December 11, 2001

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 NUCLEAR POWER STATION
NRC INSPECTION REPORT 50-346/01-13

Dear Mr. Campbell:

On November 13, 2001 the NRC completed an inspection at your Davis-Besse Nuclear Power Station. The enclosed report documents the inspection findings which were discussed on November 13, 2001, 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, the inspectors identified one issue of very low safety significance (Green) that was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your corrective action program, the NRC is treating this issue as a Non-Cited Violation in accordance with Section VI.A.1 of the NRC' s Enforcement Policy. If you deny this Non-Cited Violation, you should provide a response with a basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Davis-Besse Nuclear Power Station.

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 Publicly 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).

Sincerely,

Original signed by
Christine A. Lipa

Christine A. Lipa, Chief
Branch 4
Division of Reactor Projects

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

Enclosure: Inspection Report 50-346/01-13

cc w/encl: B. Saunders, President - FENOC
Plant Manager
Manager - Regulatory Affairs
M. O'Reilly, FirstEnergy
Ohio State Liaison Officer
R. Owen, Ohio Department of Health
A. Schriber, Chairman, Ohio Public
Utilities Commission

DOCUMENT NAME: G:\DAVI\dav 2001 013 drp.wpd

To receive a copy of this document, indicate in the box:"C" = Copy without enclosure "**E**"= Copy with enclosure"**N**"= No copy

OFFICE	RIII		RIII					
NAME	LCollins:dtp		CLipa					
DATE	12/11/01		12/11/01					

OFFICIAL RECORD COPY

ADAMS Distribution:
AJM
DFT
SPS1
RidsNrrDipmIipb
GEG
HBC
KSZ
C. Ariano (hard copy)
DRPIII
DRSIII
PLB1
JRK1

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-346
License No:	NPF-3
Report No:	50-346/01-13(DRP)
Licensee:	FirstEnergy Nuclear Operating Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5501 North State Route 2 Oak Harbor, OH 43449-9760
Dates:	October 1 through November 13, 2001
Inspectors:	D. Simpkins, Acting Senior Resident Inspector K. Green-Bates, Engineering Specialist J. House, Ph.D., Senior Engineering Specialist
Approved by:	Christine A. Lipa, Chief Branch 4 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000346-01-13, on 10/01-11/13/2001, FirstEnergy Nuclear Operating Company, Davis-Besse Nuclear Power Station; maintenance risk assessment and emergent work evaluation.

This report covers a 6-week routine inspection conducted by resident and regional inspectors. One Green finding was identified which was the subject of a Non-Cited Violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at **http://www.nrc.gov/NRR/OVERSIGHT/index.html.**

A. Inspector Identified Findings

Cornerstone: Mitigating Systems

Green. The licensee failed to have procedures appropriate to the circumstances to identify and control the removal of external flood barriers. As a result, the external flood barriers to the service water intake structure were removed, providing a pathway which could have rendered the safety-related service water pumps inoperable in the event of a design basis external flooding event. One Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified.

The issue was of very low safety significance due to the very low initiating event frequency and due to high probability of recovery for flood barriers, given the nature of the initiating event. (Section 1R13)

B. Licensee Identified Findings

No findings of significance were identified.

Report Details

Summary of Plant Status

The plant operated at 100 percent power throughout most of the inspection period. Exceptions were for brief power reductions to about 93 percent for turbine testing, to 90 percent at the request of the system dispatcher, and one reduction to about 10 percent power for main turbine generator stator cooling water system maintenance.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors reviewed the design features and implementation of the licensee's procedures designed to protect mitigation systems from adverse weather effects. The review included a procedural evaluation for cold weather preparations and contingencies, system walkdowns to ensure adequate equipment protection to preclude weather-initiated events and an evaluation of pre-emptive compensatory actions for adverse weather mitigation.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walkdown (71111.04Q)

a. Inspection Scope

The inspectors selected a redundant or backup system to an out-of-service or degraded train, reviewed documents to determine correct system lineup, and verified critical portions of the system configuration. Instrumentation valve configurations and appropriate meter indications were also observed. The inspectors observed various support system parameters to determine the operational status of the system. Control room switch positions for the systems were observed. Other conditions, such as adequacy of housekeeping, the absence of ignition sources, and proper labeling were also evaluated. The inspectors conducted partial walk-down inspections of risk significant equipment by comparing station configuration control documentation with actual system/train lineups for:

- Risk-significant electrical components during switchyard circuit breaker ACB34560 outage

- #1 Emergency Diesel Generator (EDG) during a #2 EDG outage

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown (71111.04S)

a. Inspection Scope

Additionally, the inspectors conducted a complete walkdown for the Component Cooling Water (CCW) System. The inspectors verified mechanical and electrical equipment lineups, component labeling, component lubrication, component and equipment cooling, hangers and supports, operability of support systems, and ensured ancillary equipment or debris did not interfere with equipment operation.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors reviewed the licensee's operator training program to evaluate operator performance in mitigating the consequences of a simulated event. The inspectors observed operator performance during a simulator training scenario for miscellaneous plant equipment failures (Steam Generator Startup Level indicator failed low, Turbine Generator lube oil leak, Reactor Trip, B Bus de-energizes, Loss of Gland Seal, Auxiliary Feedwater initiation). The inspectors evaluated the following attributes of the activities:

- Communication clarity and formality
- Timeliness and appropriateness of crew actions
- Prioritization, interpretation, and verification of alarms
- Correct use and implementation of procedures
- Oversight and direction provided by the shift manager and control room supervisor

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12Q)

a. Inspection Scope

The inspectors reviewed equipment issues, surveillance test failures, and other performance problems for the Component Cooling Water system. The inspectors reviewed whether the components were properly scoped in accordance with the

Maintenance Rule, whether failures were properly characterized, and whether the performance criteria were appropriate. In addition, the inspectors reviewed condition reports associated with implementation of the maintenance rule to determine if the licensee was identifying problems and entering them in the corrective action program.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors evaluated the effectiveness of the risk assessments performed before maintenance was conducted on structures, systems and components and verified how risk was managed and if maintenance risk assessments and emergent work problems were adequately identified and resolved for the following activities:

- Severe weather with the #2 Emergency Diesel Generator and #3 Service Water Pump unavailable because of maintenance
- Auxiliary Feedwater Steam Generator Level Controller troubleshooting
- Service Water Pump #3 and Cooling Tower Makeup Pump #2 removed from the Intake Structure Service Water Pump room

b. Findings

Green. One finding of very low safety significance (Green), a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified for the failure to have procedures appropriate to the circumstances to identify and control the removal of external flood barriers, an activity affecting quality.

When installed, the Cooling Tower Makeup Pumps and Service Water Pumps provide a flooding barrier for the service water intake structure in the event of a design basis external flooding event. However, the #2 Cooling Tower Makeup Pump and the #3 Service Water Pump were removed from the intake structure on July 25, 2001, and October 16, 2001, respectively, for refurbishment. The inspectors identified that the temporary covers placed over the resultant floor openings where the pumps were removed were insufficient to provide an effective barrier against water ingress and act as a flood barrier in the event of a design basis external flood.

In the event of a design basis external flood, Davis-Besse Updated Safety Analysis Report (USAR) Section 2.4.2.2 postulates a maximum probable high water level (584 feet International Great Lakes Datum (IGLD)) in excess of the floor elevation (576 feet IGLD) of the Service Water Pump room. Safety related equipment in the structure which would be adversely affected by the flood and rendered inoperable include the #1 and #2 Service Water Pumps and Strainers and the Diesel Fire Pump (DFP), with associated breakers and valves.

Because these barriers were removed without compensatory actions, potentially affecting the safety-related Service Water system and the DFP, the inspectors concluded this issue had a credible impact on safety. Because the issue potentially impacted the operability of these systems during an external flooding event, the SDP was entered for mitigating systems. Upon conducting the Phase 1 SDP, the inspectors concluded that the finding was potentially risk significant in that it involved an external flooding scenario whereby the function of both trains of Service Water and/or the DFP could be affected.

The licensee performed a risk evaluation of the finding and identified the likelihood of core damage from failing to seal the intake structure, or protect the DFP during an external flood, was low, and not significant in terms of overall risk to the public. The evaluation was based on: the very low probability of the type of flooding event in question; the probability all Service Water would be lost; the probability that the licensee would be unsuccessful in installing temporary barriers around vital equipment; the probability that the licensee would be unsuccessful in arranging alternative cooling options; and the availability of long-term core cooling from alternate sources.

The licensee's review of this issue indicated that the frequency of an external flooding event with a sufficient magnitude to flood the Service Water Intake Structure was very low, primarily due to the very low initiating event (IE) frequency but also due to the high probability of recovery for flood barriers, given the nature of the IE. The inspectors and the Region III Senior Risk Analyst (SRA) performed a phase 3 SDP analysis by reviewing the licensee's IPEEE, and the licensee's evaluation for this specific condition. The inspectors and SRA concluded that the finding was of very low risk significance (Green).

Upon review of the licensee's Work Order development process, no procedural guidance was provided to specifically identify the hazards of removing an external flooding barrier. The failure to have adequate procedures to identify and control the removal of external flood barriers is considered a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" (NCV 50-346/01-13-01(DRP)). This violation is associated with an inspection finding that is characterized by the SDP process as having very low risk significance (i.e. Green) and is being treated as a Non-Cited Violation, consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CR 01-2928.

1R14 Performance in Non-Routine Evolutions (71111.14)

a. Inspection Scope

The inspectors reviewed station personnel preparations and operator performance for a reactor down-power to about 10 percent for corrective maintenance on the main turbine generator stator cooling water system. This review was to determine if personnel actions were appropriate to the evolution and in accordance with procedures and training.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following operability determinations and evaluations affecting mitigating systems to determine whether operability was properly justified and the component or system remained available, such that no unrecognized risk increase had occurred.

- Operability Justification 2001-0001, Removal of One ECCS Room Cooler From Service
- Operability Justification 2001-0012, Removal of One ECCS Room Cooler From Service
- Operability Justification 2001-0013, EDG 1-1, DA30 Air Start Side
- Operability Justification 2001-0022, EDG 1-2, DA45 Air Start Side

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors verified that the post-maintenance test procedures and test activities were adequate to verify system operability and functional capability for the following risk significant activities:

- Reactor Coolant System Average Temperature input module repair and replacement in the Integrated Control System
- Emergency Diesel Generator 184 Day Test
- Auxiliary Feedwater #2 Steam Generator Level Controller and Emergency Diesel Generator #2 Sequencer repair and replacement

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the following temporary modifications to verify they did not affect the safety functions of important safety systems. The inspectors reviewed the temporary modifications and the associated 10 CFR 50.59 screenings against the system design basis documentation, including the USAR and TSs to determine if there was any effect on system operability or availability and to verify temporary modification consistency with plant documentation and procedures:

- Bypassing the charcoal filters on Radiation Elements RE 4597AB/BA
- Service Water Intake Structure flooding barriers

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety (OS)

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns and Radiation Work Permit (RWP) Reviews

a. Inspection Scope

The inspector reviewed the radiological conditions of work areas within radiation areas and high radiation areas (HRAs) in the radiologically restricted area to verify the adequacy of radiological boundaries and postings. This included walkdowns of several high and locked high radiation area boundaries in the Auxiliary and Radwaste Buildings. The inspector performed independent measurements of area radiation levels and reviewed associated licensee controls to determine if the controls (i.e., surveys, postings, and barricades) were adequate to meet the requirements of 10 CFR Part 20 and the licensee's Technical Specifications (TSs). Radiation work permits for jobs having significant radiological dose potential were reviewed for protective clothing requirements and dosimetry requirements including alarm set points.

b. Findings

No findings of significance were identified.

.2 Job In-Progress Reviews

a. Inspection Scope

The inspector observed aspects of work activities that were being performed in areas having significant dose potential in order to ensure that adequate radiological controls were assigned and implemented. The inspector observed radiation protection preparations and radiological controls for the spent fuel pool rerack job. In addition, a spent fuel pool filter change-out was observed. The inspector reviewed engineering controls, radiological postings, radiological boundary controls, radiation work permit requirements, radiation monitoring locations and attended pre-job briefings to verify that radiological controls were effective in minimizing dose. The inspector also observed radiation worker performance to verify that the workers were complying with radiological requirements and were demonstrating adequate radiological work practices. During work evolutions, radiation protection technician performance was observed to verify that the technicians were aware of the job requirements and that their performance was consistent with the actual and potential radiological hazards involved.

b. Findings

No findings of significance were identified.

.3 High Dose Rate, High Radiation Area and Very High Radiation Area Controls

a. Inspection Scope

The inspector reviewed the licensee's controls for high dose rate HRAs and very high radiation areas (VHRA) including the licensee's procedure for posting and control of these areas to verify the licensee's compliance with 10 CFR Part 20 and the site's TSs. The inspector also reviewed records of HRA/VHRA boundary and posting surveillances and performed a walk down to verify their adequacy. In addition, the inspector reviewed the licensee's controls for high dose rate material that was stored in the spent fuel pool and the licensee's inventory of materials currently stored in the spent fuel pool to verify that the licensee implemented adequate measures to prevent inadvertent personnel exposures from these materials.

b. Findings

No findings of significance were identified.

.4 Problem Identification and Resolution

a. Inspection Scope

The inspector reviewed the licensee's condition report (CR) database from January 2001 through October 2001 concerning problems in HRAs, radiation worker performance, and radiation protection technician performance. The inspector reviewed these documents to assess the licensee's ability to identify repetitive problems, contributing causes, the extent of conditions, and corrective actions which will achieve

lasting results.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02)

.1 Job Site Inspections and ALARA Control

a. Inspection Scope

The inspector reviewed jobs being performed in areas of potentially elevated dose rates and examined the work sites in order to evaluate the licensee's use of ALARA controls to minimize radiological exposure. Job exposure estimates were reviewed and work areas were surveyed to determine radiological conditions. The ALARA briefing documentation, the use of engineering controls and shielding were evaluated for dose minimization effectiveness. During job site walkdowns, radiation workers and supervisors were observed to determine if low dose waiting areas were being used appropriately, and equipment staging, availability of tools and work crew size were evaluated to determine the effectiveness of job supervision in dose minimization.

b. Findings

No findings of significance were identified.

.2 Problem Identification and Resolution

a. Inspection Scope

The inspector reviewed audits, self-assessments and CRs related to the ALARA program including post outage reviews of higher dose jobs to determine if problems were identified and properly characterized, prioritized and entered into the corrective action program. The most dose intensive jobs were reviewed to determine if radiological work problems/deficiencies had been identified, adequate safety evaluations performed, and the problems entered into the licensee's corrective action system.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation (71121.03)

.1 Source Tests and Calibration of Radiological Instrumentation

a. Inspection Scope

The inspector evaluated radiological instrumentation associated with monitoring transient high and/or very high radiation areas, and instruments used for remote emergency assessment to verify that the calibration process was conducted consistent with industry standards and in accordance with station procedures. The inspector reviewed the Updated Final Safety Analysis Report, performed walkdowns and reviewed calibration records to confirm that selected area radiation monitors (ARMs) were operable and properly indicated area radiation levels. The inspector examined the licensee's alarm set points for selected ARMs to verify that the set points were established consistent with the station's requirements. The inspector reviewed the most recent calibration records for selected ARMs and continuous air monitors (CAMs) which included, but were not limited to, the following:

Containment Vessel Monitors
Mechanical Penetration Rooms Monitors
Containment Air Monitors
Spent Fuel Pool Area Monitors
ECCS Room Monitor

The inspector reviewed CY 2000 - 2001 calibration records and procedures for those instruments utilized for surveys of personnel and equipment prior to egress from the radiologically restricted area. The inspector examined, and observed RP staff complete functional tests of, selected personnel contamination monitors, portal monitors, and a small article monitor to verify that these instruments were source checked and calibrated adequately, consistent with station procedures and industry standards.

The inspector examined portable survey instruments maintained in the licensee's instrument issue area to verify that those instruments designated "ready for use" had current calibrations, were operable, and were in good physical condition. The inspector observed radiation protection staff source check portable radiation survey instruments to verify that those source checks were adequately completed using appropriate radiation sources and station procedures. The inspector reviewed the calibration procedures and selected 2001 calibration records to verify that the portable radiation survey instruments had been properly calibrated consistent with the licensee's procedures.

Additionally, the inspector performed a walk down of the post accident sampling system and reviewed quality control records to ensure that the system was capable of obtaining representative samples of reactor coolant and containment atmosphere.

b. Findings

No findings of significance were identified.

.2 Self-Contained Breathing Apparatus (SCBA) Program

a. Inspection Scope

The inspector reviewed aspects of the licensee's respiratory protection program for compliance with the requirements of Subpart H of 10 CFR Part 20, to ensure that self-contained breathing apparatus (SCBA) were properly maintained and stored, and to ensure that appropriate personnel were required to be SCBA qualified. The inspector performed walkdowns of selected SCBA storage locations and inspected a sample of the units to assess the material condition of the equipment and to verify that the monthly inspection requirement had been met. In addition, the inspector reviewed the licensee's current training and qualification records to verify that applicable personnel were currently trained and qualified for SCBA use, as required by the Emergency Plan and plant procedures.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed CRs for 2001 along with self assessments and surveillances that addressed radiation instrument/SCBA deficiencies to determine if any significant radiological incidents involving radiation instrument deficiencies had occurred since the last assessment. Additionally, the inspector examined these documents to verify the licensee's ability to identify repetitive problems, contributing causes, the extent of conditions, and implement corrective actions to achieve lasting results.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

.1 Shipping Records

a. Inspection Scope

The inspector reviewed five non-excepted package shipment manifests completed in 2001, to verify compliance with NRC and Department of Transportation requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 172 and 173).

b. Findings

No findings of significance were identified.

.2 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed a self-assessment of the radioactive waste management and shipping programs to evaluate the effectiveness of the self-assessment process to identify, characterize, and prioritize problems. The inspector also reviewed year 2001 CRs that addressed the radioactive waste management and shipping program deficiencies, to verify that the licensee had effectively implemented the corrective action program.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed Licensee Event Reports and unit log entries to determine if the performance indicators for scrams and scrams with loss of normal heat removal were accurately and completely reported to the NRC by the licensee. The previous 12 months of data were inspected.

The inspector reviewed the licensee's determination of performance indicators for the occupational and public radiation safety cornerstones to verify that the licensee accurately determined these performance indicators and had identified all occurrences required. These indicators included the Occupational Exposure Control Effectiveness and the Radiological Effluent TSs/Offsite Dose Calculation Manual Radiological Effluent Occurrences. The inspector reviewed CRs for the year 2001, quarterly offsite dose calculations for radiological effluents for year 2001 and access control transactions for January 2001 through September 2001. During plant walkdowns (Section 2OS1.1), the inspector also verified the adequacy of posting and controls for locked HRAs, which contributed to the Occupational Exposure Control Effectiveness performance indicator.

The inspector also reviewed the licensee's reactor coolant system activity performance indicator for the reactor safety cornerstone to verify that the information reported by the licensee was accurate. The inspector reviewed the licensee's reactor coolant sample results for maximum dose equivalent iodine-131, January through September 2001, and the licensee's sampling and analysis procedures. The inspector also observed a chemistry technician obtain and analyze a reactor coolant sample.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

.1 The inspectors presented the inspection results to Mr. Campbell and other members of

licensee management at the conclusion of the inspections on November 13, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

.2 Interim Exit Meeting

Senior Official at Exit:	Mr. Howard Bergendahl, Plant Manager
Date:	November 8, 2001
Proprietary:	No
Subject:	Access Control, ALARA, Instrumentation, and Transportation
Change to Inspection Findings:	No

KEY POINTS OF CONTACT

Licensee
G. Campbell, Site Vice President
H. Bergendahl, Plant Manager
S. Coakley, Outage Manager
D. Eschelman, Manager, Plant Engineering
B. Geddes, Chemistry Supervisor
R. Greenwood, Health Physics Services Supervisor
J. Michaelis, Manager, Supply Chain
D. Miller, Supervisor, Compliance
W. Mugge, Manager, Nuclear Training
R. Pell, Manager, Operations
P. Shultz, Radiation Protection Manager
H. Stevens, Manager, QA
L. Worley, Director, Support Services

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-346-01-013-01	NCV	Failure to Have Adequate Procedures to Identify and Control the Removal of External Flood Barriers

Closed

50-346-01-013-01	NCV	Failure to Have Adequate Procedures to Identify and Control the Removal of External Flood Barriers

Discussed

None.

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
AFW	Auxiliary Feedwater
ALARA	As Low As Is Reasonably Achievable
ARM	Area Radiation Monitor
CAM	Continuous Air Monitor
CCW	Component Cooling Water
CFR	Code of Federal Regulations
CR	Condition Report
DRP	Division of Reactor Projects
EDG	Emergency Diesel Generator
HRA	High Radiation Area
IGLD	International Great Lakes Datum
MWO	Maintenance Work Order
NRC	Nuclear Regulatory Commission
OA	Other Activities
OS	Operations Schematic
P&ID	Piping and Instrumentation Drawing
PARS	Publicly Available Records
SCBA	Self Contained Breathing Apparatus
SD	System Description
SDP	Significance Determination Process
TM	Temporary Modification
TS	Technical Specifications
USAR	Updated Safety Analysis Report
VHRA	Very High Radiation Area

LIST OF DOCUMENTS REVIEWED

1R01 Adverse Weather Protection

DB-OP-06913	Seasonal Plant Preparation Checklist	Rev. 3
RA-EP-02810	Tornado	Rev. 1
DB-ME-09521	Preventative Maintenance and Circuit Testing of Freeze Protection and Heat Tracing	Rev. 1
DB-OP-06331	Freeze Protection and Electrical Heat Trace	Rev. 3

1R04 Equipment Alignments

CR 00-4082	#1 CCW Pump Snubber	12/29/00
CR 01-0188	Potential Unavailability of CCW Pump due to Lack of Breaker Testing	1/22/01
CR 01-0626	Procedure Deficiency in DB-OP-02005 CCW Malfunctions	3/3/01
CR 01-0627	Discrepancy Between OS-21 (CCW) and DB-OP-02005	3/3/01
CR 01-0822	CCW Pump 2 Discharge Check Valve	3/22/01
CR 01-1623	Condition Monitoring of Heat Exchangers Cooled by CCW	7/2/01
CR 01-1629	CCW Heat Exchanger Test Procedures Do Not Incorporate	8/21/01
CR 01-2334	Spend Fuel Pool Heat Exchanger CCW Isolation Valves Not Providing Isolation for Maintenance	10/25/01
DB-OP-01000	Operation of Station Breakers	3/30/01
C01-0086	Component Cooling Water System Procedure	7/11/01
CR 01-2695	Flange Fasteners without the Required Full Nut Thread Engagement (NRC ID)	10/10/01
DB-MM-09266	Flange Torquing	7/18/01
OS-41A	Emergency Diesel Generator Systems, Sh. 1	Rev. 18
OS-41A	Emergency Diesel Generator Systems, Sh. 2	Rev. 15
OS-41B	Emergency Diesel Generator Air Start/Engine Start System	Rev. 19
OS-41E	Station Blackout Diesel Generator Air Start/Engine Start System	Rev. 8

OS-41F	Station Blackout Diesel Generator Electrical Controls and Fuel Oil Systems	Rev. 1

1R11 Licensed Operator Requalification

Simulator Guide Number ORQ-SIM-S173	OTSG SU LVL fail low, TG lube oil leak, Reactor Trip, B Bus de-energizes, Loss of Gland Seal, AFW PU	8/30/01
DB-OP-2000	Specific Rule#4	
DB-OP-2000	Specific Rule#6	
DB-OP-00000	Conduct of Operations	Rev. 4

1R12 Maintenance Rule Implementation

CR 00-4082	#1 CCW Pump Snubber	12/29/00
CR 01-0188	Potential Unavailability of CCW Pump due to Lack of Breaker Testing	1/22/01
CR 01-0626	Procedure Deficiency in DB-OP-02005 CCW Malfunctions	3/3/01
CR 01-0627	Discrepancy Between OS-21 (CCW) and DB-OP-02005	3/3/01
CR 01-0822	CCW Pump 2 Discharge Check Valve	3/22/01
CR 01-1623	Condition Monitoring of Heat Exchangers Cooled by CCW	7/2/01
CR 01-1629	CCW Heat Exchanger Test Procedures Do Not Incorporate	8/21/01
CR 01-2334	Spend Fuel Pool Heat Exchanger CCW Isolation Valves Not Providing	10/25/01
DB-OP-01000	Operation of Station Breakers	3/30/01

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

	Maintenance Risk Profile for the Week of 10/22/01	
CR 01-2868	Scheduled Work Not Completed Due to Weather Conditions	10/26/01
CR 01-2628	Inability of SG Level Control to Shift to High Level Setpoint	10/5/01
CR 01-2666	Re-evaluation of Auto SG Level Control System Operability	10/9/01
	Maintenance Risk Profile for the Week of 10/8/01	
OJ 2001-0024	External Flooding Evaluation of the Service Water Pump Room	11/1/01

OJ 2001-0026	Temporary Covers to Provide Flood Protection	11/2/01
Barrier 052-F/EXT	Review of Regulatory Issue Summary 2001-09 Applicability to MWO 01-004802-000 and MWO 99-005015-000	
C-1594	Barrier Functional List	Rev. 2
USAR 2.4.2.2	Lake Flooding	Rev. 21
USAR 2.4.2.1	Flood History	Rev. 22
	Standing Order 01-002, Rev. 4 NRC Issue Summary 2001-009, Control of Hazard Barriers	8/8/01
CR 01-2910	Maintenance Deficiencies Found By NRC Inspector	10/31/01
CR 01-2928	Intake Structure Flooding Issue With Pumps Removed	11/1/01
CR 01-1954	Intake Structure Missile Shield	7/31/01
TM 01-0020	Installation of a Temporary Barrier in place of #3 Service Water Pump	11/2/01
TM 01-0021	Installation of a Temporary Barrier in place of #2 Cooling Tower Makeup Pump	11/2/01
NOP-WM-1001	Work Order Planning Process	Rev. 0
DB-DP-00007	Control of Work	Rev. 3
DB-DP-00007	Control of Work	Rev. 2
NOP-WM-4002	Repair Identification and Toolpouch Maintenance	Rev. 0
DB-PF-00002	Preventative Maintenance Program	Rev. 1
DB-MN-00001	Conduct of Maintenance	Rev. 7
WPG-1	Administrative Work Process Guidelines Manual	Rev. 13
C-NSA-99-16.47	Core Damage Frequency due to Flooding of the Service Water Pump Room	Rev. 0
NG-DB-0001	Risk Significant Component Matrix Safety Monitor	Rev. 0

1R14 Performance in Non-Routine Evolutions

DB-OP-00000	Conduct of Operations	Rev. 4

1R15 Operability Evaluations

OJ 2001-0012	Removal of One ECCS Room Cooler From Service	5/14/01
OJ 2001-0001	Removal of One ECCS Room Cooler From Service	1/3/01
CR 01-0013	Operability Justification for ECCS Room Cooler #1 (E42-1)	1/3/01
PCR 00-2141	Procedure Change Request 00-2141	11/28/00
CR 01-2440	ECCS Room Cooler #4	10/19/01
OJ 2001-0013	EDG 1-1, DA30 Air Start Side	7/26/01
OJ 2001-0022	EDG 1-2, DA45 Air Start Side	10/12/01
CR 01-2717	DA62 did not Reset Properly Upon Idle Start of EDG2	10/12/01
NG-DB-0018	Operability Determinations Procedure	4/1/00
CR 01-0570	Weakness in Operability Justification Process	2/27/01

1R19 Post-Maintenance Testing

TM 01-0003	Diesel Generator Air Start Unit Log	
USAR Section 8.3.1.1.4	Diesel Generator	Rev. 18
TS 3/4/8.1.1	A.C. Sources	Amend. 206
OS-17A,B	Auxiliary Feedwater System	Revs. 16, 17
SD-003B	Emergency Diesel Generators	Rev. 3
USAR Figure 9.5.8	EDG Auxiliary Systems	Rev. 1
OS-041A, Sheets 1&2	EDG Systems	Revs. 18, 15
P&ID M-017A	Diesel Generators	Rev. 16
	Key Work Activities and Surveillances	week of 10/23/01

	Davis-Besse Weekly Maintenance Risk Summary Daily Review	week of 10/23/01
	Work Week Schedule for October 23-26, 2001	
	Key Work Activities and Surveillances	week of 10/29/01
	Davis-Besse Weekly Maintenance Risk Summary Daily Review	week of 10/29/01
	Work Week Schedule for October 29-November 2, 2001	
SD-015	Auxiliary Feedwater System	Rev. 2
USAR Section 1.2.8.2.9	Auxiliary Feedwater System	Rev. 21
USAR Section 10.4.7.2	Auxiliary Feedwater System	Rev. 21

1R23 Temporary Plant Modifications

TM 01-0020	Installation of a Temporary Barrier in place of #3 Service Water Pump	11/2/01
TM 01-0021	Installation of a Temporary Barrier in place of #2 Cooling Tower Makeup Pump	11/2/01

4OA1 Performance Indicator Verification

	Key Work Activities and Surveillances
	1st, 2nd and 3rd Quarter 2001Davis-Besse System Health Reports
	2000 Davis-Besse System Health Reports
	Unit Logs

2OS1 Access Control to Radiologically Significant Areas

DP-HP-04033	Spent Fuel Pool Radiological Material Inventory	October 10, 2001
DP-HP-04003	Locked High Radiation Area Boundary Verification	May 4, 2001
DB-HP-01114	Diving Operations in Contaminated Waters	September 17, 2001
01-2959	Entries Into Locked High Radiation Areas	November 5, 2001

01-0027	Radiation Protection Procedure Noncompliance	February 18, 2001
01-0029	Inadequate Administrative Controls During 12 RFO FOSAR Move.	January 4, 2001
01-0306	Dose Set Point Performance Indicator Response	February 1, 2001
01-0441	Contamination Area Boundaries	March 19, 2001
01-0625	Lock Not Secure on the Entrance to an RRA	March 2, 2001
01-0808	Noncompliance with Procedure DB-HP-01232	May 5, 2001
01-0985	Dose Versus Risk Evaluation for Nuclear Filter Changes	June 4, 2001
01-1893	Sign Posting	September 28, 2001
01-2221	SFP Rerack Readiness Enhancement	August 28, 2001
01-2368	Failure to Implement Approved Corrective Actions	September 13, 2001
01-2637	Debris in Cask Pit Sump	October 8, 2001
RWP 2001-2010	Containment Entry to Add Oil to RCP 2-2 Upper Bearing, ALARA Package	October 22, 2001
RWP 2001-1030	Spent Fuel Pool Rerack Work, ALARA Package	November 8, 2001
RWP 2001-1026	Decay Heat Pump #1 Outage	August 8, 2001
RWP 2001-1035	Decay Heat Pump #2 Outage	September 25, 2001
	Surveillance Report: SR-01-RPRWP-06	September 13, 2001
	Self-Assessment Report: SA 2000-0024	November 30, 2000
	Self-Assessment Report: SA 2000-0151	December 18, 2000
	Self-Assessment Report: SA 2001-0107	September 7, 2001
	Self-Assessment Report: SA 2001-0115	August 28, 2001

2OS3 Radiological Instrumentation

DB-HP-01309	Use of the MSA Custom 4500 II SCBA	October 25, 2001
DB-HP-01308	Respiratory Protection Equipment Inspection and Maintenance	January 7, 1998
DB-HP-01301	Use of the MSA Ultra-Twin and Ultra-VUE Respirator	June 10, 1991

	Respirator Qualification Report	October 31, 2001
	D-B Nuclear Quality Assessment Surveillance Report, SR-01-RPRWP-05	June 7, 2001
	Self Assessment Report: RP Instruments and Surveys, SA-2000-0023	November 15, 2000
	Self Assessment Report: Radiological Respiratory Protection Program, SA-2001-0016	February 19, 2001
	Post Accident Sampling System Data	
4597	Containment Vessel High Range Detectors	May 19, 2000
4596	Containment Vessel High Range Detectors	May 19, 2000
8401	Reactor Coolant and Radwaste Sample Room	April 26, 2001
8402	Emergency Core Cooling System	November 13, 2000
8409	Mechanical Penetration Room #1	July 27, 2001
8417	Fuel Handling Area	November 2, 2000
8426	Spent Fuel Pool	May 2, 2001
8446	Fuel Handling Area Exhaust	February 22, 2001
DB-HP 01442	Telepole Calibrations	June 30, 2001
DB-HP 01452	Kurz High Volume Air Sampler Calibrations	August 17, 2001
DB-HP-01432	ASP1 Neutron Detector Calibrations	August 8, 2001
DB-HP-01418	RSO-50 Ion Chamber Calibrations	September 25, 2001
DB-HP-01418	RSO-5 Ion Chamber Calibrations	August 7, 2001
DB-HP-06030	PCM1B Calibrations	August 2, 2001
	Eberline AMS 3 Continuous Air Monitor Calibrations	February 28, 2001
	Whole Body Counter Calibration	
	SAM-9 Tool Monitor Calibrations	December 1, 2000
	AMP 100 Underwater Detector Calibrations	October 10, 2001
01-1461	RP Procedure Enhancement Recommendations	June 4, 2001
01-2940	Containment Radiation Monitors	November 4, 2001
01-2936	Unable to Perform Functional Test	November 3, 2001
01-0456	Shoulder Strap Clip Failed On Training SCBA	February 16, 2001

01-0477	Air Compressor Intake Not Protected from Airborne Contamination	February 19, 2001
01-0481	Procedure Allows Higher Temperature for Respirator Cleaning than OSHA	February 19, 2001
01-0656	Calibration of SAM 11	April 20, 2001
01-1076	Misuse of Retired “Eagle” Air Compressor	June 16, 2001
01-1410	Radiation Monitor Setpoint Manuals	July 14, 2001
01-1549	Portal Monitor Failed Daily Source Check	July 30, 2001

2PS2 Radioactive Material Processing and Transportation

01-1418	RAM Shipment	May 31, 2001
01-0878	Non Compliance Notification for the 10-142B Cask	March 28, 2001
01-0232	10 CFR 61 Procedure Improvement	February 6, 2001
01-0233	Discrepancies Between Operating Procedure and the USAR	February 6, 2001
01-0235	Station Sampling System in the USAR Not Correct	February 6, 2001
DB-HP-04024	10 CFR 61 Sampling For Waste Classification	April 1, 1999
	D-B Process Control Program	April 19, 1999
	Self Assessment Report SA 2001-0002	February 6, 2001
TR01-004	Radioactive Waste Manifest	August 21, 2001
TR01-005	Radioactive Waste Manifest	September 14, 2001
TR01-002	Radioactive Waste Manifest	April 3, 2001
RM01-0009	Radioactive Material Manifest	February 22, 2001
RM01-0022	Radioactive Material Shipment	April 17, 2001