April 15, 2002

Mr. Howard Bergendahl Vice President - Nuclear, Davis-Besse 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 50-346/02-02

Dear Mr. Bergendahl:

On March 31, 2002, the NRC completed an inspection at your Davis-Besse Nuclear Power Station. The enclosed report documents the inspection findings which were discussed on March 29, 2002, 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.

No findings of significance 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 Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <u>http://www.nrc.gov/NRC/ADAMS/index.html</u> (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 50-346/02-02

See Attached Distribution

<u>See Previous Concurrence</u> DOCUMENT NAME: G:\DAVI\DAV 2002 002 drp.wpd <u>To receive a copy of this document, indicate in the box:"C" = Copy without enclosure "E"= Copy with enclosure"N"= No copy</u>

OFFICE	RIII	RIII			
NAME	LCollins:dtp	CLipa			
DATE	04/11/02	04/15/02			

OFFICIAL RECORD COPY

H. Bergendahl

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 Public Utilities Commission of Ohio H. Bergendahl

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 Public Utilities Commission of Ohio

ADAMS Distribution:

AJM DFT SPS1 RidsNrrDipmlipb GEG HBC CST1 DSS C. Ariano (hard copy) DRPIII DRSIII PLB1 JRK1 OEMAIL BCW

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: License No:	50-346 NPF-3
Report No:	50-346/02-02(DRP)
Licensee:	FirstEnergy Nuclear Operating Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5501 North State Route 2 Oak Harbor, OH 43449-9760
Dates:	February 16, 2002, through March 31, 2002
Inspectors:	S. Thomas, Senior Resident Inspector D. Simpkins, Resident Inspector J. House, Senior Radiation Specialist
Approved by:	Christine A. Lipa, Chief Branch 4 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000346-02-02, on 02/16-03/31/2002, FirstEnergy Nuclear Operating Company, Davis-Besse Nuclear Power Station. Integrated Inspection Report.

This report covers a 6-week routine inspection conducted by resident inspectors and regional specialists. No findings of significance were identified during this inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC0609 "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 <u>http://www.nrc.gov/NRR/OVERSIGHT/index.html</u>.

A. Inspection Findings

No findings of significance were identified.

B. Licensee Identified Findings

A violation of very low significance which was identified by the licensee has been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. This violation is listed in section 40A7 of this report.

Report Details

Summary of Plant Status

The plant operators began a plant power reduction on February 15, 2002 in preparation for refueling outage 13. The plant was shutdown on February 16. On March 7, the licensee identified significant degradation of the reactor vessel head material adjacent to control rod drive mechanism penetration #3. The plant remained shut down for the entire inspection period due to an extended refueling outage.

1. **REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment (71111.04Q)

a. Inspection Scope

The inspectors performed a walkdown of the #2 emergency diesel generator to verify that the redundant train was in the correct lineup while the #1 emergency diesel generator was inoperable due to planned maintenance. The inspectors used the system checklist and drawings listed at the end of this report to determine the correct lineup. The inspectors also reviewed outstanding work orders (WO) and condition reports (CR) associated with the #2 emergency diesel generator to verify that these documents did not reveal issues that could affect train function. The inspectors used the information contained in the applicable sections of the Updated Safety Analysis Report (USAR) and the Technical Specifications (TS) to determine the functional requirements of the system. During the walkdown, the inspectors also observed the material condition of the equipment to verify that there were no significant conditions not already in the licensee's work control system.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on availability, accessibility, and the condition of fire fighting equipment, the control of transient combustibles, and on the condition and operating status of installed fire barriers. The inspectors selected fire areas for inspection based on their overall contribution to internal fire risk, as documented in the Individual Plant Examination of External Events (IPEEE), their potential to impact equipment which could initiate a plant transient, or their impact on the plant's ability to respond to a security event. Using the documents listed at the end of this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use, that fire detectors

and sprinklers were unobstructed, that transient material loading was within the analyzed limits, and that fire doors, dampers, and penetration seals appeared to be in satisfactory condition.

The following areas were inspected:

- containment;
- number 1 electrical isolation room;
- number 2 electrical isolation room; and
- battery room 2.
- b. Findings

No findings of significance were identified.

1R12 <u>Maintenance Rule Implementation (71111.12Q)</u>

a. <u>Inspection Scope</u>

The inspectors reviewed systems to verify that the licensee properly implemented the maintenance rule for structures, systems, or components (SSCs) with performance problems. This evaluation included the following aspects:

- whether the SSC was properly scoped in accordance with 10 CFR 50.65;
- whether the performance problem constituted a maintenance rule functional failure;
- the proper safety significance classification;
- the proper 10 CFR 50.65(a)(1) or (a)(2) classification for the SSC; and
- the appropriateness of the performance criteria for SSCs classified as (a)(2) or the appropriateness of goals and corrective actions for SSCs classified as (a)(1).

The above aspects were evaluated by using the maintenance rule scoping and report documents listed at the end of this report. For each SSC reviewed, the inspectors also reviewed significant WOs and CRs listed at the end of this report to verify that failures were properly identified, classified, and corrected and that unavailable time had been properly calculated. In addition, the inspectors reviewed CRs to verify that minor deficiencies identified during these inspections were entered in the licensee's corrective action system.

The inspectors reviewed the licensee's implementation of the maintenance rule requirements for the following SSCs:

- main steam system;
- nuclear fuel; and
- 250/125VDC and 120V instrument AC.

b. <u>Findings</u>

No findings of significance were identified.

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

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's management of plant risk during emergent maintenance activities or weather conditions that may have impacted one or more safety significant systems. The activities were chosen based on their potential impact on increasing the probability of an initiating event or impacting the operation of safety significant equipment. The inspection was conducted to verify that evaluation, planning, control, and performance of the work were done in a manner to reduce the risk and minimize the duration where practical, and that contingency plans were in place where appropriate. The licensee's daily configuration risk assessments, observations of shift turnover meetings, observations of daily plant status meetings, and the documents listed at the end of this report were used by the inspectors to verify that the equipment configurations had been properly listed, that protected equipment had been identified and was being controlled where appropriate, and that significant aspects of plant risk were being communicated to the necessary personnel.

The inspectors reviewed the following maintenance activities:

- reactor head repairs; and
- ultimate heat sink/decay heat removal icing issues.
- b. Findings

No findings of significance were identified.

1R14 Performance in Non-Routine Evolutions (71111.14)

a. Inspection Scope

The inspectors observed operator conduct during the performance of the second deep drain subsequent to the completion of steam generator eddy current testing. The inspectors verified that the evolution was conducted in a safe and conservative manner and performed in accordance with applicable TSs requirements, operations procedures, and facility administrative procedures.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors selected condition reports which discussed potential operability issues for a risk significant components or systems. These condition reports were evaluated to determine whether the operability of the components or systems was justified. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and USAR to the licensee's evaluations presented in the conditions reports listed below to verify that the components or systems were operable. Where compensatory measures were necessary to maintain operability, the inspectors verified by review of the documents listed at the end of the report that the measures were in place, would work as intended, and were properly controlled.

The conditions evaluated were:

- decay heat pump 2 oil problems; and
- argon blanket used instead of the required nitrogen blanket for an electrical penetration.
- b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed post-maintenance testing activities associated with maintenance on important mitigating and support systems to ensure that the testing adequately verified system operability and functional capability with consideration of the actual maintenance performed. The inspectors used the appropriate sections of TS and the USAR, as well as the documents listed at the end of this report; to evaluate the scope of the maintenance and verify that the post-maintenance testing performed adequately demonstrated that the maintenance was successful and that operability was restored. In addition, the inspectors reviewed CRs to verify that minor deficiencies identified during these inspections were entered into the licensee's corrective action system.

The following activity was observed and evaluated:

- decay heat removal system train 1 valve test.
- b. <u>Findings</u>

No findings of significance were identified.

1R20 <u>Refueling and Outage (71111.20)</u>

a. Inspection Scope

The inspectors observed activities associated with the refueling outage which began on February 16, 2002. The inspectors reviewed the reactor coolant system (RCS) cooldown rate, configuration management, clearance activities, reduced RCS inventory operations, shutdown risk management, conformance to applicable procedures, and compliance with TSs. The following major activities were also observed:

- RCS cooldown and the transition to placing the decay heat removal system into service;
- reactor fuel handling evolutions;
- draining the RCS from reactor flange level to 26" (approximately the level of the top of the RCS hot legs); and
- the initial evaluation of the reactor vessel head nozzle repairs.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors witnessed selected surveillance tests and/or reviewed test data to verify that the equipment tested using the surveillance procedures (SPs) met TS, USAR, and licensee procedural requirements, and also demonstrated that the equipment was capable of performing its intended safety functions. The activities were selected based on their importance in verifying mitigating systems capability. The inspectors used the documents listed at the end of this report to verify that the testing met the TS frequency requirements; that the tests were conducted in accordance with the procedures, including establishing the proper plant conditions and prerequisites; that the test acceptance criteria were met; and that the results of the tests were properly reviewed and recorded.

The following tests were observed and evaluated:

- core flood tank 1 refueling check valve test;
- 4160 system transfer and lockout test buses C1 and C2; and
- emergency diesel generator 2 monthly test.
- b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 <u>Plant Walkdowns, Radiological Boundary Verifications and Radiation Work Permit</u> <u>Reviews</u>

a. Inspection Scope

The inspectors conducted walkdowns of selected portions of the radiologically protected area (RPA) including high and locked high radiation areas and areas within the Auxiliary

and Containment Buildings where significant radiological work was occurring to verify the adequacy of radiation area boundaries and postings. Confirmatory radiation measurements were taken in order to verify that those areas were properly posted and controlled in accordance with 10 CFR Part 20, licensee procedures and TSs. The inspectors walked down areas having the potential for airborne activity and assessed the adequacy of the licensee's continuous air monitoring systems and contamination control process. Selected radiation work permits (RWPs) for radiologically significant work being conducted during RFO13 were reviewed to verify that they contained adequate work controls, including protective clothing requirements and electronic dosimetry alarm set points for both dose rate and accumulated dose.

b. Findings

No findings of significance were identified.

- .2 Job-In-Progress Reviews
- a. Inspection Scope

The inspectors observed work occurring in the refueling areas of the Containment and Auxiliary Buildings including fuel transfer and fuel sipping operations. Reactor vessel head inspection/repair activities and maintenance work on a purification demineralizer were also observed. Radiation work permit requirements and the As-Low-As-Is-Reasonably-Achievable (ALARA) briefing packages for selected jobs were reviewed. The inspectors verified that dosimetry placement including multiple badging, electronic dosimetry alarm set points, job site radiological surveys, radiological exposure estimates, contamination controls, airborne monitoring for radioactive materials, and postings were adequate, given the varying radiological conditions for the ongoing radiological work.

b. Findings

No findings of significance were identified.

- .3 <u>High Risk Significant, High Dose Rate High Radiation Area and Very High Radiation</u> <u>Area Controls</u>
- a. Inspection Scope

The inspectors reviewed the licensee's controls, including procedures and surveillance data, for areas having elevated radiation levels. During plant walkdowns, the inspectors observed areas that met the definition of high radiation areas and locked high radiation areas (LHRA) to verify that they were adequately posted and secured as required by 10 CFR Part 20 and the site TSs. There was one Performance Indicator occurrence for this area that was identified by the licensee and is documented in Section 40A7.

b. Findings

No findings of significance were identified.

.4 Radiation Worker Performance

a. Inspection Scope

The inspectors evaluated radiation worker (radworker) performance by observing the use of low dose waiting areas and proper use of protective clothing, based on RWP requirements. Radiological conditions were discussed with radworkers to determine worker awareness of significant radiological conditions and electronic dosimetry set points. Radiological problem condition reports were reviewed to determine if weaknesses in radworker performance had been identified, evaluated, and corrected.

b. Findings

No findings of significance were identified.

- .5 Radiation Protection Technician Performance
- a. Inspection Scope

Radiation protection technician performance was evaluated with respect to radiological work requirements. During work evolutions, the inspectors observed job coverage, contamination control, exit boundaries, and oversight of radworkers. The inspectors also reviewed technician response to radiological incidents. Radiological problem condition reports were reviewed to determine if technician errors had been identified, evaluated, and corrected.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02)

- .1 Job Site Inspection and ALARA Control
- a. Inspection Scope

The inspectors observed jobs being performed in areas of elevated dose rates, examined exposure estimates and work sites, and evaluated selected RWPs, along with the associated ALARA briefing packages, to verify that worker radiological exposure was minimized. The inspectors also attended selected ALARA Review Committee meetings. Protective clothing requirements, dosimeter use including radiotelemetry dosimetry, and electronic dosimeter alarm set points for both dose rate and accumulated dose were evaluated. The use of engineering controls was also reviewed to verify that worker exposures were maintained ALARA.

The inspectors attended selected pre-job ALARA and work control briefings and observed portions of work evolutions to verify that adequate work controls were in place to maintain worker exposures ALARA. During job site walkdowns, radworkers and supervisors were observed to determine if low dose waiting areas were being used

appropriately and to evaluate the effectiveness of job supervision including equipment staging, use of shielding, availability of tools, and work crew size.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed the Performance Indicator (PI) data submitted by the licensee for completeness and accuracy for the Unplanned Power Changes per 7000 Critical Hours PI in the Initiating Events cornerstone. The time period evaluated included all 2001 data. The inspectors compared the data reported by the licensee to the definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 1. The inspectors reviewed the licensee's computerized data sources and logs to gather information regarding reactor power history, and compared that information to what was reported by the licensee.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

a. Inspection Scope

Following a bottom up ultrasonic test of reactor head nozzle 3, the licensee identified cracks and began repairing the nozzle. During the repair on March 7, 2002, an area of significant reactor vessel head degradation was identified. Subsequent to the discovery of the reactor vessel head cavity, the inspectors evaluated the initial information about the issue provided by the licensee and communicated this information to Region and Headquarters staff. This information, in part, was used to determine the need for an Augmented Inspection Team (AIT) inspection at Davis-Besse to better understand the facts and circumstances related to the degradation of the reactor vessel head pressure boundary material. The team will also identify any precursor indications of this condition so that appropriate followup actions can be taken.

b. <u>Findings</u>

No findings of significance were identified. Additional information on this issue will by documented in the AIT inspection report 50-346/02-03(DRS).

40A6 Exit Meetings

Exit Meeting

The inspectors presented the inspection results to Mr. Bergendahl and other members of licensee management on March 28, 2002. The licensee acknowledged the findings presented. No proprietary information was identified.

Interim Exit Meeting

Senior Official at Exit:	R. Fast, Plant Manager
Date:	March 8, 2002
Proprietary:	No
Subject:	Radiological Access Control Program, and the ALARA Planning and Controls Program
Change to Inspection Findings:	No

4OA7 Licensee Identified Violations

The following finding of very low significance (Green) was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as a Non-Cited Violation (NCV).

NCV Tracking Number	Requirement Licensee Failed to Meet
(1) NCV 50-346/02-02-01	Technical Specification 6.12.2(a) requires, in part, that LHRAs with dose rates greater then 1.0 rem/hour at 30 centimeters from the radiation source or from any surface penetrated by the radiation be conspicuously posted as a high radiation area and shall be provided with a locked door, gate, or other barrier that prevents unauthorized entry.
	On Friday March 1, 2002, the radiation protection section unlocked and deposted the barriers in containment that prevented access to areas adjacent to the fuel transfer tubes. This was done to facilitate maintenance activities, as fuel movement had been suspended. On Saturday, March 2, 2002, at 0930 the outage radiation protection manager directed that these areas be locked and posted as LHRAs and not be deposted in the future. Actions were then taken to accomplish this. On Sunday, March 3, 2002, the barrier at the 565 foot elevation near core flood tank 1-1 was found unlocked and was not posted as a LHRA. The licensee documented this incident in CR 02- 00998. Since this failure did not represent a significant potential for an overexposure, the inspectors concluded that the failure was a Green finding and an associated

Non-Cited Violation (NCV) of TS 6.12.2(a) for the failure to properly control access to a LHRA. This was also a performance indicator occurrence under the occupational radiation safety cornerstone.

KEY POINTS OF CONTACT

<u>Licensee</u>

- H. Bergendahl, Vice President Nuclear
- R. Fast, Plant Manager
- W. Bentley, Superintendent, Operations
- S. Coakley, Outage Manager
- D. Eshelman, Director, Support Services
- D. Geisen, Manager, Design Engineering
- D. Lockwood, Manager, Regulatory Affairs
- G. Melssen, Maintenance Rule Coordinator
- J. Messina, Director, Work Management
- D. Miller, Supervisor, Compliance
- S. Moffit, Director, Technical Services
- W. Mugge, Manager, Nuclear Training
- D. Nelson, Manager, Work Control
- R. Pell, Manager, Plant Operations
- R. Rishel, PRA Specialist
- J. Rogers, Manager, Plant Engineering
- P. Schultz, Manager, Radiation Protection
- G. Skeel, Manager, Nuclear Security
- H. Stevens, Manager, Quality Assessment
- M. Stevens, Manager, Maintenance
- G. Wolf, Licensing Engineer

LIST OF ITEMS OPENED CLOSED AND DISCUSSED

<u>Opened</u>

50-346/02-02-01 NCV Failure to properly control access to a locked high radiation area. (Section 4OA7)

<u>Closed</u>

50-346/02-02-01 NCV Failure to properly control access to a locked high radiation area. (Section 4OA7)

LIST OF ACRONYMS USED

AIT	Augmented Inspection Team
AFW	Auxiliary Feedwater
ALARA	As-Low-As-Is-Reasonably-Achievable
CFR	Code of Federal Regulations
CR	Condition Report
DB	Davis-Besse
DBNPS	Davis-Besse Nuclear Power Station
DBT	Design Basis Threat
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EDG	Emergency Diesel Generator
IPEEE	Individual Plant Examination of External Events
LHRA	Locked High Radiation Area
MR	Maintenance Rule
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NPS	Nuclear Power Station
NRC	Nuclear Regulatory Commission
OA	Other Activities
PARS	Publically Available Records
PI	Performance Indicator
Radworker	Radiation Worker
RCS	Reactor Coolant System
RFO	Refueling Outage
RPA	Radiologically Protected Area
RWP	Radiation Work Permit
SDP	Significance Determination Process
SP	Surveillance Procedure
SSC	Systems, Structures, and Components
TS	Technical Specifications
USAR	Updated Safety Analysis Report
WO	Work Order

LIST OF DOCUMENTS REVIEWED

1R04 Equipme	ent Alignment	
SD-003B	Emergency Diesel Generators	Rev. 3
USAR Figure 9.5.8	EDG Auxiliary Systems	Rev. 1
OS-041A, Sheets 1&2	EDG Systems	Rev. 18, 15
P&ID M-017A	Diesel Generators	Rev. 17
P&ID M-017B	Diesel Generator Air Start	Rev. 32

1R05 Fire Protection

NRC Reg. Guide 1.189	Fire Protection for Operating Nuclear Power Plants		
	Fire Hazards Analysis Report	Rev. 14	
PFP-AB-428A	Battery Room 2	Rev. 2	
PFP-AB-429A	Number 2 Electrical Isolation Room	Rev. 2	
PFP-AB 428B	Number 1 Electrical Isolation Room	Rev. 2	
A-222F	Fire Protection General Floor Plan El. 565	Rev. 11	
A-223F	Fire Protection General Floor Plan El. 585	Rev. 14	
A-224F	Fire Protection General Floor Plan El. 603	Rev. 17	

<u>1R12</u> <u>Maintenance Rule Implementation</u>

<u>General</u>

	Davis-Besse System Health Report 1st Quarter 2001	
	Davis-Besse System Health Report 2nd Quarter 2001	
	Davis-Besse System Health Report 3rd Quarter 2001	
	Davis-Besse System Health Report 4th Quarter 2001	
	Maintenance Rule Program Manual	Rev. 7
DB-PF-00003	Maintenance Rule Administrative Procedure	Rev. 1

Nuclear Fuel

NG-EN-318	Nuclear Fuel Integrity Program	Rev. 2
DB-NE-10200	Fuel Integrity Monitoring	Rev. 3
CR 02-1203	During Investigation of Failed Fuel Assembly, Fuel Rod B15 Separated	
CR 02-01103	Perform a Collective Significance Investigation For 13 Refueling Outage Spacer Grid Issues	
CR 02-01062	Loose Fuel Rod in Fuel Assembly NJ100U	
CR 02-01113	Loose Fuel Rod in Fuel Assembly NJ101A	
CR 02-01122	Missing Piece of Spacer Grid in Fuel Assembly NJ100N	
CR 02-01068	Missing Spacer Grid Piece in Fuel Assembly NJ1009	
CR 02-01162	Damaged Spacer Grid in Fuel Assembly NJ1019	
CR 02-01060	Defective Fuel Assembly NJ1010	
CR 02-00997	Loose Fuel Rod in Fuel Assembly NJ1014	
CR 02-01001	Piece of Space Grid Resting on Top of Fuel Assembly NJ08GT	
CR 02-01063	Slipped Spacer Grid in Fuel Assembly NJ08F9	
CR 02-01000	Missing Portion of Spacer Grid on Fuel Assembly NJ100H	
CR 02-01083	Potential Defective Fuel Rod in Fuel Assembly NJ08FP	
CR 02-01098	Damaged Spacer Grid in Fuel Assembly NJ1006	
CR 02-01102	Fuel Assembly NJ1029 Sustained Additional Damage During Cycle 13	
CR 01-3195	Collective Significance Investigation of Fuel Vendor Related Condition Reports	
CR 01-1897	Design Deficiency of Mark B10K-s (Batch 15E) Fuel Assemblies	
Main Steam		
DB-OP-6201	Main Steam System Operating Procedure	
CR 02-00523	Turbine Bypass Valve SP13B3 Failed to the ICS Control Station	
CR 02-00522	Turbine Bypass Valve SP13A3 Failed Approximately 20% During Plant Shutdown	

CR 01-2433 Turbine Bypass Valve Air Regulators MOD 99-0041

250/125VDC and 120V Instrument AC System

Drawing M-027B	Auxiliary Building Non Radiation Areas	Rev. 38	
Drawing OS-060 Sheet 1	250/125VDC and 120V Instrument AC System	Rev 12	
CR 01-1232	Cracks in Seal Rings For Positive Posts On Cell 21, 2P Battery		
	Cause Analysis for CR 01-1232		
CR 01-1442	Battery Room #2 Exhaust Fan Found Tripped		
	Cause Analysis for CR 01-1442		
CR 02-1400	Battery Room 428A Room Temperature Concerns		

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

- CR 02-01343 Debris (rust) on Reactor Head Under Insulation
- CR 02-01302 Reactor Head Insulation Degradation
- CR 02-01128 Reactor Head Material Finding

<u>1R14</u> <u>Performance in Non-Routine Evolutions</u>

DB-OP-6904	Shutdown Operations	Rev. 4
DB-OP-6903	Plant Shutdown and Cooldown	Rev. 5
DB-OP-6002	RCS Draining and Nitrogen Blanketing	Rev. 3
DB-OP-1003	Operations Procedure Use Instructions	Rev. 1
DB-OP-0000	Conduct Of Operations	Rev. 4

1R15 Operability Evaluations

CR 02-00634	Decay Heat Pump #2 Oil Problems	
Operability Justification 02-0004	Decay Heat Pump #2 Oil Problems	Rev. 0

Cause Analysis for CR 02-00634

CR 02-00874 Incorrect Inert Gas was Used for West Electrical Penetrations

1R19 Post-Ma	aintenance Testing	
DB-PF-03132	Decay Heat Train 1 Valve Test	Rev. 3
OS-4, sh. 1, 2	Decay Heat Removal / Low Pressure Injection	Rev. 32, 4
M-033B	Decay Heat Train 1	
<u>1R20 Refuelii</u>	ng and Outage	
DB-OP-6904	Shutdown Operations	Rev. 4
DB-OP-6903	Plant Shutdown and Cooldown	Rev. 5
DB-OP-6002	RCS Draining and Nitrogen Blanketing	Rev. 3
1R22 Surveill	ance Testing	
DB-SC-3071	Emergency Diesel Generator 2 Monthly Test	Rev. 2
	Emergency Diesel Generator 2 Crankcase Pressure Plots Since Last 12 Year Planned Maintenance	
DB-PF-03176	Core Flood Tank 1 Refueling Check Valve Test	Rev. 1
DB-SC-04053	4160 System Transfer and Lockout Test Buses C1 and C2	Rev. 1

20S1 Access Control

DB-HP-01206	Multiple Badging: Issue, Use and Collection	12/5/01
DB-HP-01109	High Radiation Area Access Control	12/13/01
DB-HP-04003	Locked High Radiation Area Inside Containment	3/4/02
DB-HP-04003	Locked High Radiation Area Outside Containment	3/4/02
CR 02-00998	Locked High Radiation Area (During Fuel Movement) Not Locked	
CR 02-01088	LHRA Control-Key and Lock Control	
CR 02-01038	Machining of CRD Nozzles	
CR 02-01037	Non-Proceduralized Protocol	

CR 02-01034	Valve Operations in LHRA	
CR 02-01014	Personnel Contamination With Particle in Eye	
CR 02-01008	Misleading Dose Rates Due to Meter Used with Too High Range	
CR 02-01005	Stopped Work to Preclude Inadvertent Entry into LHRA	
CR02-00995	Merlin-Gerin On Pause While Worker in Containment	
CR 02-00910	Radiation Dose Control	
CR 02-00909	Disassembly of Reactor Services Hoist	
CR 02-00876	Work Performed on Wrong RWP	
CR 02-00824	Reactor Vent Valve Inspection	
CR 02-00714	Administrative Dose Control Levels Exceeded Without Approval from the RPM	
CR 02-00709	Internal Dose Assessment	
CR 02-00702	Locked High Radiation Area Entry	
CR 02-00668	Increase Radioactivity in RCS	
CR 02-00659	Modified Primary System Shutdown Chemistry Methodology	
CR 02-00649	Loss of Access to Containment and Auxiliary Building Due to Contamination	
CR 02-01086	Merlin Gerin Dose and Dose Rate Alarms	
CR 02-01091	Worker Exceeding His Dose Rate Setpoint	
	RCS Gross Specific Activity Data	
	Cycle 13 RCS Filtrate: Cobalt 58 and Cobalt 60	
	Cycle 13 RCS Crud: Cobalt 58 and Cobalt 60	
	Primary System Strategic Water Chemistry Plan	
	13RFO RP/Chemistry Shift Turnover	3/6/02 3/7/02
	13RFO Outage Control Center Turnover	3/6/02 3/7/02

20S2 ALARA Planning and Controls

2002-5010	RWP/ALARA Package:	Primary Valve Maintenance Work	1/28/02
2002-5107	RWP/ALARA Package:	Reactor Head Removal	2/1/02

2002-5109	RWP/ALARA Package: CRD Nozzle Inspections, Repairs and Associated Work Activities	2/13/02
2002-5115	RWP/ALARA Package: Perform Fuel Shuffle in Containment and Auxiliary Buildings Including Operational Checks of Refueling Bridges	2/14/02
2002-6016	RWP/ALARA Package: Inspect, Decon, and Repair Purification Demineralizer #3	3/1/02
2002-5301	RWP/ALARA Package: Setup, Maintenance, Teardown of Eddy Current Equipment	2/15/02
	ALARA Review Committee Meeting Agendas	3/2/02 3/4/02 3/5/02 3/7/02
	Special RP/ALARA Meeting Notes	
	13RFO RWP Estimates Versus Actual Dose	3/4/02 3/5/02
	Lift Plan for Control Rod Drive Flange Assembly	3/6/02
	Man-way Removal, Decontamination, Gasket Removal and Repair	3/4/02

40A1 Performance Indicator Verification

Davis-Besse Monthly Operating Reports for the January through December 2001

Unit Operations Logs

4OA3 Event Follow-up

- CR 02-00932 CRDM Nozzle Crack Indications
- CR 02-01128 Reactor Head Material Finding