



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

June 9, 2009

Mr. Barry Allen  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
5501 North State Route 2, Mail Stop A-DB-3080  
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION BASELINE EMERGENCY  
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT  
05000346/20009502

Dear Mr. Allen:

On May 15, 2009, the U. S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Davis-Besse Nuclear Power Station. The enclosed inspection report documents the inspection findings which were discussed on May 15, 2009, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no NRC-identified and no self-revealed findings of very low safety significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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 by B. Palagi for/***

Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

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

Enclosure: Inspection Report 05000346/2009502  
w/Attachment: Supplemental Information

See Attached Distribution

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Letter to Barry Allen from Hironori Peterson dated June 9, 2009.

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION BASELINE EMERGENCY  
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT  
05000346/2009502

cc w/encl: The Honorable Dennis Kucinich  
J. Hagan, President and Chief  
Nuclear Officer - FENOC  
J. Lash, Senior Vice President of  
Operations and Chief Operating Officer - FENOC  
Manager - Site Regulatory Compliance - FENOC  
D. Pace, Senior Vice President of  
Fleet Engineering - FENOC  
K. Fili, Vice President, Fleet Oversight - FENOC  
P. Harden, Vice President, Nuclear Support  
D. Jenkins, Attorney, FirstEnergy Corp.  
Director, Fleet Regulatory Affairs - FENOC  
Manager - Fleet Licensing - FENOC  
C. O'Claire, State Liaison Officer, Ohio Emergency Management Agency  
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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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 No: 50-346

License No: NPF-3

Report No: 05000346/2009502

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Davis-Besse Nuclear Power Station

Location: Oak Harbor, OH

Dates: May 11 through 15, 2009

Inspectors: Robert Jickling, Senior Emergency Preparedness  
Regina Russell, Emergency Preparedness Inspector  
Adam Wilson, Resident Inspector

Approved by: Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000346/2009502; 05/11/2009 – 05/15/2009; Davis-Besse Nuclear Power Station;  
Baseline Emergency Preparedness Biennial Exercise Inspection.

This report covers a 1 week period of announced baseline inspection by two regional inspectors and one resident inspector. 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 4, dated December 2006.

### **A. NRC-Identified and Self-Revealed Findings**

#### **Cornerstone: Emergency Preparedness**

No findings of significance were identified.

### **B. Licensee-Identified Violations**

None.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstone: Emergency Preparedness

#### 1EP1 Exercise Evaluation (71114.01)

##### .1 Exercise Evaluation

##### a. Inspection Scope

The inspectors reviewed the May 12, 2009, biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of other drills and exercises conducted in 2007, 2008, and 2009, to verify that those drills' scenarios were sufficiently different from the scenario used in the May 12, 2009, exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk significant activities of emergency classification, notification, and protective action decision making, implementation of accident mitigation strategies, and correction of past exercise weaknesses in the following emergency response facilities:

- Control Room Simulator (CRS);
- Technical Support Center (TSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the CRS, TSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators and managers to obtain the licensee's findings and assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance. Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01-05.

##### b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES

##### 4OA1 Performance Indicator (PI) Verification (71151)

###### .1 Drill/Exercise Performance

###### a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance PI for the period from the first quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; assessments of PI opportunities during pre-designated control room simulator training sessions, performance during the 2008 exercise, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one drill/exercise performance sample as defined in IP 71151-05.

###### b. Findings

No findings of significance were identified.

###### .2 Emergency Response Organization Drill Participation

###### a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the first quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; performance during the 2008 exercise and other drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

###### b. Findings

No findings of significance were identified.



.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the period from the first quarter 2008 through first quarter 2009. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 5, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; and results of periodic ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one alert and notification system sample as defined in IP 71151-05.

b. Findings

No findings of significance were identified.

4OA5 Other Activities

.1 (Closed) NRC Temporary Instruction (TI) 2515/175 "Emergency Response Organization, Drill/Exercise Performance Indicator, Program Review"

The inspector performed TI 2515/175, ensured the completeness of the TI's Attachment 1, and then forwarded the data to NRC, Headquarters.

4OA6 Management Meetings

.1 Exit Meeting Summary

On May 15, 2009, the inspectors presented the inspection results to Mr. B. Allen and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

B. Allen, Site Vice-President  
B. Boles, Maintenance Director  
C. Blead, Design Engineering Supervisor  
B. Cope, Emergency Response Senior Nuclear Specialist  
J. Dominy, Maintenance Manager  
S. Filipucci, Security Operations Supervisor  
L. Griffith, Human Resources Manager  
C. Hensee, Engineering Supervisor  
B. Hovland, Training Manager  
D. Imlay, Operations Manager  
D. Moul, Engineering Director  
D. Noble, Radiation Protection Manager  
C. Pride, Performance Improvement Director  
S. Plymale, Plant Engineering Manager  
M. Roelant, Work Management Manager  
C. Steagall, Fleet Oversight Manager  
P. Smith, Emergency Response Specialist  
J. Sturdavant, Regulatory Compliance Senior Specialist  
G. Van Wey, Emergency Response Nuclear Specialist  
J. Vetter, Performance Improvement and Emergency Response Manager  
M. Widner, Site Projects Manager  
D. Wuokko, Regulatory Compliance Manager

#### Nuclear Regulatory Commission

J. Rutkowski, Senior Resident Inspector  
A. Wilson, Resident Inspector

### **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

#### Opened, Closed, and Discussed

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.

### 1EP1 Exercise Evaluation

Davis-Besse Nuclear Power Station Emergency Plan; Revision 26

Davis-Besse Nuclear Power Station Emergency Preparedness 2009 Evaluated Exercise; May 12, 2009

RA-EP-02110; Emergency Notification; Revision 9

RA-EP-02220; Emergency Operations Facility Activation and Response; Revision 6

RA-EP-02245; Protective Action Guidelines; Revision 5

RA-EP-02260; Radiological Controls in the DBAB; Revision 5

RA-EP-02310; Technical Support Center Activation and Response; Revision 7

RA-EP-02320; Emergency Technical Assessment; Revision 6

RA-EP-02620; Emergency Dose Control and Potassium Iodide Distribution, Revision 5

RA-EP-02720; Recovery Organization; Revision 9

CR 09-59213; EP Drill – GE Notification Form Accuracy; dated May 15, 2009

CR 09-59215; EP Drill – FEMA Question on Initial Notification Form; dated May 14, 2009

CR 09-59142; EP Drill – Potential Training Opportunity for Rarely Used EALs; dated May 13, 2009

CR 09-59151; EP Drill - Simulator Improvement during E-Plan Drills Opportunity; dated May 12, 2009

CR 09-59153; EP Drill – Simulator Crew Improvement Opportunity – SCM; dated May 12, 2009

CR 09-59154; EP Drill - Emergency Dosimetry Distribution for Security Personnel; dated May 12, 2009

CR 09-59162; EP Drill – Unauthorized Simulation; dated May 12, 2009

CR 09-59161; EP Drill – Evaluated Exercise – Loss of Station Vent Flow Undetected; dated May 12, 2009

CR 09-59164; EP Drill – Evaluated Exercise – Dose Projection Incorrect Release Data; dated May 12, 2009

CR 09-59179; EP Drill – OSC Manager Notification – Assembly and Accountability Not Communicated; dated May 12, 2009

CR 09-55865; Inconsistent Interpretation of Reference Material Regarding Release in Progress; dated March 22, 2009

CR 07-20671; EP Evaluated Exercise (5/15/07) – Dose Assessment Center Critique Items; dated May 15, 2007

CR 07-19084; EP Drill: Emergency Operations Facility Critique Items; dated April 19, 2007

CR 07-20661; EP Drill – Scenario/Drill Conduct Improvement Opportunities; dated May 16, 2007

40A1 Performance Indicator Verification

RA-EP-04400; Prompt Notification System Test, Revision 11

DBBP-EMER-0003; NRC Performance Indicator Alert and Notification System (ANS) Reliability; Revision 7

DBEP-085-03; Alert and Notification (ANS) Reliability Test Documentation; January 2008 through March 2009

DBEP-082-02; NRC Performance Indicator Documentation Sheet for Classification, Notification, and Protective Action Recommendations; January 2008 through March 2009

NOBP-LP-4012-55; Emergency Response Organization Drill Participation Records; January 2008 through March 2009

CR 09-51704; NRC Performance Indicator for ERO Participation Data Submittal Correction; dated January 5, 2009

CR 09-51796; Misunderstanding of Impact of Changing Position Descriptions in FITS for ERO Participation Performance Indicator; dated January 5, 2009

## LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
ANS	Alert and Notification System
CFR	Code of Federal Regulations
CR	Condition Report
CRS	Control Room Simulator
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
IP	Inspection Procedure
KI	Potassium Iodide
NEI	Nuclear Energy Institute
NUREG	<u>Nuclear Regulatory Commission</u>
NRC	U. S. Nuclear Regulatory Commission
OSC	Operations Support Center
PAR	Protective Action Recommendation
PARS	Publicly Available Records
PI	Performance Indicator
SDP	Significance Determination Process
TI	Temporary Instruction
TSC	Technical Support Center