October 13, 2000

Mr. L. W. Myers
Senior Vice President
Post Office Box 4
FirstEnergy Nuclear Operating Company
Shippingport, Pennsylvania 15077

SUBJECT: NRC'S BEAVER VALLEY INSPECTION REPORT 05000334/2000-010; 05000412/2000-010

Dear Mr. Myers:

On September 30, 2000, the NRC completed an inspection at the Beaver Valley 1 & 2 reactor facilities. The enclosed report presents the results of that inspection. The results of this inspection were discussed on October 5, 2000, with Mr. Robert Saunders, yourself, and other members of your staff.

This inspection was an examination of 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. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, the NRC identified one finding that was evaluated under the significance determination process and was determined to be of very low safety significance (Green). The finding involved failure to implement required compensatory actions while performing maintenance on a containment isolation valve and was a violation of NRC requirements. This violation is being treated as a non-cited violation (NCV), consistent with Section VI.A of the Enforcement Policy issued on May 1, 2000 (65 FR 25368). If you contest the violation or severity level of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region I, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001, and the NRC Resident Inspector at the Beaver Valley facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room and will be available on 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).

We appreciate your cooperation. Please contact me at 610-337-5146 if you have any questions regarding this letter.

Sincerely,

/RA/

John F. Rogge, Chief
Projects Branch 7
Division of Reactor Projects

Docket Nos.: 05000334; 05000412
License Nos: DPR-66, NPF-73

Enclosure: Inspection Report 05000334/2000-010; 05000412/2000-010

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REGION I

Docket Nos.	05000334, 05000412
License Nos.	DPR-66, NPF-73
Report Nos.	05000334/2000-010, 05000412/2000-010
Licensee:	FirstEnergy Nuclear Operating Company
Facility:	Beaver Valley Power Station, Units 1 and 2
Location:	Post Office Box 4 Shippingport, PA 15077
Dates:	August 13, 2000 through September 30, 2000
Inspectors:	D. Kern, Senior Resident Inspector G. Dentel, Resident Inspector G. Wertz, Resident Inspector G. Smith, Senior Security Specialist Inspector P. Frechette, Security Specialist Inspector
Approved by:	J. Rogge, Chief Projects Branch 7 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000334-00-10, IR 05000412-00-10, on 08/13-09/30/2000; FirstEnergy Nuclear Operating Company; Beaver Valley Power Station; Units 1 & 2. Operability Evaluations.

The inspection was conducted by resident inspectors and regional security specialist inspectors. The inspection identified one green issue, which was a non-cited violation. The safety significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process (SDP) in Inspection Manual Chapter 0609 (see Attachment 1).

Cornerstone: Barrier Integrity

- **Green** On August 28, 2000, planned periodic maintenance and testing were performed on a Unit 1 containment isolation valve (MOV-RW-104A), during which time (30 hours) the valve was inoperable. Operators misinterpreted the required technical specification (TS) actions for an inoperable containment isolation valve and violated TS 3.6.3.1. Specifically, Unit 1 continued power operation in excess of 6 hours without isolating the affected containment penetration (penetration #79) by use of a deactivated closed automatic valve, a closed manual valve, or a blind flange.

  The issue was evaluated using the phase 1 SDP for the containment barrier cornerstone. The finding did not result in an actual open pathway in the physical integrity of the reactor containment and therefore had very low safety significance. Failure to maintain containment isolation operability or implement required compensatory actions was a non-cited violation of TS 3.6.3.1 consistent with Section VI.A of the Enforcement Policy, issued May 1, 2000 (65 FR 25368). (Section 1R15)

Report Details

SUMMARY OF PLANT STATUS: Unit 1 operated at 100 percent power for the entire inspection period. Unit 2 began this inspection period at 100 percent power. The unit began an end of refueling cycle power coastdown on August 28, 2000. Unit 2 refueling outage number eight (2R8) began when the main generator output breakers were opened at 12:06 a.m. on September 23. The unit entered cold shutdown (Mode 5) conditions on September 23 and remained in Mode 5 for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstone: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignments

a. Inspection Scope

The inspectors performed partial system walkdowns of the Unit 2 emergency diesel generator (EDG) and auxiliary feedwater systems. The inspectors reviewed the system alignment as described on plant drawings and performed field verification of major equipment alignment.

- The inspectors performed a partial system walkdown of the Unit 2 EDG system following performance of operating surveillance test (OST) 2OST-1.12B, "Safeguards Protection System Train 'B' IS GO Test," Rev. 22. The inspectors reviewed the system alignment as described on plant drawings 10080-RM-436-1 through 6 and in plant procedures 2OM-36.3.C.9, Power Supply and Control Switch List - Diesel Generator 2-2, Rev. 10.

- The inspectors performed a partial system walkdown of the Unit 2 Steam Turbine Driven Auxiliary Feedwater Pump following performance of 2OST-1.12B, "Safeguards Protection System Train 'B' SIS GO Test," Rev. 22. The inspectors reviewed the system alignment as described on plant drawings 10090-RM-424-3 and in plant procedure 2OM-24.3.C, "Power Supply and Control Switch List," Rev. 10.

b. Issues and Findings

There were no findings identified.

1R05 Fire Protection

.1 Fire Protection Area Walkdown

a. Inspection Scope

The inspectors reviewed the fire protection analyses for both units and identified the following risk significant areas:

- Unit 2 emergency switchgear room
- Unit 2 control building main control room

- Unit 2 control building instrument and relay area
- Unit 2 reactor containment building

Specific fire protection conditions examined during plant walkdowns included control of transient combustibles, material condition of fire protection equipment, and the adequacy of any fire impairments and compensatory measures.

b. Issues and Findings

There were no findings identified.

.2 Fire Drill

a. Inspection Scope

The inspectors observed a Unit 1 fire drill in the north yard outside of the turbine building. The inspectors reviewed: 1) the effectiveness of communications; 2) the assessment of the fire and the use of proper fire fighting strategy; 3) the adequacy and condition of fire fighting equipment; and 4) the knowledge and skill of the fire brigade. The critique was also observed to ensure all deficiencies were identified and captured.

b. Issues and Findings

There were no findings identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors performed walkdowns of the Unit 1 primary auxiliary building at the 722 and 735 feet elevations. The inspectors examined a sample of flood seals concentrating on the risk significant seals associated with the high head safety injection pumps. The inspectors reviewed the Updated Final Safety Report, the Individual Plant Examination, and Individual Plant Examination of External Events to evaluate the design basis and risk significance for internal and external floods. The inspectors compared their inspection results with the Beaver Valley Test, 1BVT-1.33.07, “Flood Seals Visual Inspection,” Rev. 1.

b. Issues and Findings

There were no findings identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors evaluated Maintenance Rule (MR) implementation for the issues listed below. Specific attributes reviewed included MR scoping, characterization of failed structures, systems, and components (SSCs), MR risk categorization of SSCs, SSC performance criteria or goals and appropriateness of corrective actions. The following issues were evaluated:

- In February 2000, Unit 1 was forced to shut down due to condenser tube leaks that degraded steam generator water chemistry. The root cause was determined to be a welded slip joint within the condenser, which resulted in loose debris damaging the condenser tubes. The Maintenance Rule Steering Committee (MRSC) concluded that this event was a maintenance preventable functional failure which caused the system to exceed plant level performance criteria. The MRSC placed the condensate system in category (a)(1), established performance goals, and verified corrective actions were appropriate.

- The Unit 2 primary component cooling system was in category (a)(1) due to repetitive failures of the reactor coolant pump thermal barrier check valves. Corrective actions to replace the valves and to perform a filtration of the system were appropriate. The valves were successfully tested during the Unit 2 refueling outage. The system will remain in category (a)(1) until a second successful test is completed.

- The Unit 2 reactor coolant system (RCS) was reviewed. Leaking power operated relief valves (PORVs) extended and/or required plant shutdowns in November 1998 and October 1999. The shutdowns resulted in the RCS system exceeding the MR plant level performance criteria for unplanned capability loss factor. Appropriate PORV performance goals and corrective actions were established which included refurbishment of all three PORVs and reconfiguration of the piping heat trace circuitry during the current refueling outage.

- The Unit 2 main feedwater (MFW) system was reviewed. Emergent maintenance performed on main feedwater isolation valves 2FWS-HYV157 ‘A’ and ‘C’ resulted in the MFW system exceeding MR plant level performance criteria for unplanned capability loss factor. Appropriate MFW system goals and corrective actions were established which involved improvements to the MFW isolation valves during the current refueling outage.

- The Unit 1 river water (RW) system was reviewed. The RW system exceeded its specific performance criteria when the ‘B’ RW pump exceeded its pump testing criteria in May. The inspectors reviewed the MR Disposition Review evaluation and attended the MRSC meeting. Although the ‘B’ RW pump performance has degraded with age and usage, maintenance was recently performed on the pump to improve the pump performance (pump lift was adjusted) and the baseline criteria for pump performance was adjusted in accordance with the in-service testing program. The pump’s performance margin to its design basis

minimum operating point remains adequate with the new baseline criteria established. The committee decided to leave the RW system in the MR (a)(2) category.

- The inspectors evaluated MR implementation for maintenance performed on the risk significant Unit 2 'B' high head safety injection (HHSI) pump, including performance criteria and goals and appropriateness of corrective actions. The 'B' HHSI pump was removed from service on August 17 for replacement of a leaking inboard labyrinth oil seal. The clearance was removed at 8:07 p.m. On August 19, the pump was started for post-maintenance testing (PMT) and immediately secured when the operators noticed smoke coming from the new seal. The old seal was reinstalled and the pump declared operable at 9:22 p.m. on August 19. However, continued oil leakage from the labyrinth seal necessitated replacement on August 31. The 'B' HHSI pump again failed the PMT on September 1 due to excessive oil leakage; however, the pump remained available. At 6:39 a.m. on September 6, the pump was removed from service and new seal was installed. The pump PMT was successfully completed at 8:37 p.m. The ineffective maintenance performed on August 17 and 31, resulted in an additional 82 hours of 'B' HHSI pump unavailability time (Condition Reports [CR] 00-2719, 00-2732 and 00-2890).

  The inspectors reviewed the MR performance criteria for the spare HHSI train availability and determined that the additional unavailability hours did not exceed the specific criteria of 85 percent availability over a rolling 3-year period. The increase in risk due to the additional out-of-service time was minimal since the 'B' HHSI pump was the spare pump during this time and the other two HHSI pumps were available.

b. Issues and Findings

There were no findings identified.

1R13 Maintenance Risk Assessment and Emergent Work Control

a. Inspection Scope

The inspectors reviewed scheduling and control of maintenance activities in order to evaluate the effect on plant risk. The inspectors reviewed the routine planned maintenance and emergent work for the following equipment removed from service:

- On September 6, 1OST-24.4, "Steam Generator Feedwater System Operating Surveillance Test, Steam Driven Auxiliary Feed Pump Test [1FW-P-2]," Rev. 15, was performed as scheduled. The Nuclear Shift Supervisor (NSS) determined that the pump becomes unavailable during a portion of the test, and the daily plant risk assessment had not addressed the unavailability properly. Two additional planned safety-related periodic work activities were added to the maintenance schedule after the T+1 week risk profile analysis; hence, they were not considered during the scheduling risk assessment. The Unit 1 'A' and 'C' HHSI pumps were unavailable during a breaker swap, and the Unit 2 'B' quench

spray pump was unavailable during portions of a periodic surveillance. For each case, the NSS discussed the work activities with the site risk analysts and determined that the resulting increased plant risk profile remained within the unit specific cumulative core damage frequency goal. Condition Reports 00-3182 and 00-3122 were written to address the risk assessment and scheduling deficiencies.

- On August 28, planned preventive maintenance and periodic motor operated valve testing were performed on the '1A' recirculation spray heat exchanger inlet isolation valve (MOV-RW-104A). The valve supports safety functions for cooling water to the recirculation spray heat exchangers and containment isolation.

- On August 16, the Unit 1 'B' river water pump was started following planned intake bay cleaning and other maintenance activities. Operators identified a loss of seal pressure during the pump start. The cause of the loss was clogging of the seal water backflow check valve (1RW-676) with mud and other river debris that was inadvertently left in the intake bay. The valve was cleaned, successfully retested on August 18, and long-term corrective actions were developed. The additional out-of-service time was accounted for in the daily risk profile and for the maintenance rule.

- The Unit 2 'B' HHSI pump was removed from service for planned maintenance on August 17 and 31 and September 6 to repair a leaking oil seal. On August 19, the pump's PMT was unsuccessful, and the pump was taken out of service for emergent maintenance. (See Section 1R12). The inspectors reviewed the plant's risk assessment for the planned and emergent maintenance performed on the 'B' HHSI pump.

- The 'A' standby service water (SWE) pump was removed from service due to the motor anti-rotation device being found damaged on August 26. The cause of the motor damage was due to failure of the pump's discharge check valve SWE-221 to completely close when the 'B' SWE pump was operating for post-modification testing. The reverse flow was sufficient to damage the anti-rotation device. Corrective actions included repair of the motor and check valve. The pump was restored to operable on September 21. The plant risk was minimal for the duration that the pump was out of service. Additionally, the 'B' SWE pump discharge pressure gauge was found damaged on August 27 due to an overpressure condition. Subsequent evaluations determined that operators had not opened recirculation line valve SWE-220 adequately when the pump was initially started, resulting in a pressure pulse of approximately 281 pounds per square inch. The pump remained operable; therefore, there was no increase in plant risk. The inspectors reviewed the cause determination, risk assessment, and corrective actions.

b. Issues and Findings

There were no findings identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors reviewed operator performance during the following nonroutine plant evolutions:

- Unit 2 control room operators responded to an unplanned increase in the 'B' train 3rd and 4th point feedwater heater levels on August 14. The control room operators used their alarm response procedures and stabilized the plant. Reactor power was reduced slightly (approximately 1 percent) to account for the positive reactivity effects of the lower temperature feedwater. Maintenance was performed on the normal level control valve for the 4th point heater, 2HDL-LCV122B2. However, no abnormalities were identified which would explain the 4th point feedwater heater level increase. The event was documented in CRs 00-02661 and 00-02663.

- Unit 2 control room operators placed the 'A' and 'B' trains of residual heat removal into service on September 23 as planned in support of the 2R8. The operators prepared for this infrequently performed activity the previous week by performing the controlling procedure, 2OM-10.4.A, "Residual Heat Removal System Startup," Rev 28, on the control room simulator.

- On September 23, a Unit 2 automatic feedwater isolation occurred, with the reactor at approximately 7 percent power while shutting down for the 8th refueling outage. The control room staff notified the NRC duty officer of the Engineered Safety Feature (ESF) actuation in accordance with the requirements of 10CFR50.72 (Event report number 37371). The ESF actuation occurred due to problems associated with the control of steam generator levels during the low reactor power operation. All required systems worked as designed and the plant risk was minimal during the event.

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed operability evaluations in order to determine whether proper operability justifications were performed for the following items. In addition, where a component was determined to be inoperable, the inspectors verified the TS limiting condition for operation implications were properly addressed.

- Preventive maintenance and motor operated valve actuator testing on the Unit 1 '1A' recirculation spray heat exchanger (RSHX) inlet isolation valve (MOV-RW-104A).

- Low service water cooling flow while supplying the Unit 2 'B' and 'C' HHSI pumps simultaneously from the 'B' service water header (CR 00-02750).

- Low seal water flow to the Unit 2 'A' SWE pump, discovered during design change package (DCP) 2287 implementation (CR 00-03160).

b. Issues and Findings

MOV-RW-104A has two safety functions. It opens to provide cooling water to the '1A' RSHX for long term core cooling and closes to provide containment isolation for containment penetration #79. Technical Specification 3.6.3.1 requires each containment isolation valve to be operable. With one containment isolation valve inoperable, operators must either (a) restore the valve to operable status within 4 hours, (b) isolate the affected penetration within 4 hours using at least one deactivated automatic valve, (c) isolate the affected penetration within 6 hours using at least one closed manual valve or blind flange, or (d) shut down the reactor and be in hot standby within the next 6 hours. The NSS initially concluded TS 3.6.3.1 could not be satisfied to support the work activity without shutting down the reactor. Condition Report 00-2820 was initiated and operations management was contacted to consider rescheduling the work activity.

Operations and licensing personnel reviewed the containment isolation issue and determined that TS 3.6.3.1 could be met for the planned work activity. On August 28, 2000, with Unit 1 at 100 percent power, the NSS authorized the MOV-RW-104A work activities and declared MOV-RW-104A inoperable for 30 hours to complete the planned maintenance. The NSS determined that the closed system (RSHX and associated piping) was an acceptable alternative to an automatic valve. The '1A' RSHX outlet isolation valve (MOV-RW-105A), located on the downstream piping outside of containment penetration #83, was then closed to block flow through the closed system. The NSS believed these actions were adequate to satisfy the actions required by TS 3.6.3.1.b for an inoperable containment isolation valve. Operators properly applied TS 3.6.2.2 for the inoperable RSHX, which permitted one inoperable RSHX for up to 7 days prior to requiring a plant shutdown.

Operators misinterpreted the TS 3.6.3.1 required actions for an inoperable containment isolation valve. The inspectors determined that operators violated TS 3.6.3.1 in that with MOV-RW-104A inoperable, Unit 1 continued power operation in excess of 6 hours without isolating the affected containment penetration (penetration #79) by use of a deactivated closed automatic valve, a closed manual valve, or a blind flange. Specifically, use of a closed system and a deactivated closed valve (MOV-RW-105A) downstream of penetration #83 did not isolate penetration #79 by use of at least one deactivated closed automatic valve. This violation is being treated as a noncited violation consistent with Section VI.A of the Enforcement Policy, issued May 1, 2000 (65 FR 25368) **(NCV 05000334/2000-010-01).** Condition Report 00-3263 was initiated to evaluate implementation of TS for this issue.

The containment isolation issue was more than minor because it had a credible impact on plant safety and would become a more significant safety concern if it remained

uncorrected. The issue was evaluated using the SDP phase 1 for the containment barrier cornerstone. The finding did not result in an actual open pathway in the physical integrity of the reactor containment, and therefore a phase II SDP evaluation was not warranted. The finding had very low safety significance (GREEN finding). The 30-hour period during which one RSHX was inoperable was within the TS allowed outage time for the recirculation spray system and therefore the effect on the mitigating system cornerstone was not evaluated using the SDP.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed DCP 2287, "Upgrade Standby Service Water Piping for 2SWE-P21A, B Seal Water Piping to Stainless Steel," to verify design basis, licensing bases, and performance capability of the risk significant system were not degraded through the modification. The inspection included design change documentation review, modification installation observation, and post-installation testing evaluation. The inspectors further verified that the installation of the modification did not place the plant in an unsafe condition.

b. Issues and Findings

There were no findings identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed and/or observed several PMTs to ensure: 1) the PMT was appropriate for the scope of the maintenance work completed; 2) the acceptance criteria were clear and demonstrated operability of the component, and 3) the PMT was performed in accordance with procedures. The following PMTs were observed.

- Unit 2 standby service water seal flow verification and pump operablity testing were performed following completion of Design Change 2287, "Upgrade Standby Service Water Pumps 2SWE-P21A, B Seal Water Piping to Stainless Steel."

- Unit 2 main steam safety valve testing was completed following adjustments to two valves which exceeded the TS setpoint tolerance band. The testing was performed using 2BVT-01.21.02, "Trevitest Method for Main Steam Safety Valve Setpoint Check," Rev. 4.

- Unit 2 2OST-47.3B, "Containment Penetration and ASME Section XI Valve Test," Rev. 22, for the Auxiliary Feedwater Throttle Valve 2FWE-HCV100F following preventive maintenance work.

b. Issues and Findings

There were no findings identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors reviewed the Unit 2 Pre-Outage Safety Review Evaluation focusing on the overall outage risk assessment and key safety function status. The key safety function status review included the adequacy of the electrical power sources, decay heat removal methods, containment integrity, and boration inventory control. The contingency actions for the reduction in the RCS inventory period were reviewed and appeared adequate. Temporary Operating Procedure (TOP) 2TOP-96-04, "Contingency Plan for Emergency Equipment Hatch Closure," Rev. 1, was invoked for the reduced RCS inventory period. The inspectors verified the specifications of the TOP including direct communications from the control room operators to the containment hatch closure coordinator, and the prestaging of tools and equipment necessary to ensure a timely closure of the equipment hatch.

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed and reviewed the following operating surveillance tests (OSTs) and maintenance surveillance procedures (MSPs), concentrating on verification of the adequacy of the test to demonstrate the operability of the required system or component safety function.

- 1MSP-13.04-I, "L-QS100D, Refueling Water Storage Tank Level Channel II Calibration," Rev. 6
- 2OST-1.12C, "Safeguards Protection System Train 'B' CIB/Spray Actuation Test," Rev. 12
- 2OST-30.1A "Standby Service Water Pump [2SWE-P21A]," Rev. 13

b. Issues and Findings

There were no findings identified.

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP1 Access Authorization Program

a. Inspection Scope

The following activities were conducted to determine the effectiveness of the behavior observation portion of the personnel screening and fitness-for-duty programs:

Five supervisors representing the Mechanical, Engineering, Radiation Protection, Construction, and Instrumentation & Control Departments were interviewed, on September 26, 2000, regarding their understanding of behavior observation responsibilities and the ability to recognize aberrant behavior traits. Two Access Authorization/Fitness-for-Duty self-assessments, an audit, and event reports and loggable events for the four previous quarters were reviewed, during this inspection. On September 26, 2000, five individuals, who perform escort duties, were interviewed to establish their knowledge level of those duties. Behavior observation training procedures and records were also reviewed.

b. Issues and Findings

There were no findings identified.

3PP2 Access Control

a. Inspection Scope

The following activities were conducted during the period September 25 - 27, 2000, to verify that the licensee had effective site access controls, and equipment in place designed to detect and prevent the introduction of contraband (firearms, explosives, incendiary devices) into the protected area:

A random sample of personnel, granted unescorted access to the protected and vital areas, was checked to assure that they were properly screened, identified, and authorized. Site access control activities were observed, including personnel and package processing through the search equipment at the access point, during peak ingress periods on September 26 and 27, 2000, and vehicle searches, on September 26, 2000. On September 26, 2000, testing of all access control equipment; including the metal detectors, explosive material detectors, and X-ray examination equipment, was observed. The Access Control event log, and an annual security audit were also reviewed.

b. Issues and Findings

There were no findings identified.

3PP4 Security Plan Changes

a. Inspection Scope

An in-office review was conducted of changes to the Beaver Valley Physical Security Plan, identified as Revision 39 to Issue 4, submitted to the NRC on April 4, 2000, in accordance with the provisions of 10 CFR 50.54(p). Based on a limited review of the changes, as described in the plan revision, the inspectors determined that no NRC approval of this change was required. These changes will be subject to future

inspection to confirm that the changes, as implemented, have not decreased the overall effectiveness of the security plan.

b. Issues and Findings

There were no findings identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

.1 Unplanned Power Changes per 7000 Critical Hours

a. Inspection Scope

The inspectors reviewed the Unit 1 and Unit 2 performance indicators for unplanned changes in reactor power of greater than 20 percent per 7000 hours of critical operation. Manual and automatic scrams are excluded from this performance indicator. The inspectors verified accuracy of the reported data through reviews of monthly operating reports, shift operating logs, Licensee Event Reports and additional records. The inspectors reviewed 9 months of reported data (October 1999 - June 2000) and the latest 3 months of collected data which has not yet been reported (July - September 2000). No problems with performance indicator accuracy or completeness were identified.

b. Issues and Findings

There were no findings identified.

.2 Emergency Power Safety System Unavailability

a. Inspection Scope

The inspectors reviewed the Unit 1 and Unit 2 performance indicators for the emergency alternating current power system. The inspectors verified accuracy of the reported data through reviews of the last 6 months of reported data (January - June 2000), the last 3 months of collected data (July - September 2000), shift operating logs, various completed operations surveillance test procedures, condition reports, and additional records. Verification methods included observation of selected operations surveillance tests affect which effected EDG availability. In addition, the following procedures were reviewed to evaluate the determination of availability.

1/2 OM-48.1.I "Conduct of Operations: Technical Specification Compliance," Rev. 8
1OST-36.1 "Diesel Generator No. 1 Monthly Test," Rev. 27
2OST-36.1 "Emergency Diesel Generator [2EGS*EG2-1] Monthly Test," Rev. 28

No problems with performance indicator accuracy or completeness were identified.

b. Issues and Findings

There were no findings identified.

.3 Fitness-for-Duty, Personnel Screening, and Protected Area Security Equipment Performance

a. Inspection Scope

The inspectors reviewed programs for gathering and submitting data for the Fitness-for-Duty, Personnel Screening, and Protected Area Security Equipment Performance Indicators. The review included tracking and trending reports, personnel interviews, and security event reports for the Performance Indicator data submitted from the 2nd quarter of 1997 through the 1st quarter of 2000.

b. Issues and Findings

There were no findings identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Robert Saunders, Mr. Lew Myers, and other members of licensee management following the conclusion of the inspection on October 5, 2000. The licensee acknowledged the findings presented.

The licensee did not indicate that any of the information presented at the exit meeting was proprietary.

ITEMS OPENED, CLOSED AND DISCUSSED

Opened/Closed

05000334/2000-010-01	NCV	Failure to Implement TS 3.6.3.1 Actions for Inoperable Containment Isolation Valve [MOV-RW-104A] (Section 1R15)

LIST OF ACRONYMS USED

2R8	Unit 2 Refueling Outage Number 8
CFR	Code of Federal Regulations
CR	Condition Report
DCP	Design Change Package
EDG	Emergency Diesel Generator
ESF	Engineered Safety Feature
HHSI	High Head Safety Injection
MFW	Main Feedwater
MR	Maintenance Rule
MRSC	Maintenance Rule Steering Committee
MSP	Maintenance Surveillance Procedure
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NSS	Nuclear Shift Supervisor
OST	Operating Surveillance Test
PMT	Post-Maintenance Testing
PORV	Power Operating Relief Valves
RCS	Reactor Coolant System
RSHX	Recirculation Spray Heat Exchanger
RW	River Water
SDP	Significance Determination Process
SSC	Structures, Systems, and Components
SWE	Standby Service Water
TOP	Temporary Operating Procedure
TS	Technical Specification

ATTACHMENT 1

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	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent 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.