-02249, Security Working Hours
CR 06-00512, Failed Test, DB-MI-03452 Acceptance Criteria Not Met
CR 06-00990, Worker Received Electrical Shock
CR 06-01456, Corrective Action Program Timeliness Issues
CR 06-01713, SW [Service Water] 1356 Failed Its Air Drop Test
CR 06-01877, SW 1356 Failed Its Air Drop Test
CR 06-02310, Decline in Shutdown Safety Performance During 14RFO
CR 06-02314, Supervisor Review of Maintenance Notifications
CR 06-02418, IPA Trend In Configuration Control Events
CR 06-02435, Procedure Quality Documented as Area for Improvement
CR 06-02672, The Hot Leg Level Calculation in the New Plant Computer Software is Incorrect
CR 06-02789, CR06-00990, Issues with Apparent Cause Evaluation
CR 06-6003, Manual Reactor Trip Due to Lowering Condenser Vacuum
CR 06-6545, Inadvertent Transfer of Water from the MUT [Makeup Tank] to the BWST [Borated Water Storage Tank]
CR 06-6732, Expiration of Health Physical Results in Loss of Fire Brigade and SER Qualification
CR 06-6749, CC1467 CCW [Component Cooling Water] from Decay Heat Cooler 1 Solenoid Outlet Valve Would Not Close
CR 06-9221, "Q" Instrument - Found Out of Tolerance
CR 06-9225, "Q" Instrument - Drawings Incorrect
CR 06-9296, BWST Low-Low Level Setpoint Calculation

Notifications Reviewed

600263078, OpEx [Operating Experience] Review of Topical Report TR5-50 Large Pump Motor Failures
600247430, OE21355 (Perry) Agastat EGD Relay Coil Failure
600319858, OpEx Review of NRC IN 2006-17 SW System
600251707, Review of Perry IR 05-05 Findings 4 & 5
600323305, OE21355 Checked Relay Cabinets RC2825 for Potential Coil Failures
600327826, OE21355 Checked Relay Cabinet JT2703 for Potential Coil Failures
600327829, OE21355 Checked Relay Cabinet JT2704 for Potential Coil Failures
600245530, Review DB E-Plan for RCS [Regulatory Issues Summary] 2005-02
600263007, Establish a Formal Process for Review of Plant Changes to Station Procedures, Equipment, That Could Potentially Decrease Level of Effectiveness
600262994, IN 05-19 Effect of Plant Change on E-Plan
600265657, Transferred from Enhancement Corrective Action 04-06462-02
600247693, Conduct a Meeting with Emergency Security Managers, Owner-Controlled Area Supervisors and ER Staff to Review Security Actions During Declared Emergencies
600306690, This AID is Written to Document the Identification of an Emerging Trend in the Area of Human Performance, Specifically Regarding Inattention to Detail
600322262, Incorporate CR 06-02807
600225085, Oil Level Low for HPI #2 Pump Motor Inboard Bearing
600226303, DBC1N Tripped Breaker BE1235
600226410, Battery 2N in Alarm
600227260, Replace SW 1356 Nitrogen Bottle
600228118, Adjust Packing on Valve HP14
600229767, D106 Degraded 42b Contact HPI [High Pressure Injection] DC L/O [Lube Oil] Pump 1
600245539, SW-1358 High Pressure Nitrogen
600251522, HPI Pump 2 DC Lube Oil Pump Not Operating
600251597, N2 [Nitrogen] for SW 1357
600268855, Wiring Configuration
600270814, SW1357 - Perform Diagnostic Testing
600273229, SB Batteries Low SpGr [Specific Gravity] - C
600274067, D.C.-2PN Float Potentiometer Adjustment
600274077, D.C.-2PN Repair/Replace Float Potentiometer
600274257, D.C.-2PN Float Potentiometer
600284850, Routine Inspection Noted Hot Spot DBC2N
600286424, Breaker Handle for D115 is Broken
600287007, Retorque HP82 - 14 RFO BACC [Boric Acid Corrosion Control]
600287152, N2 [Nitrogen] Bottle for SW1356 Needs to be Replaced
600287200, SW321 Drain Line Needs Shortened
600287739, 1N Station Does Not Meet Technical Specification Limit
600287809, 1P Battery Failed Technical Specification Limits
600288650, HP2B Will Not Stay in Manual
600288686, RD193 Will Not Stay in Manual
600292214, Calibration Check FTHP3C
600293031, Perform Energized Motor Test for PF3082
600293147, HISHP2D "Open" Light Turned Off While Throttling Closed HP2D and 100 gpm [gallons per minute] Flow

600293841, DCMCC1 Intermittent Grounding Issue
600293877, Difficult to Operate DAN 19
600293879, SW1356 Failed Air Drop Test
600301885, ECR [Engineering Change Request] 03-0474-00, Change Fuses D135
600301887, ECR 03-0474-00, Change Fuses D107
600305660, DCMCC [Direct Current Motor Control Center] 1 Ground Indication Out of Specification
600305707, Disassemble and Inspect HP2B
600308759, Request Supervisor Review of Maintenance Notification
600329325, HP2B Not Fully Closed When Green Light On
600345027, DH1A Will Not Stay in Manual
600345105, DH9B Will Not Stay in Manual
600345616, FW601 Will Not Stay in Manual
600346018, HP2A Actuator Will Not Stay in Manual
600346019, MS106 Actuator Will Not Stay in Manual
600347645, MS603 Will Not Stay in Manual
600347670, RC11 Will Not Stay in Manual

Work Orders (WO)

WO 200201873, DB-SW1356; Repair Air Leaks on Nitrogen Line

Operability Evaluations

03-0015, Revision 0, Evaluate Masonry Walls
03-0039, Revision 0/1, Evaluation of DH-13A/B & DH-14A/B Leakage

Internal Assessments

DSM-06-00053 Revision 1, Davis-Besse Maintenance Integrated Performance Assessment
November 1, 2005 – April 30, 2006
D.B.E.-06-099 Revision 1, Design Engineering Integrated Performance Assessment,
November 1, 2005 – April 30, 2006
DASS-06-14, Use of Relevant OpEx in PreJob Briefs
DB-C-06-01, Davis-Besse Fleet Oversight Quarterly Assessment Report, Maintenance
Functional Area Assessment
DB-C-06-03, Davis-Besse Fleet Oversight Quarterly Assessment Report, Engineering
Functional Area Assessment, July 1, 2006 to September 11
DB-C-05-03, Davis-Besse Fleet Oversight Quarterly Assessment Report, Engineering
Functional Area Assessment
TRS 06-0050 Revision 1, Plant Engineering Technical Services Integrated Performance
Assessment, November 1, 2005 - April 30, 2006
DB-C-06-02, Davis-Besse Fleet Oversight Quarterly Assessment Report, April 1, 2006 to
June 30, 2006
Operations OPS IPA 2005-02, Revision 0, Integrated Performance Assessment, May 1, 2005
through October 31, 2005
Operations OPS IPA 2006-01, Revision 2, Integrated Performance Assessment,
November 1, 2005 - April 30, 2006

TRS 06-00050, Plant Engineering and Technical Services Integrated Performance Assessment, November 1, 2005 through April 30, 2006, Revision 1
DB-SS-06-02, Corrective Action Program Implementation 1st Quarter, 2006
DB-SS-06-04, Corrective Action Program Implementation 2nd Quarter, 2006
DB-SS-06-11, Davis-Besse 14th Refueling Outage Condition Report Trend Summary Integrated Performance Assessment, November 1, 2005 - April 30, 2006, Revision 1

Other Documents

System Description for 480 VAC [Volt Alternating Current] system
Davis-Besse Plant Health Report 2nd Quarter 2006
Maintenance Rule Action (a)(1) Action Plan for the Medium Voltage AC System; dated August 22, 2006
Maintenance Rule Action (a)(1) Action Plan for the 480 Volt AC System; dated July 25, 2005
Maintenance Rule Action (a)(1) Action Plan, Revision 2, for the 480 Volt AC System; dated October 12, 2006
Apparent Cause Analysis 02-09359, SHRR - Continued Seat Leakage on DH2733, dated January 6, 2004
Corrective Action Fix 03-04171-1, Repair or Replace DH2733, dated June 27, 2003
Davis-Besse Site Protection, Players Debrief, October 2006
Davis-Besse Site Protection, Controller Briefing, October 2006
Davis-Besse Site Protection, Adversary Briefing, October 2006
ESI-BAS-I010, Revision 0, Mechanical Engineering Fundamentals
ON-BIT-I301.01, Mechanical Fundamentals, Valves
ON-BIT-I310.02, Valve Positioning Lesson Plan
Primary Equipment Operator Turnover Checklist, Zone 3 Operator, dated November 14, 2006
Secondary Equipment Operator Turnover Checklist, Zone 1 Operator, dated November 14, 2006
Secondary Equipment Operator Turnover Checklist, Zone 2 Operator, dated November 14, 2006
Employee Concerns Program, 2006 Results, Davis-Besse
Davis-Besse Nuclear Power Station Monthly Performance Report, September 2006

Condition Reports Generated During This Inspection

CR 06-9381, NRC PI&R [Problem Identification and Resolution]: Deficiency Tag Not Hung on HP2B
CR 06-9957, NRC PI&R: Notifications Not Generated Affecting Safety Related Equipment
CR 06-10011, Nitrogen Leak on SW 1356, CAC 1 Nitrogen Supply Regulator
CR 06-10042, NRC PI&R: Potential Adverse Condition For Which No CR Initiated
CR 06-10081, NRC PI&R: HP2B Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10085, NRC PI&R: HP2A Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10086, NRC PI&R: MS106 Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10087, NRC PI&R: MS603 Declutch Lever Would Not Stay Engaged in the Manual Position

CR 06-10089, NRC PI&R: DH1A Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10091, NRC PI&R: FW601 Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10092, NRC PI&R: DH9B Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10093, NRC PI&R: RC11 Declutch Lever Would Not Stay Engaged in the Manual Position
CR 06-10101, NRC PI&R: Potential Adverse Condition of Degraded Hardware Affecting Q Equipment

Notifications Generated Due to This Inspection

6000345042; Document Change Request NOBP-LP-2003 Employee Concerns Program
6000345043; Document Change Request NOBP-LP-2003 Employee Concerns Program Staff Manual

LIST OF ACRONYMS USED

AC	Alternating Current
ADAMS	Agency-Wide Document Access and Management System
BACC	Boric Acid Corrosion Control
BWST	Borated Water Storage Tank
CAP	Corrective Action Program
CAQ	Condition Adverse to Quality
CR	Condition Report
DC	Direct Current
ECP	Employee Concerns Program
ECR	Engineering Change Request
FENOC	FirstEnergy Nuclear Operating Company
FIN	Fix-It-Now
HELB	High Energy Line Break
HIC	High Integrity Container
HPI	High Pressure Injection
IMC	Inspection Manual Chapter
IN	Information Notice
L/O	Lube Oil
MCC	Motor Control Center
MOV	Motor-Operated Valve
MUT	Makeup Tank
N ₂	Nitrogen
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
OE	Operating Experience
O&MR	Operations and Maintenance Reminder
OPEX	Operating Experience
OSC	Operations Support Center
PI&R	Problem Identification and resolution
PORV	Pilot-Operated Relief Valve
RFO14	Refueling Outage 14
RP	Radiation Protection
RWP	Radiation Work Permit
SCWE	Safety Conscious Work Environment
SDP	Significance Determination Process
SEN	Significant Event Notice
SER	Significant Event Report
SOER	Significant Operating Experience Report
SW	Service Water
TR	Topical Report
TS	Technical Specifications
TSC	Technical Support Center
VDC	Volts Direct Current
WO	Work Order