July 19, 2000

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

SUBJECT: DAVIS-BESSE NRC INSPECTION REPORT 50-346/2000008(DRS)

Dear Mr. Campbell:

On June 30, 2000, the NRC completed a baseline and supplemental inspection at your Davis-Besse Nuclear Generating Station. The results of this inspection were discussed with Mr. R. Coad and other members of your staff on June 30, 2000. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to emergency preparedness and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel. Specifically, this inspection focused on the implementation of your emergency preparedness program. In addition, we reviewed your staff's evaluation of the performance indicators for the Emergency Preparedness Cornerstone, including your staff's reassessment of 1999 data related to the drill and exercise performance indicator that changed this indicator from the white to the green performance band.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.790 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 *Publically Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from* the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Gary L. Shear, Chief Plant Support Branch Division of Reactor Safety

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

Enclosure: Inspection Report 50-346/2000008(DRS)

cc w/encl: B. Saunders, President - FENOC

J. Lash, Plant Manager

J. Freels, Manager, Regulatory Affairs

M. O'Reilly, FirstEnergy

State Liaison Officer, State of Ohio R. Owen, Ohio Department of Health A. Schriber, Chairman, Ohio Public

Utilities Commission

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Utilities Commission

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

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

Report No: 50-346/2000008(DRS)

Licensee: FirstEnergy Nuclear Operating Company

Facility: Davis-Besse Nuclear Power Station

Location: 5501 North State Route 2

Oak Harbor, OH 43449-9760

Dates: June 26-30, 2000

Inspector: Thomas J. Ploski, Senior Emergency Preparedness

Analyst

Approved by: Gary L. Shear, Chief, Plant Support Branch

Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently 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 and assessing 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
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness
- Occupational
- Public
- Physical Protection

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 very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

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 varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

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. 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. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

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

SUMMARY OF FINDINGS

Davis-Besse Nuclear Generating Station NRC Inspection Report 50-346/2000008(DRS)

The report covers a one week period of announced inspection by a regional emergency preparedness analyst. This inspection focused on the implementation of the emergency preparedness program, and included a review of the licensee's three performance indicators associated with the Emergency Preparedness Cornerstone.

REACTOR SAFETY

Cornerstone: Emergency Preparedness

There were no findings identified.

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System (ANS) Testing

a. <u>Inspection Scope</u>

The inspector discussed with licensee staff the design and ongoing equipment modification of the public ANS for the station's Emergency Planning Zone. The inspector also reviewed procedures and records related to periodic system testing, and preventive and non-scheduled maintenance. A siren system operability status test was observed. Statistics gathered to determine ANS reliability were also reviewed.

b. <u>Issues and Findings</u>

There were no findings identified.

1EP3 <u>Emergency Response Organization (ERO) Augmentation Testing</u>

a. Inspection Scope

The inspector reviewed the semi-annual, off-hours staff augmentation drill procedure, related 1999 and 2000 drill records, backup provisions for off-hours notification of the licensee's emergency responders, and the current ERO roster. The inspector discussed a late 1999 upgrade to the ERO's Computerized Automated Notification System (CANS) and reviewed related training records. The inspector also reviewed and discussed provisions for maintaining the ERO's telephone directory.

b. <u>Issues and Findings</u>

There were no findings identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

a. <u>Inspection Scope</u>

The inspector reviewed and discussed the latest Quality Assessment (QA) audit and surveillance reports relevant to the licensee's emergency preparedness program. The inspector reviewed the licensee's self-assessment of the Emergency Planning (EP) aspects of an actual Unusual Event declaration in April 2000. The inspector also reviewed and discussed samples of 1998 through May 2000 Condition Reports (CR), Emergency Planning Activity Scheduling System (EPASS), and Recurrent Activity Tracking System records used by EP staff to document and track corrective actions related to emergency preparedness program activities. The inspector verified that procedure revisions were completed as indicated in several CR and EPASS records.

b. <u>Issues and Findings</u>

There were no findings identified.

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspector reviewed and discussed the licensee's methods and procedures for assessing information used to determine the values for the following three emergency preparedness PIs for the period 1999 through June 2000: ANS, ERO Drill Participation, and Drill and Exercise Performance (DEP). Samples of documentation relevant to the raw data for each indicator was reviewed and evaluated. Records of simulator training sessions, periodic siren tests, and relevant drills and exercises were also reviewed. The methods for determining 1999 Control Room Simulator training sessions' emergency classification and State/county notification opportunities were reviewed and discussed with EP staff.

b. <u>Issues and Findings</u>

The inspector identified a minor discrepancy in the 1999 PI data. The DEP indicator, related to PI data gathered prior to April 2000, only took credit for three opportunities associated with a General Emergency declaration during a drill or exercise, while relevant Nuclear Energy Institute (NEI) 99-02 guidance indicated that four performance opportunities should be counted. The EP Supervisor indicated that future DEP data submittals would be based on four opportunities related to General Emergency declarations unless relevant guidance would be revised.

There were no findings identified.

4. OTHER ACTIVITIES

4OA5 Other

.1 Temporary Instruction 2515/144

a. <u>Inspection Scope</u>

The inspector reviewed the licensee's data collecting and reporting process for the ERO Drill Participation PI. The review included a relevant QA surveillance report, procedures, the current ERO roster, relevant 1999 training records, and NEI 99-02 guidance.

b. Issues and Findings

There were no findings identified.

.2 <u>Licensee's Reassessment of Historic DEP PI Data</u>

a. <u>Inspection Scope</u>

The inspector reviewed and discussed records related to the licensee's reassessment of 1999 data for the DEP indicator, which resulted in the licensee's determination that 1999 performance should have been characterized as being in the licensee response (green) band rather than the NRC response (white) band.

b. <u>Issues and Findings</u>

There were no findings identified.

.3 <u>Tour of Emergency Response Facilities</u>

a. <u>Inspection Scope</u>

The inspector toured the Technical Support Center (TSC) and Emergency Control Center (ECC) to assess the adequacy of these facilities to support emergency response operations.

b. <u>Issues and Findings</u>

There were no findings identified.

4OA6 Management Meetings

.1 <u>Exit Meeting Summary</u>

The inspector presented the inspection results to Mr. R. Coad and other members of licensee management on June 30, 2000. The licensee acknowledged the information presented and did not identify any information discussed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

- A. Bless, Assistant Engineer-Licensing
- R. Coad, Manager-Operations
- B. Cope, Senior EP Specialist
- D. Lockwood, Manager-Regulatory Affairs
- P. McCloskey, Supervisor-EP
- J. Messina, Director-Work Management
- D. Miller, Supervisor-Compliance
- S. Moffitt, Director-Technical Services
- M. Pavlick, Senior Nuclear Engineer
- G. Skeel, Manager-Support Services
- P. Smith, EP Specialist
- H. Stevens, Manager-QA
- P. Timmerman, Senior EP Specialist
- J. Vetter, Supervisor-QA
- G. Wolf, Engineer-Licensing
- L. Worley, Director-Support Services

	ITEMS OPENED, CLOSED, AND DISCUSSEI
	,
<u>Opened</u>	
None.	
Closed	
None.	
<u>Discussed</u>	
None.	

LIST OF ACRONYMS USED

ANS Alert and Notification System

CANS Computerized Automated Notification System

CR Condition Report

DEP Drill and Exercise Performance
DRS Division of Reactor Safety
ECC Emergency Control Center

EP Emergency Planning

EPASS Emergency Planning Activity Scheduling System

ERO Emergency Response Organization

NEI Nuclear Energy Institute
NPF Nuclear Power Facility

NRC Nuclear Regulatory Commission

PI Performance Indicator
QA Quality Assessment
TSC Technical Support Center

LIST OF DOCUMENTS REVIEWED

Assessments and Audits

"QA Audit Report AR-99-EMPRP-01," dated January 14, 2000

"QA Surveillance Report SR-00-REGAF-01," dated February 9, 2000

"Davis-Besse Nuclear Power Station April 23, 2000 Unusual Event (Self-Assessment) Report," dated June 14, 2000

Miscellaneous

Davis-Besse Nuclear Power Station Emergency Plan, Revision 21

Monthly ANS Test Records for January 1999 through June 2000

Records of Biennial Siren Acoustic Tests conducted in March 2000

Records of Annual Siren Preventive Maintenance performed in August and September 1999

Records of May 1999 Emergency Preparedness Exercise

Records of October 1999 Integrated Drill

Records of December 1999 Emergency Preparedness Exercise

Off-Hours Augmentation Drill Records for 1999 and March 2000

"Emergency Preparedness PI Guide for ERO Drill Participation," Revision 0

"Emergency Preparedness PI Guide for Drill/Exercise Performance," Revision 0

"Emergency Preparedness PI Guide for ANS Reliability," Revision 0

Internal Memo - "February 24, 1999 Integrated Drill Report," dated April 19, 1999

Internal Memo - "EP PI for ERO Drill Participation," dated June 27, 2000

"NRC Oversight Program Emergency Preparedness Cornerstone Drill/Exercise Performance Indicator White Window Change"

"Evaluation Guide No. ORQ-EPE-S102," Revision 4

"Evaluation Guide No. ORQ-EPE-S103," Revision 5

"Evaluation Guide No. ORQ-EPE-S111," Revision 6

"Evaluation Guide No. ORQ-EPE-S112," Revision 5

"Evaluation Guide No. ORQ-EPE-S127," Revision 4

Lesson Plan - "CANS Upgrade Training - Licensed Operator Training - July 1999"

Lesson Plan - "1999 Licensed Operator (EP) Re-Qualification Training - September 29 - November 5, 1999"

Training Attendance Sheets for 1999 CANS Upgrade Training

Training Attendance Sheets for 1999 Licensed Operator (EP) Re-Qualification Training

"Davis-Besse Nuclear Power Station Emergency Telephone Directory," Revision 65

Condition Reports (CR)

1999-0297; 1999-0449; 1999-0606; 1999-1922; 1999-2113; 1999-2153; 1999-2168; 1999-2174; 1999-2178; 1999-2180; 1999-2255; 2000-0092; 2000-1658; 2000-0169

Emergency Planning Activity Scheduling System

1998-0025; 1998-0034; 1998-0043; 1998-0058; 1998-0090; 1999-0007; 1999-0009; 1999-0010; 1999-0010; 1999-0021; 1999-0029; 2000-0008; 2000-0009; 2000-0010

Procedures

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RA-EP-01600, Revision 00, "Unusual Event"
RA-EP-01700, Revision 00, "Alert"
RA-EP-01800, Revision 00, "Site Area Emergency"
RA-EP-01900, Revision 00, "General Emergency"
RA-EP-02010, Revision 02, "Emergency Management"
RA-EP-02110, Revision 01, "Emergency Notifications"
RA-EP-02220, Revision 00, "ECC Activation and Response"
RA-EP-02310, Revision 00, "TSC Activation and Response"
RA-EP-02410, Revision 02, "Operational Support Center Activation and Response"
RA-EP-02510, Revision 02, "Emergency Security Organization and Response"
RA-EP-00510, Revision 01, "Maintenance of the Emergency Plan Telephone Directory"
RA-EP-00520, Revision 00, "ERO"
RA-EP-00550, Revision 01, "CANS"
RA-EP-04003, Revision 02, "CANS Weekly Test"
RA-EP-00400, Revision 00, "Prompt Notification System Maintenance"
RA-EP-04400, Revision 00, "Prompt Notification System Test"
RA-EP-02810, Revision 01, "Tornado"
HS-EP-02240, Revision 04, "Offsite Dose Assessment"
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