NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION
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No. III-04-011 March 8, 2004

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NRC APPROVES DAVIS-BESSE RESTART

The Nuclear Regulatory Commission staff has approved the restart of the Davis-Besse Nuclear Power Plant, which has been shut down since February 2002 for replacement of a damaged reactor vessel head and other safety improvements. The plant near Oak Harbor, Ohio, is operated by FirstEnergy Nuclear Operating Company.

James Caldwell, Regional Administrator for the agency's Region III office in Lisle, Illinois, approved restart of the plant in a letter to the utility issued today, subject to the utility's compliance with its license requirements and NRC regulations. (The letter is attached to this news release.) The letter and supporting documentation will also be available on the NRC web site: http://www.nrc.gov -- select "Davis-Besse" from the key topics menu.

Based on the findings of numerous NRC inspections and on the improvements made by FirstEnergy, Mr. Caldwell told the utility, " the NRC has reasonable assurance that the Davis-Besse facility can be restarted and operated safely."

During the startup, the NRC will maintain round the clock inspection coverage of plant activities. Expanded inspection coverage at Davis-Besse will continue beyond startup. There are three resident inspectors assigned to Davis-Besse, one more than the normal staffing.

With its restart decision, the NRC issued a Confirmatory Order to FirstEnergy requiring independent assessments and inspections at the Davis-Besse Nuclear Power Station to provide reasonable assurance that the long-term corrective actions remain effective. (The Order is also attached.)

On February 26, 2004, the NRC Davis-Besse Oversight Panel recommended to Mr. Caldwell that the plant be permitted to restart. The panel has coordinated the NRC's regulatory activities for Davis-Besse during the lengthy outage. Panel members include managers and staff from the Region III Office, from NRC Headquarters, and from the NRC resident inspection staff at the plant.

Since February 12, when FirstEnergy submitted its restart request at a public meeting, the Oversight Panel and Mr. Caldwell reviewed information provided by the utility, the NRC inspection findings over the past two years, the assessments of NRC staff members who have been involved with Davis-Besse, and questions and concerns raised by outside individuals and organizations. The extensive inspections, conducted by the agency, have involved about 80 NRC inspectors and contract

experts.

The oversight panel will continue to coordinate the inspection and regulatory activities for Davis-Besse until the agency determines that the plant's performance warrants resumption of the NRC's normal reactor oversight program.

The panel will continue to hold periodic meetings in the vicinity of Davis-Besse with FirstEnergy officials to review the status of ongoing activities at the plant. These meetings will be open to public observation and participation.

During the past two years, the NRC staff has conducted some 75 public meetings on Davis-Besse -- most in the vicinity of the plant -- and held 50 briefings for federal, state, and local government officials.

Shortly after the discovery of the reactor vessel head damage, the agency set up a web site for information related to Davis-Besse. Numerous documents have been posted there as they were issued. In addition, the NRC issued monthly newsletters on the status of its regulatory activities for Davis-Besse.

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Attachments:
Letter to FirstEnergy dated March 8, 2004
Confirmatory Order dated March 8, 2004

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

March 8, 2004

CAL No. 3-02-001
EA-03-214

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: APPROVAL TO RESTART THE DAVIS-BESSE NUCLEAR POWER STATION, CLOSURE OF CONFIRMATORY ACTION LETTER, AND ISSUANCE OF CONFIRMATORY ORDER

Dear Mr. Myers:

This letter removes the restriction the NRC has placed on the restart of the Davis-Besse Nuclear Power Station. The U. S. Nuclear Regulatory Commission (NRC) staff has completed the necessary inspection, assessment, and licensing activities to resolve the issues identified as contributors to the Davis-Besse reactor vessel head degradation event. This letter also confirms the commitments in the November 23, 2003, FirstEnergy Nuclear Operating Company (FENOC) "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval," and its subsequent updates and transmits an immediately effective Confirmatory Order. That order requires annual independent assessments for five years, in the areas of operations, engineering, corrective actions and safety culture and requires inspection of key reactor coolant system pressure boundary components during a mid-cycle outage to ensure effective assessment and sustained safe performance.

This letter specifically addresses the following areas: Confirmatory Action Letter closure, Restart Checklist closure, confirmation of the commitments made to the NRC in the FENOC "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval," coordination of the restart decision with other federal agencies, issuance of the Confirmatory Order, and continuation of enhanced NRC regulatory oversight of Davis-Besse activities after restart.

Confirmatory Action Letter Closure

On February 16, 2002, the Davis-Besse Station was shut down for its 13th refueling outage. One activity to be accomplished during the outage was inspection of control rod drive penetrations through

the reactor pressure vessel (RPV) head pursuant to NRC Bulletin 2001-01. During outage activities, the licensee identified significant wastage of the carbon steel RPV head material near Penetration No. 3. The NRC was notified of the condition and, on March 12, 2002, initiated an Augmented Inspection Team (AIT) to review the facts surrounding the degraded vessel head. Also, on March 13, 2002, the NRC issued Confirmatory Action Letter Number 3-02-001 to Davis-Besse documenting six commitments required to be accomplished prior to restarting the reactor. On May 15, 2002, the NRC revised the Confirmatory Action Letter to address the option of replacing the RPV head.

The NRC letter dated December 24, 2002, documented the status of each item in the Confirmatory Action Letter including closure of item 6. NRC letters dated January 21, 2003, and July 17, 2003, clarified the status of Confirmatory Action Letter item 1. NRC letter dated September 19, 2003, documented closure of Confirmatory Action Letter items 1 and 2. The basis for resolution of the remaining Confirmatory Action Letter items not previously documented in public documents, items 3, 4, and 5, is included in Enclosure 1. The licensee requested closure of the Confirmatory Action Letter in a letter to the NRC dated February 23, 2004. All commitments contained in Confirmatory Action Letter No. 3-02-001 are closed.

Restart Checklist Closure

As a result of the findings from the AIT, on April 29, 2002, pursuant to NRC Inspection Manual Chapter (IMC) 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems," the NRC Davis-Besse Oversight Panel (Panel) was chartered to coordinate and oversee NRC activities needed to verify proper licensee safety performance. The Panel also ensured appropriate focus was provided and resources were allocated with regard to reviewing Davis-Besse improvement initiatives. On August 16, 2002, the Davis-Besse Oversight Panel issued a Restart Checklist, which was developed in accordance with NRC IMC 0350. This Checklist includes issues that required resolution prior to NRC consideration of restart approval. These issues were identified based on insights from routine inspections and performance indicators; results from the AIT and AIT Follow-up inspections; insights gained from Panel evaluation of ongoing licensee assessments; and items in the Return to Service Plan and subordinate Building Block Plans that the licensee originally submitted to the NRC by letter dated May 21, 2002.

The Restart Checklist was updated on October 30, 2002, January 28, 2003, and July 2, 2003, in response to NRC assessment of ongoing activities at the Davis-Besse Station. The updates addressed issues that needed to be resolved prior to the NRC consideration of restart approval.

The NRC staff has completed its inspection, assessment and licensing activities and has evaluated the effectiveness of the licensee's actions to address the issues that resulted in the plant shutdown. These items are listed in the Restart Checklist. The Panel's assessment of the licensee's actions was based on resident and region-based inspections, NRR staff reviews, baseline inspections, and a number of special inspections, including:

- Augmented Inspection Team (AIT) of RPV Head Degradation Event and AIT Follow-Up Inspections (Inspection Reports (IRs) 02-03 and 02-08)
- Boric Acid Corrosion Extent of Condition Inspection Parts I and II (IRs 02-09 and 02-12)
- Program Effectiveness Inspection Parts I and II (IRs 02-11 and 03-09)
- System Health Assurance Inspection, Safety System Design and Performance Capability Inspection, and Design Issues Inspection - Paths A, B, and C (IRs 02-13, 02-14 and 03-03)
- Uncontrolled Radioactive Material Release and Substantial Potential for Overexposure Special Inspections and Radiation Protection Supplemental (95002) Inspection (IRs 02-06, 02-16 and 03-08)
- Reactor Pressure Vessel Head Replacement Inspection (IR 02-07)
- Containment Integrated Leak Rate Test Inspection (IR 03-05)
- Emergency Core Cooling System and Containment Spray System Sump Inspection (IR 03-06)
- Completeness and Accuracy of Information Inspection (IR 03-19)
- Reactor Coolant System Integrity Inspection (IR 03-23)
- Corrective Action Team Inspection (IR 03-10)
- Engineering and Maintenance Backlog Assessment Inspection (IR 03-24)
- Management and Human Performance Inspection Phases I, II, and III and Management and Human Performance Follow-Up Inspection (IRs 02-15, 02-18, 03-12, and IR 04-03)
- Restart Readiness Assessment Team and Restart Readiness Assessment Team Followup Inspections (IRs 03-11 and 04-04)

Additional significant inspections accomplished during the outage included NRC evaluation of licensee actions to implement security orders and NRC and Federal Emergency Management Agency (FEMA) evaluation of the biennial emergency preparedness exercise.

The Panel has also conducted frequent public meetings with the licensee to discuss licensee performance and NRC inspection and assessment results. The results of these meetings were documented in public meeting summaries and internal Panel meeting minutes, all of which have been or will be placed in the NRC Public Electronic Reading Room.

Enclosure 2 to this letter documents the basis for resolution of all checklist items. In many instances, the basis consists of a reference to a previous public document that closed the item. For those items that have not been previously closed in public documents, the basis for resolution of those items is described.

Confirmation of Commitments in the "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval"

FENOC submitted the "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval" on November 23, 2003. The report was updated on February 6, 2004, and February 19, 2004. Appendices A and D of that report provide commitments to sustain performance improvement at Davis-Besse. 10 CFR 50, Appendix B, Criterion XVI requires that actions be taken to prevent recurrence of significant conditions adverse to quality. FENOC categorized the occurrence of the RPV head degradation as a significant condition adverse to quality. The actions described in Appendices A and D are intended by FENOC to ensure the improvements realized during the extended outage remain in place. Please provide written notification to the NRC Regional III Administrator should FENOC determine that any of those actions cannot be accomplished consistent with the schedule in Appendices A and D, or should FENOC determine that revision to the commitments in Appendices A and D is necessary.

Coordination of Restart Authorization with other Federal Agencies

In accordance with IMC 0350, the NRC staff has coordinated with the Federal Emergency Management Agency and determined that there are no offsite emergency preparedness issues that would impact a decision to approve restart of the Davis-Besse facility.

In addition, the Panel and NRC management have been regularly briefed on the results of the NRC Office of Investigations (OI) investigation. The federal investigation of possible wrongdoing is continuing as a joint effort of the United States Attorneys Office, Cleveland, Ohio; U. S. Department of Justice; and NRC's OI. An NRC manager has been assigned to monitor the continuing federal investigation and identify any emerging potential safety issues. In accordance with the NRC's Enforcement Manual, the NRC staff has reviewed the investigative results and concluded that no immediate enforcement action is necessary at this time. These matters will continue to be monitored and will be appropriately handled consistent with NRC policies for enforcement and interface with the U.S. Department of Justice, and any enforcement related to the events surrounding the reactor head degradation event will be issued in accordance with NRC policies.

Issuance of Confirmatory Order

To ensure effective assessment and sustained safe performance at Davis-Besse, the NRC has determined that additional measures are needed. Therefore, the NRC is issuing a Confirmatory Order to FirstEnergy Nuclear Operating Company modifying License No. NPF-3 requiring annual independent assessments for five years in the areas of operations, engineering, corrective actions and safety culture and requiring inspections of key reactor coolant system pressure boundary components during a mid-cycle outage. Enclosure 3 contains the Confirmatory Order.

Continuation of Oversight Panel after Restart Approval

As discussed during several public meetings, implementation of the routine reactor oversight and assessment processes will continue to be suspended. The Davis-Besse Oversight Panel will continue to provide NRC regulatory oversight at Davis-Besse until the Panel confirms sustained safe operating performance at Davis-Besse. The Panel will continue to monitor licensee startup activities through resident and region-based special inspections, including a period of continuous observation during restart of the station. In addition, enhanced inspection oversight will be provided utilizing the additional resident inspector at the station, and other focused special inspections of areas the Panel determines warrant additional oversight. By separate correspondence the licensee will be provided a copy of the NRC's inspection plans for the Davis-Besse Nuclear Power Station during the upcoming 18-month period.

In summary, the matters contained in the NRC's Confirmatory Action Letter and Restart Checklist, required to be addressed before NRC consideration of restart approval have been adequately resolved and the NRC has reasonable assurance that the Davis-Besse facility can be restarted and operated safely. Therefore, the NRC is removing the restriction placed on restart of the Davis-Besse Nuclear Power Station in the Confirmatory Action Letter. You remain accountable to comply with all requirements in NRC regulations and the Davis-Besse operating license as applicable before the plant can restart. Further, the NRC acknowledges your commitments to take action to prevent recurrence of significant performance deficiencies at Davis-Besse and is issuing an immediately effective Confirmatory Order requiring future assessments and inspections.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response if you choose to respond, will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC website, namely http://www.nrc.gov/reading-rm/adams.html.

Sincerely,

/signed/

James L. Caldwell
Regional Administrator

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

Enclosures:
1. CAL Closure Summary [Available from NRC Office of Public Affairs]
2. Restart Checklist [Available from NRC Office of Public Affairs]
3. Order Modifying License [Attached to news release]

7590-01-P

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)
	) Docket No. 50-346
FirstEnergy Nuclear Operating Company	) License No. NPF-3
(Davis-Besse Nuclear Power Station, Unit 1)	) EA-03-214

CONFIRMATORY ORDER MODIFYING LICENSE
(EFFECTIVE IMMEDIATELY)

I.

FirstEnergy Nuclear Operating Company (FENOC, or the Licensee) is the holder of Facility Operating License No. NPF-3 issued on April 22, 1977, by the Nuclear Regulatory Commission (NRC or Commission) pursuant to 10 CFR Part 50. The license authorizes the operation of Davis-Besse Nuclear Power Station, Unit 1 (Davis-Besse), in accordance with conditions specified therein. The facility is located on the Licensee's site in Ottawa County, Ohio.

II.

The discovery of circumferential cracking in some of the control rod drive mechanism (CRDM) nozzles that penetrate the reactor pressure vessel (RPV) head at Oconee Nuclear Station, Unit 3, in February 2001, and Oconee Nuclear Station, Unit 2, in April 2001, raised concerns about the potential safety implications and prevalence of cracking in RPV head penetration nozzles in pressurized-water reactors (PWRs). In response to these concerns, the NRC issued NRC Bulletin 2001-01 on August 3, 2001. The bulletin required all PWR operators to report to the NRC on the structural integrity of the CRDM nozzles, including their plans to ensure that future inspections would verify structural integrity of the reactor vessel boundary. Davis-Besse was shut down on February 16, 2002, when it began its 13th refueling outage, which included an inspection of CRDM nozzles. On March 6, 2002, FENOC employees discovered a cavity in the RPV head. The cavity was the result of corrosion caused by long-term leakage of reactor coolant, which contains boric acid, from small cracks in one of the CRDM nozzles.

The NRC staff subsequently determined that FENOC's failure to properly implement its boric acid corrosion control and corrective action programs was a performance deficiency that allowed reactor coolant system pressure boundary leakage to occur undetected for a prolonged time, resulting in RPV upper head degradation. The NRC determined that the Licensee's performance deficiency had high safety significance, in the Red range, as documented in a letter to the Licensee dated May 29, 2003 (ADAMS Accession No. ML031490778).

The NRC took a series of actions in response to the discovery of the cavity in the Davis-Besse RPV head. An Augmented Inspection Team was sent to Davis-Besse on March 12, 2002, to collect facts regarding the conditions that led to the head degradation. Additionally, the NRC issued a Confirmatory Action Letter (CAL) to the Licensee on March 13, 2002 (ML020730225), confirming the Licensee's agreement that NRC approval is required for restart of Davis-Besse. The CAL also documented a number of actions that the Licensee must implement before restart. By letter dated April 29, 2002 (ML021190661), the NRC informed FENOC that its corrective actions at Davis-Besse would receive enhanced NRC oversight, as described in NRC Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition With Performance Problems." That enhanced monitoring began on May 3, 2002, and included the creation of a panel to provide the required oversight during the plant shutdown and during and after any future restart until a determination is made that the plant is ready for return to the NRC's normal reactor oversight process.

By letter dated April 18, 2002 (ML021130029), "Confirmatory Action Letter Response - Root Cause Analysis Report," the Licensee submitted to the NRC its technical root cause analysis report for the RPV head degradation, as revised by letter dated September 23, 2002 (ML022750125), "Revision 1 to Root Cause Analysis Report Regarding Reactor Pressure Vessel Head Degradation." The Licensee

concluded that the probable cause of the degradation was primary water stress corrosion cracking of the nozzle. The physical factors that caused corrosion of the RPV head were the CRDM nozzle leakage associated with through-wall cracking, followed by boric acid corrosion of the RPV low-alloy steel. The Licensee further concluded that the large-scale corrosion occurred as a result of a failure to detect and arrest the leakage until advanced symptoms had appeared.

The Licensee submitted to the NRC its nontechnical root cause analysis by letter dated August 21, 2002 (ML022750405), "Management and Human Performance Root Cause Analysis Report on Failure to Identify Reactor Pressure Vessel Head Degradation." In this analysis, the Licensee concluded that "there was a lack of sensitivity to nuclear safety and the focus was to justify existing conditions. The overall conclusion is that Management ineffectively implemented processes and thus failed to detect and address plant problems as opportunities arose." The Licensee identified a number of root causes for the failure to identify boric acid corrosion of the RPV head, including:

1. Less-than-adequate nuclear safety focus - A production focus established by management, combined with minimum action to meet regulatory requirements, resulted in acceptance of degraded conditions on the RPV head and other components affected by boric acid.

2. Less-than-adequate implementation of the corrective action program, as indicated by the following:
   a. Addressing symptoms rather than causes
   b. Low categorization of conditions
   c. Less-than-adequate cause determinations
   d. Less-than-adequate corrective actions
   e. Less-than-adequate trending

3. Less-than-adequate analyses of safety implications - Failure to integrate and apply key industry information and site knowledge/experience, effectively use vendor expertise, and compare new information to baseline knowledge led to less-than-adequate analyses and decisionmaking with respect to the nuclear safety implications of boric acid on the reactor vessel head and in the containment.

4. Less-than-adequate compliance with the boric acid corrosion control and inservice test programs - Contrary to these programs, boric acid was not completely removed from the RPV head. The affected areas were not inspected for corrosion and leakage from nozzles and the sources of the leakage were not determined.

As documented in NRC Inspection Report No. 50-346/02-15 (ML030380037), dated February 6, 2003, the NRC concluded that the Licensee's management and human performance initial root cause analyses were not sufficiently broad to identify potential contributors in the engineering and corporate support areas and were not developed in an integrated manner to identify potentially systemic issues. Additional analyses were performed by the Licensee, including assessments in the areas of operations, engineering, oversight, and corporate support, and were evaluated by the NRC, as documented in NRC Inspection Report No. 50-346/02-18 (ML032050528), dated July 24, 2003. Following review of the

additional FENOC analyses, the NRC concluded that the Licensee's overall nontechnical root cause 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 RPV head degradation.

Corrective actions taken by the Licensee included the development of a Return-to-Service Plan, which described FENOC's actions for Davis-Besse's safe and reliable return to service. The Return-to-Service Plan was initially submitted to the NRC on May 21, 2002 (ML021430429), and has been revised several times, most recently on April 6, 2003 (ML031000739).

The NRC Davis-Besse Oversight Panel established a Restart Checklist, which lists the essential issues requiring disposition prior to restart. The Restart Checklist was originally issued on August 16, 2002 (ML022310034), and has been revised as necessary by the Oversight Panel based on the results of NRC inspections and the Licensee's assessments. The Restart Checklist addresses those issues necessary to resolve the causes of the RPV head degradation so that the Licensee can safely restart and operate the plant. For example, issues requiring resolution before the Oversight Panel can consider a recommendation for restart include (1) the adequacy of safety-significant structures, systems, and components inside containment, (2) the adequacy of safety-significant programs, such as the corrective action program, self-assessment programs, and the boric acid corrosion management program, and (3) the adequacy of organizational effectiveness and human performance, including the effectiveness of corrective actions.

While the Restart Checklist establishes those essential actions necessary for safe restart and operation, a key element in preventing recurrence of a safety-significant event such as the RPV head degradation is effective Licensee self-assessment. Given the magnitude, scope, and duration of problems found at Davis-Besse, and that the Licensee's own self-assessments were not effective in preventing risk-significant performance deficiencies, additional assurance that the Licensee's self-assessment programs remain effective is essential.

III.

To address the issues identified above and ensure sustained safe performance in plant operation, the Licensee developed the Davis-Besse Nuclear Power Station Operational Improvement Plan - Operating Cycle 14, which was submitted to the NRC by letter dated November 23, 2003, "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval" (ML033360251) and most recently revised on January 27, 2004 (ML040280597). The Operational Improvement Plan provides for a managed transition from the Return-to-Service Plan to normal plant operations and refueling outages. The purpose of the Operational Improvement Plan is to ensure that improvements realized during the extended outage remain in place and are further built upon to improve performance in the future.

On November 12, December 3, and December 10, 2003, the Licensee met with the NRC staff regarding the Davis-Besse Nuclear Power Station Operational Improvement Plan for Operating Cycle 14. Among other long-term corrective actions, the Operational Improvement Plan focuses on Licensee initiatives to measure and sustain achievements in the areas of management and human performance at Davis-Besse. The Operational Improvement Plan contains a number of key improvement initiatives,

including continuing actions in the areas of operations, engineering, safety culture, and corrective actions.

As assurance that the Operational Improvement Plan initiatives are sufficient to ensure the continued integrity of the reactor coolant system and correction of the underlying management and organizational problems which led to the RPV head degradation, the Licensee also committed to the following actions. By letters dated March 31 (ML030930451) and November 14, 2003 (ML033220323), FENOC committed to conduct certain inspections every refueling outage for leakage from the RPV upper head and from pressure-retaining components above the RPV head. These include the CRDM flanges. In addition, by letter dated July 30, 2003 (ML032160384), FENOC committed to conduct similar inspections of the reactor vessel underside incore monitoring instrumentation nozzles, including during the Cycle 14 midcycle outage. As noted in the NRC staff assessment (ML032510339), the midcycle inspection will help to assure prompt identification of any significant reactor coolant system pressure boundary leakage should it develop. The midcycle outage activities will provide additional confirmation of the material status of the reactor coolant system.

Notwithstanding the corrective actions completed to address the CAL and Restart Checklist and planned by the Licensee in the Operational Improvement Plan, the NRC requires additional measures with respect to independent assessments and midcycle inspections to provide reasonable assurance that the long-term corrective actions remain effective for those conditions that resulted in risk-significant performance deficiencies. During the course of the extended shutdown of Davis-Besse beginning in February 2002, FENOC conducted a number of thorough evaluations and self-assessments. Examples include the evaluation of system design, the assessment of the completeness and accuracy of docketed information, the evaluation of operational performance deficiencies during the normal operating pressure test, and the evaluation of the failure to comply with technical specification requirements during testing of the steam and feedwater rupture control system. However, Licensee assessments of operational performance prior to both the normal operating pressure test and the NRC's Restart Readiness Assessment Team Inspection in December 2003 failed to identify a number of deficiencies. NRC inspections also discovered problems that were not originally found by the Licensee, most notably in safety culture, in the corrective action program, and in the quality of engineering calculations and analyses. These issues indicated weaknesses in the Licensee's ability to assess, find, and correct conditions adverse to quality. In addition, on November 23, 2003, the Licensee concluded that the plant, programs, and personnel were ready to support safe operation, subject to completion of a few, well-defined work activities prior to restart, and requested the NRC schedule a meeting as stated in the CAL, and then provide approval for restart. A meeting was originally scheduled for December 18, 2003, to discuss restart. However, due to self-revealing equipment and operational problems and issues from the NRC Restart Readiness Assessment and the Management and Human Performance inspection teams, the meeting was delayed. Given the Licensee's previous conclusion that it was ready to support safe operation, these problems were additional evidence of inadequate self-assessment. Since then, the NRC recognizes that FENOC has implemented significant corrective actions resulting in improved performance and self-assessment capability. Nevertheless, considering the problems noted above and going forward, the NRC requires independent outside assessments to ensure continued effective Licensee self-assessments and sustained safe performance in the areas of operations, engineering and corrective actions at Davis-Besse.

On February 26, 2004, the Licensee executed a consent form in which it committed to implement the conditions in Section IV below with respect to future independent assessments of operations, safety culture, corrective actions, and engineering at Davis-Besse, and inspections of the reactor coolant system pressure boundary during a midcycle outage. The independent assessments will provide important confirmation of the effectiveness of the Licensee's self-assessments and long-term improvement actions. The reactor coolant system pressure boundary inspections will assure prompt identification of any leakage should it develop. The Licensee further agreed that this Order would be effective upon issuance and waived its right to a hearing.

I find that the Licensee's commitments, as set forth in Section IV, are acceptable and necessary and conclude that with these commitments, plant safety is reasonably assured. In view of the foregoing, I have determined that public health and safety require that the Licensee's commitments be confirmed by this Order. Based on the above, this Order is immediately effective upon issuance.

IV.

Accordingly, pursuant to Sections 103, 161b, 161i, 161o, 182 and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and 10 CFR Part 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT LICENSE NO. NPF-3 IS MODIFIED AS FOLLOWS:

1. FENOC shall contract with independent outside organizations to conduct comprehensive assessments of the Davis-Besse operations performance, organizational safety culture, including safety conscious work environment, the corrective action program implementation, and the engineering program effectiveness. Ninety days prior to the assessments, FENOC shall inform the Regional Administrator, NRC Region III, in writing, of the identity of its outside assessment organizations, including the qualifications of the assessors, and the scope and depth of the assessment plans. These outside independent assessments at Davis-Besse shall be completed before the end of the 4th calendar quarter of 2004 and annually thereafter for 5 years. Within 45 days of completion of the assessments, the Licensee shall submit by letter to the Regional Administrator, NRC Region III, all assessment results and any action plans necessary to address issues raised by the assessment results.

2. FENOC shall conduct a visual examination of the reactor pressure vessel upper head bare metal surface, including the head-to-penetration interfaces; the reactor pressure vessel lower head bare metal surface, including the head-to-penetration interfaces; and the control rod drive mechanism flanges, using VT-2 qualified personnel and procedures during the Cycle 14 midcycle outage. The results and evaluation of the inspections will be reported by letter to the Regional Administrator, NRC Region III, prior to restart from the midcycle outage, and any evidence of reactor coolant leakage found during the inspections will be reported by telephone within 24 hours of discovery to the Regional Administrator, NRC Region III, or designee.

If the Licensee determines that submittals made in accordance with these conditions contain proprietary information as defined by 10 CFR 2.390, the Licensee shall also provide a nonproprietary version in accordance with 10 CFR 2.390(b)(1)(ii). The Regional Administrator, NRC Region III, may, in writing, relax or rescind any of the above conditions upon demonstration by the Licensee of good cause.

V.

Any person adversely affected by this Confirmatory Order, other than the Licensee, may request a hearing within 20 days of its issuance. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time in which to request a hearing must be made in writing to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and must include a statement of good cause for the extension. Any request for a hearing shall be submitted to the Secretary, U.S. Nuclear Regulatory Commission, ATTN: Chief, Rulemakings and Adjudications Staff, Washington, DC 20555. Copies of the hearing request shall also be sent to the Director, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, to the Assistant General Counsel for Materials Litigation and Enforcement at the same address, to the Regional Administrator for NRC Region III, 801 Warrenville Road, Lisle, Illinois 60532-4351, and to the Licensee. If a person requests a hearing, that person shall set forth with particularity the manner in which his interest is adversely affected by this Order and shall address the criteria set forth in 10 CFR 2.309(d).

If a hearing is requested by a person whose interest is adversely affected, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be whether this Confirmatory Order should be sustained. AN ANSWER OR A REQUEST FOR HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

FOR THE NUCLEAR REGULATORY COMMISSION

/signed/

J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Dated this 8th day of March, 2004