April 27, 2000

Mr. Guy G. Campbell
Vice President - Nuclear
First Energy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: NRC INSPECTION REPORT 50-346/2000005(DRS)

Dear Mr. Campbell:

On April 21, 2000, the NRC completed an inspection at your Davis-Besse Nuclear Power Station. The enclosed report presents the results of that inspection. No violations of NRC requirements were identified.

This routine, announced inspection assessed the effectiveness of your program for monitoring degradation of vital system boundaries. Specifically, the inspector evaluated the implementation of your inservice inspection program for monitoring degradation of the reactor coolant system boundary, risk significant piping system boundaries, and the containment boundary.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC homepage, http://www.nrc.gov/NRC/ADAMS/index.html.

Sincerely,

/RA/

John M. Jacobson, Chief
Mechanical Engineering Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 50-346/2000005(DRS)

See Attached Distribution

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DOCUMENT NAME: G:\DRS\DAV2000005 DRS.WPD **(SEE PREVIOUS CONCURRENCE)**
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J. Freels, Manager, Regulatory Affairs
M. O'Reilly, FirstEnergy
State Liaison Officer, State of Ohio
R. Owen, Ohio Department of Health
C. Glazer, Chairman, Ohio Public
Utilities Commission

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-346
License No:	NPF-3
Report No:	50-346/2000005(DRS)
Licensee:	First Energy Nuclear Operating Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5503 N. State Route 2 Oak Harbor, OH 42449
Dates:	April 17-21, 2000
Inspector:	Donald Jones, Reactor Inspector
Approved by:	John M. Jacobson, Chief, Mechanical Engineering Branch Division of Reactor Safety

SUMMARY OF FINDINGS

Davis-Besse Nuclear Power Station
NRC Inspection Report 50-346/2000005(DRS)

This routine, announced inspection assessed the effectiveness of the licensee's program for monitoring degradation of the reactor coolant system boundary, risk significant piping system boundaries, and the containment boundary. Specifically, the inspector observed three types of nondestructive examination activities, reviewed three modification packages including radiography, and reviewed nine condition reports.

Initiating Events

There were no significant findings identified.

Mitigating Systems

There were no significant findings identified.

Barrier Integrity

There were no significant findings identified.

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent little effect on safety. WHITE findings indicate issues with some increased importance to safety, which may require additional NRC inspections. YELLOW findings are more serious issues with an even higher potential to effect safety and would require the NRC to take additional actions. RED findings represent an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant to shut down.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE), performance that results in definitive, required action by the NRC (YELLOW), and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, as described in the matrix. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.

Report Details

1. REACTOR SAFETY

1R08 Inservice Inspection

a. Inspection Scope

The inspector reviewed the implementation of the licensee's inservice inspection program for monitoring degradation of the reactor coolant system boundary, risk significant piping system boundaries, and the containment boundary. Specifically, the inspector observed three types of nondestructive examination activities, and reviewed three modification packages including radiography.

b. Observations and Findings

There were no significant findings identified.

4 OTHER ACTIVITIES

4OA1 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed nine condition reports to verify the identification of ISI problems at an appropriate threshold. The inspector also verified that the corrective actions were appropriate.

b. Observations and Findings

There were no significant findings identified.

4OA5 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on April 21, 2000. The licensee acknowledged the results presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

G. G. Campbell, Vice President Nuclear
H. W. Stevens, Manager, QA
M. D. Shepherd, Supervisor, Plant Engineering
D. H. Lockwood, Supervisor, Compliance/Regulatory Affairs
G. M. Wolf, Engineer, Regulatory Affairs
S. Moffitt, Director, Technical Services
C. Daft, Senior Engineer, Plant Engineering
D. C. Geisen, Manager, Technical Services
A. McAllister, Supervisor, Test and Performance
L. W. Worley, Director, Support Services
D. Munson, Plant Engineering

Framatome Technologies Inc

D. Langenfeld, Supervisor, Level III NDE

NRC

K. S. Zellers, Senior Resident Inspector, Davis-Besse

LIST OF BASELINE INSPECTIONS PERFORMED

The following inspectable area procedures were used to perform inspections during the report period. Documented findings are contained in the body of the report.

Inservice Inspection	R08
Identification and Resolution of Problems	OA1
Meetings, including Exit	OA5

LIST OF NONDESTRUCTIVE EXAMINATION ACTIVITIES OBSERVED

- Reactor Closure Head to Flange Weld Ultrasonic Examination (B01.040.0524.1)
- Reactor Closure Head to Flange Weld Magnetic Particle Examination (B01.040.0524.2)
- High Pressure Injection System 2.5 inch Pipe to Elbow Weld Ultrasonic Examination (C05.021.9941.1)
- High Pressure Injection System 2.5 inch Pipe to Elbow Weld Liquid Penetrant Examination (C05.021.9941.2)

LIST OF DOCUMENTS REVIEWED

Reports

- 1998 Inservice Inspection Final Report for Toledo Edison Company Davis-Besse Unit 1 Refueling Outage 11

Procedures

- Davis Besse Administrative Procedure No. DB-PF-00104, “Inservice Inspection Program,” Revision 00.
- Framatome Technologies Inc., Procedure No. 54-ISI-130-34, “Ultrasonic Examination of Ferritic Vessel Welds Greater Than Two Inches in Thickness,” November 25, 1997.
- Framatome Technologies Inc., Procedure No. 54-ISI-836-03, “Procedure for the Ultrasonic Examination of Austenitic Piping Welds,” March 20, 2000.
- Framatome Technologies Inc., Procedure No. 54-ISI-240-37, “Penetrant Examination of Welds and Base Materials, Including Studs and Nuts,” November 25, 1997.
- Framatome Technologies Inc., Procedure No. 54-ISI-270-36, “Wet or Dry Methods of Magnetic Particle Examination of Welds Base Materials, Studs, Bolts, and Pump Motor Flywheels,” November 24, 1997.
- Toledo Edison Procedure No. NA-QC-00194, “Radiographic Examination,” Revision 00.
- Davis -Besse Nuclear Power Station Welding/Brazing Procedure Specification, Number A8-1-1, “Shielded Metal Arc Welding (SMAW) of Stainless Steel (P8), Groove With Backing,” Revision 0.
- Davis -Besse Nuclear Power Station Welding/Brazing Procedure Specification, Number A8-2-1, “Gas Tungsten Arc Welding (GTAW) of Stainless Steel (P8), Groove With or Without Backing,” Revision 1.

Modification Packages Including Radiography

- Modification 97-0074, Post LOCA Boric Acid Precipitation Control.
- Modification 98-0050, Relief Valve Installation for Component Cooling Water to Letdown Cooler.
- Modification 99-050, Pipe Valves Installation to Facilitate Draining of Moisture in Rad Monitors.

Condition Reports

- Davis-Besse Condition Report No. 2000-0680
- Davis-Besse Condition Report No. 2000-0709
- Davis-Besse Condition Report No. 2000-0717
- Davis-Besse Condition Report No. 2000-0781
- Davis-Besse Condition Report No. 2000-0869
- Davis-Besse Condition Report No. 2000-0892
- Davis-Besse Condition Report No. 2000-0899
- Davis-Besse Condition Report No. 2000-0949
- Framatome Technologies Inc. Nonconformance Report No. 6002623, Revision 0

Condition Reports Issued as a Result of the Inspection

- Davis-Besse Condition Report No. 2000-1085