

June 5, 2001

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

SUBJECT: BEAVER VALLEY POWER STATION - NRC INSPECTION REPORT
50-334/01-04, 50-412/01-04

Dear Mr. Myers:

On May 12, 2001, the NRC completed an inspection at your Beaver Valley Units 1 & 2. The enclosed report documents the inspection findings which were discussed with you and members of your staff on May 18, 2001.

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.

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Mr. L. W. Meyers

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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 No. 7
Division of Reactor Projects

Docket Nos.: 50-334, 50-412
License Nos: DPR-66, NPF-73

Enclosure: Inspection Report 50-334/01-04; 50-412/01-04
Attachment: Supplemental Information

cc w/encl:

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REGION I

Docket Nos. 50-334, 50-412
License Nos. DPR-66, NPF-73

Report Nos. 50-334/01-04, 50-412/01-04

Licensee: FirstEnergy Nuclear Operating Company

Facility: Beaver Valley Power Station, Units 1 and 2

Location: Post Office Box 4
Shippingport, PA 15077

Dates: April 1, 2001 through May 12, 2001

Inspectors: D. Kern, Senior Resident Inspector
G. Dentel, Resident Inspector
G. Wertz, Resident Inspector
M. Ferdas, Reactor Inspector
P. Frechette, Physical Security Inspector
N. Perry, Senior Project Engineer
G. Smith, Senior Physical Security Inspector

Approved by: John Rogge, Chief,
Projects Branch 7
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000334-01-04, IR 05000412-01-04, on 04/01-05/12/2001, FirstEnergy Nuclear Operating Company, Beaver Valley Power Station, Units 1 & 2. Resident inspector report.

The inspection was conducted by resident inspectors, regional physical security specialists, a regional reactor systems specialist, and a regional senior project engineer. 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

No findings of significance were identified.

B. Licensee Identified Findings

No findings of significance were identified.

Report Details

SUMMARY OF PLANT STATUS: Unit 1 began this inspection period at 100 percent power. On April 20, operators performed a planned shutdown to replace the 'A' and 'B' reactor coolant pump (RCP) seals. Following successful RCP seal replacement, operators synchronized the unit to the offsite power grid on April 29, and achieved full power operation on April 30. The unit remained at full power through the end of the inspection period.

Unit 2 began this inspection period at 100 percent power. On April 6, operators declared an Unusual Event (UE) due to a fire in the secondary chemistry laboratory (see Section 4OA3). On April 12, operators performed a planned power reduction to 45 percent to repair 'A' and 'B' heater drain pump packing. Following successful maintenance on the heater drain pumps, plant operators returned the plant to 100 percent power on April 16. On April 21, operators initiated an unplanned power reduction to 45 percent to repair the 'A' heater drain pump motor breaker. Power ascension commenced on April 22, and full power operation was achieved on April 23. On May 12, operators performed a planned power reduction to approximately 27 percent power in order to perform maintenance on the 'B' RCP flow transmitter.

1. **REACTOR SAFETY**

Cornerstone: Initiating Events, Mitigating Systems, Barrier Integrity (Reactor-R)

1R04 Equipment Alignments

.1 Unit 1 Auxiliary Feedwater System

a. Inspection Scope

The inspectors performed a partial system walkdown of the Unit 1 auxiliary feedwater (AFW) system. The inspectors reviewed the system alignment to verify that it was aligned properly as described in Operating Manual (OM) Figures 21-2, 24-3, and procedure 1OM-21.3.B.1, "Valve List 1MS," Rev. 12. The AFW system was selected because it is a risk important system. Additionally, the inspectors evaluated a system configuration alignment issue which had recently caused an AFW pump to become inoperable at another plant.

b. Findings

No findings of significance were identified.

.2 Unit 2 High Head Safety Injection

a. Inspection Scope

The inspectors performed a partial system walkdown of the Unit 2 high head safety injection (HHSI) system. The inspectors reviewed the system alignment to verify that it was aligned properly as described in OM Figures 7-1A, 11-2, 13-2, and Procedure 2OM-7.3.B.1, "Valve List 2CHS," Rev. 13. The HHSI system was selected because it is a risk important system which had recent maintenance.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors reviewed the Unit 1 Updated Fire Protection Appendix R Review, Rev. 16 and the Unit 2 Fire Protection Safe Shutdown Report, Addendum 18 and identified the following risk significant areas:

- Unit 1 cable spreading room (CS-1)
- Unit 1 primary auxiliary building 735' elevation (PA-1E)
- Unit 1 reactor containment building (RC-1)
- Unit 2 control room (CB-3)
- Unit 2 cable tunnel (CT-1)
- Unit 2 secondary plant chemistry laboratory

The inspectors reviewed the fire protection conditions of the above listed areas in accordance with the criteria delineated in Nuclear Power Division Administrative Manual (NPDAP) 3.5, "Fire Protection," Rev. 15. Included in these plant specific reviews were control of transient combustibles, material condition of fire protection equipment, and the adequacy of any fire protection impairments and compensatory measures.

The inspectors examined the secondary plant chemistry laboratory following a fire which resulted in the declaration of an UE on April 6 (see Section 4OA3). The inspectors reviewed the fire protection mitigating and detection equipment and the combustible loading in the area. Although this laboratory contained no radiological material, its ventilation system can communicate with connected ventilation ducting from various radiologically controlled areas. The inspectors evaluated the effect the fire had on the ventilation system and the potential for release of radioactivity. The inspectors walked down the ventilation system, interviewed the system engineer, and reviewed radiological sample results taken from turbine roof ventilation ducts to ensure no radioactive materials were released.

b. Findings

No findings of significance were identified.

1R07 Biennial Heat Sink Performance Inspection

a. Inspection Scope

The inspectors verified that processes and programs were adequate to ensure proper heat exchanger performance for the following heat exchangers:

- Unit 1 'A' and 'B' emergency diesel generator (EDG) heat exchangers
- Unit 2 'A', 'B', and 'C' charging pump lube oil coolers
- Unit 2 'A', 'B', and 'C' service water (SW) pump motor coolers

The methods (inspection, cleaning, maintenance, and performance monitoring) used to ensure heat removal capabilities for the selected components were reviewed and compared to commitments made to NRC Generic Letter (GL) 89-13, "Service Water System Problems Affecting Safety-Related Equipment."

The inspection, maintenance methods, and cleaning frequencies were reviewed with the system engineers and the heat exchanger performance engineer to ensure that they were consistent with expected degradation trends. The inspectors reviewed inspection and cleaning records from January 1999 to April 2001, to verify that the results were recorded and evaluated to ensure proper heat exchanger operation. The inspectors reviewed design basis values and assumptions (i.e., plugging limits and vendor information) and verified that they were incorporated into the heat exchanger inspection and maintenance procedures. The inspectors reviewed the system engineers' trending of key parameters (temperature, differential pressure, and flow) used to assess heat exchanger performance.

The SW and river water (RW) chemical treatment program was reviewed and discussed with the system engineers to verify that potential biofouling mechanisms had been identified, treatments were conducted as scheduled, and results were monitored for effectiveness. In addition, a sample of condition reports (CRs) related to equipment and programs utilized to ensure heat sink performance was reviewed to verify that identified problems were appropriately resolved. The inspectors conducted a walkdown of the SW and RW systems including the selected heat exchangers in order to assess material condition.

2. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspector selected the following safety significant systems in (a)(1) status to verify that: 1) failed systems, structures, and components were properly characterized; 2) goals and performance criteria were appropriate; 3) corrective action plans were appropriate; and 4) performance was being effectively monitored.

- Unit 1 Main Turbine - Electro-Hydraulic Control (EHC)
- Unit 2 Main Feedwater

The inspectors reviewed Maintenance Rule (a)(1) disposition reviews, system improvement plans, system health reports, the EHC Latent Issues Report, Design Change Package 2171, "Feedwater Isolation Valve Modification," and CRs for main feedwater and EHC. The inspector verified that the systems were being appropriately managed as required by 10 Code of Federal Regulations (CFR) 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and System and Performance Engineering Administrative Manual 3.2, "Maintenance Rule Program Administration," Rev. 3.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the scheduling and control of maintenance activities in order to evaluate the effect on plant risk. Scheduling and control of maintenance was evaluated against the criteria contained in NPDAP 7.12, "Non-Outage Planning, Scheduling, and Risk Assessment," Rev. 11. The inspectors reviewed the routine planned maintenance and emergent work for the following equipment removed from service:

- On April 2, operators isolated ventilation to the Unit 2 charging pump cubicles to perform testing of fire damper 2HVP-DMPF213B in accordance with planned Work Order (WO) 00-019036. The inspectors reviewed Engineering Memorandum (EM) 118550 which evaluated the effect that loss of ventilation would have on the operating charging pump and standby HHSI pump, and toured the pump cubicles.
- On April 9, maintenance technicians performed Unit 2 Maintenance Surveillance Procedure (MSP) 6.38-I, "Reactor Coolant Temperature Loop 2RCS-T412 Delta T-Tavg Protection Channel I Calibration," Rev. 11, and 2MSP -6.20-I, "Delta T-Tavg Temperature Loop 2RCS-T412 Channel Test," Rev. 11. The inspectors examined the risk assessment associated with removing one temperature loop instrumentation channel from service.
- On April 16, Unit 2 operators commenced a planned power ascension from 45 percent power following maintenance on the 'A' and 'B' heater drain pumps. The inspectors observed the power ascension in accordance with 2OM-52.4.B, "Load Following," Rev. 37, paying particular attention to the operators' control of feedwater level. The feedwater level control system is risk important as an initiating event due to previous performance problems which resulted in plant transients.
- On May 8, engineers began a series of tests in accordance with Beaver Valley Test (BVT) 3BVT 1.44.05, "Control Room Envelope Air In-Leakage Test," Rev. 0 in order to quantify the amount of outside air leakage into the Unit 1 and 2 control room pressure boundary. During these tests, a trace gas was injected into the control room and normal personnel access was limited. The inspectors reviewed the gas testing methodology, including the impact on the operators' ability to perform normal and emergency actions.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors reviewed human performance during the following non-routine plant evolutions, to determine whether personnel performance caused unnecessary plant risk or challenges to reactor safety. The inspectors reviewed the following evolution in accordance with the requirements listed in NPDAP 8.23, "Infrequently Performed Tests or Experiments," Rev. 5.

- On April 17, operators added boric acid to the Unit 1 RCP seals in an attempt to reverse a degrading trend in seal performance using temporary operating procedure 1TOP-01-004, "Boric Acid Flush of Reactor Coolant Pump Seals," Rev. 0. The inspectors observed the preevolution briefing, procedure performance, and subsequent RCP seal performance trending. The inspectors verified that: 1) proper contingencies were established; 2) operating experience was evaluated and communicated; 3) communication and job responsibilities were clear and understood; and 4) management and supervisory oversight were sufficient.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

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

- On April 9, maintenance technicians determined, during calibration procedure, 2MSP-6.38-1, that the Unit 2 reactor coolant system (RCS) loop 2 temperatures were approximately one degree Fahrenheit (F) beyond their normal tolerance. The inspectors reviewed the temperature effect on reactor protection system operability and design basis assumptions. Using basis for continued operation (BCO) 2-98-011, "RPS/ESFAS Setpoint and Allowable Value Administrative Control," Rev. 2, the inspectors determined that the design basis assumptions were maintained and the reactor protection system would function as designed. Engineers continued to pursue resolution of this issue as documented in CR 01-2025.
- On April 17, operators added boric acid to the Unit 1 RCP seals in an attempt to reverse a degrading trend in seal performance (see Section 1R14 above). The inspectors reviewed Technical Evaluation Report 10149, "Nuclear Steam Supply System Fine Filtration," Rev. 0, in order to assess the impact of the test on the RCP seals as they represent an important part of the RCS pressure boundary.

- During the planned Unit 1 RCP seal replacement shutdown on April 20, residual heat removal (RHR) inlet isolation valve, MOV-1RH-700, failed to open remotely from the control room bench board switch. The valve was declared inoperable and the plant power reduction continued to cold shutdown (Mode 5) as required by TS. The inspectors reviewed BCO 1-01-002, "Dual Indication of MOV-1RH-700," to verify RHR isolation capability remained operable during the outage. The valve was repaired prior to plant power ascension.
- Engineers performed an evaluation of the Unit 2 'A' and 'C' SW pump discharge head ratios and determined that the pumps' performance decreased during the warmer months due to uneven thermal expansion of pump components composed of dissimilar metals. The inspectors reviewed EM 200766, "Evaluation of [2SWS*P21A and C] Performance During Winter/Summer Operation," versus American Society of Mechanical Engineers (ASME) XI, "Head Ratio Acceptance Criteria," in order to validate the operability of the pumps, and evaluate compliance of the new pump performance limits with the Inservice Testing (IST) program.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed and/or observed several post-maintenance tests (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:

- On April 10, the 'A' intake structure was returned to service following bay cleaning. The inspectors verified that proper inspections of the bay were completed in accordance with Operating Surveillance Test (OST) 30.19, "Main and Alternate Intake Structure Silt Check and Bay Cleaning," Rev. 9. The inspectors interviewed maintenance, operations, and engineering personnel, reviewed previous CRs, and observed the post-maintenance critique. Several issues were identified and documented in CR 01-2040.
- On May 7, OST 47.3B, "Containment Penetration and ASME Section XI, Valve Test," Rev. 23, was performed on 'A' steam generator atmospheric release valve 2SVS-PCV101A following maintenance. Operators noted that the valve stroke time (open) exceeded the criteria specified in the OST. The Inservice Testing (IST) program engineer determined that the valve was operable. The inspectors reviewed the maintenance performed, the PMT criteria and the IST program requirements for the valve in order to substantiate the operability determination.

- On April 2, OST 47.3B, "Containment Penetration and ASME Section XI, Valve Test," Rev. 23, was performed on residual heat release valve, 2SVS-HCV104 following maintenance. Operators noted that the valve stroke time (open) exceeded the criteria specified in the OST. The IST program engineer determined that the valve was operable. The inspectors reviewed the maintenance performed, the PMT criteria, and the IST program requirements for the valve in order to substantiate the operability determination.

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

Station personnel conducted a Unit 1 maintenance outage from April 19 to 29 to replace degraded seals on the 'A' and 'B' RCPs. First stage seal leakoff on the 'B' RCP had increased to 4.6 gallons per minute, indicating deteriorating seal performance. The inspectors observed selected reactor shutdown, outage maintenance, and reactor startup activities to determine whether shutdown safety functions (e.g., reactor decay heat removal, reactivity control, electrical power availability, reactor coolant inventory, spent fuel cooling, and containment integrity) were properly maintained as required by TSs and license conditions. Specific performance attributes evaluated included configuration management, communications, instrumentation accuracy, and identification and resolution of problems. The inspectors closely monitored configuration management during reactor coolant loop isolation activities due to the associated increase in shutdown risk. Specific activities evaluated included:

- 'A' reactor coolant loop recovery following RCP seal replacement
- Solid plant reactor coolant system pressure control and establishment of a pressurizer bubble
- Radiological controls to address elevated radiation levels resulting from an RCS crud burst
- Managers' restart readiness assessment meeting

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed and reviewed the following OSTs concentrating on verification of the adequacy of the test to demonstrate the operability of the required system or component safety function.

- 1OST-24.3 "Motor Driven Auxiliary Feed Pump Test [1FW-P-3B]," Rev. 16

- 1OST-13.1 "Quench Spray Pump [QS-P-1A] Test," Rev. 20
- 1OST-13.5 "[1RS-P-1A], Inside Recirculation Spray 1A Pump Dry Test," Rev. 4
- 2OST-24.4 "Steam Driven Auxiliary Feed Pump [2FWE*P22] Quarterly Test," Rev. 39

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

3PP1 Response to Contingency Events

a. Inspection Scope

The following activities were conducted to determine the effectiveness of the licensee's Response to Contingency Events, as measured against the Beaver Valley Power Station Physical Security Plan, and Training and Qualifications Plan.

On April 23, 2001, performance testing of the intrusion detection system was conducted. This testing was accomplished by touring the entire perimeter and selecting areas of potential vulnerability in the intrusion detection system. As a result of this tour, ten specific locations were selected for testing. Inspectors observed security personnel perform crawl, jump, or run testing at these locations. The inspectors also monitored the central alarm station during the tests to observe audible and visual alarm annunciation, and to evaluate the licensee's camera coverage of the perimeter.

Firearms proficiency was observed on April 22, 2001. The course of fire for stress firing was observed. Three security officers demonstrated their proficiency on this course of fire. In addition, a selected review of 12 firearms qualification training records was performed.

A review was conducted of the defensive strategy, response timelines, target sets, and relevant implementing procedures. Upon completion of this review, four tabletop drills were conducted with a security shift supervisor and a response team leader. The scenario selections, including the adversary entry points and targets, were made by the inspectors for each tabletop drill.

On April 25, 2001, a review of documentation associated with the licensee's drill and exercise program was conducted. This review included the documentation and critiques for response drills conducted during the four quarters prior to the inspection.

b. Findings

No findings of significance were identified.

3PP4 Security Plan Changes

a. Inspection Scope

An in-office review was conducted of changes to the Physical Security Plan, identified as Revision 40 to Issue 4, submitted to the NRC on August 1, 2000, in accordance with the provisions of 10 CFR 50.54(p). The review was conducted to confirm that the changes were made in accordance with 10 CFR 50.54(p), and did not decrease the effectiveness of the plan.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA3 Event Follow-up

a. Inspection Scope

At 7:43 p.m. on April 6, 2001, Unit 2 operators declared an UE due to a fire adjacent to the primary auxiliary building, which was not extinguished within 15 minutes. The source of the fire was a diesel fuel oil sample being analyzed in the secondary chemistry laboratory. The oil sample and exhaust hood ventilation duct caught fire. Automatic fire suppression systems in the room actuated as designed, containing, but not fully extinguishing the fire. The station fire brigade responded, and offsite fire fighting assistance was requested due to heavy black smoke seen exiting the rooftop ventilation ducts. The station emergency response organization responded to the site, but did not activate the emergency response facilities. The station fire brigade applied water from two fire hoses for approximately 15 minutes to extinguish the fire. The fire was declared out at 8:22 p.m.

The Nuclear Shift Supervisor terminated the UE at 11:00 p.m., based on the fire being extinguished, a reflash watch was stationed, the plant was stable, and adequate support staff was available for contingencies. The fire was contained to the secondary chemistry laboratory, which is inside the protected area, but outside of the radiologically controlled area. There was no direct challenge to radiological barriers or mitigation equipment, and no indication of radioactive release to the environment. The inspectors noted that the initial radiation surveys were insufficient to fully evaluate the potential for radiological release. Technicians performed additional radiological surveys to address the inspectors' concerns. No indication of a radiological release from this event was identified. Unit 2 remained at full power during the fire.

The inspectors responded to the control room, plant spaces adjacent to the fire, and the emergency response facility to evaluate licensee response to the event. The inspectors inspected adjacent plant areas for indications of damage from the fire or fire fighting activities. The inspectors verified that the emergency plan was properly implemented and determined that fire brigade response was appropriate. Condition Reports 01-1975 and 01-2032 were initiated to address event reporting deficiencies observed by the inspectors.

b. Findings

No findings of significance were identified.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Lew Myers, and other members of licensee management following the conclusion of the inspection on May 18, 2001. The licensee acknowledged the findings presented.

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

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. Key Points of Contact

R. Boyle	System Engineer
C. Brooks	Plant Services Director, Acting
T. Cosgrove	Manager, Licensing
G. Davie	Training Manager
R. Dibler	Nuclear Analyst
N. DiPietro	Supervisor Nuclear Access
R. Donnellon	Director, Projects and Scheduling
R. Fast	Director, Plant Maintenance
R. Freund	Supervisor, Unit 2 Radiological Operations
D. Girdwood	Supervisor, Unit 1 Radiological Operations
D. Huff	Manager Support Engineering
D. Kline	Security Manager (Acting)
E. Kazak	Heat Exchanger Performance Engineer
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D. Orndorf	System Engineer
L. W. Pearce	Plant General Manager
M. Pearson	Director, Plant Services
P. Schwartz	Operations Training Superintendent
B. Sepelak	Supervisor Regulatory Affairs
J. Sipp.	Manager, Health Physics
F. von Ahn	Director, Plant Engineering
R. Williams	Supervisor Nuclear Engineer

b. List of Documents ReviewedDrawings

DWG No. 8700-RM-1	Valve Oper. No. Diagram River Water System
DWG No. 8700-RM-430-6	Valve Oper. No. Diagram RW/SWS Chemical Injection System
DWG No. 10080-RT-107A	Tube Sheet Map for Heat Exchanger 2CHS-E25A
DWG No. 10080-RT-107B	Tube Sheet Map for Heat Exchanger 2CHS-E25B
DWG No. 10080-RT-107C	Tube Sheet Map for Heat Exchanger 2CHS-E25C
DWG No. 10080-RM-430-1	Valve Oper. No. Diagram Service Water Supply and Distribution
Sketch 8700-2.19-35	Diesel Generator Heat Exchanger Assembly for EE-E-1A

Procedures

SPEAP-2.4, Rev. 2	River/Service Water System Control and Monitoring Program
NPAP 8.20, Rev. 6	River/Service Water System Control and Monitoring Program
1/2PMP-7CH-P-1A/ 21A-B-C-1M	Charging/High Head Safety Injection Pump Lubrication and Maintenance
1 MSP-36.22M, Rev. 9	No. 1 Emergency Diesel Generator Filter, Strainer, Heat Exchanger, and Woodward Governor Maintenance
NPAP 2.19, Rev. 5	Commitment Management
1OST-30.12A	Train 'A' Reactor Plant River Water System Full Flow Test
2OST-30.13A	Train 'A' Service Water Full Flow Test

Work Orders

WO 00-016069-000	Acid Clean Coil Service Water Pump 21A Motor
WO 00-016068-000	Replace Upper Lube Oil Cooler Tubing Service Water Pump 21A Motor

Heat Exchanger Inspection/Cleaning

Tube Side Heat Exchanger Inspection Sheet - Diesel Generator 1A dated 4/16/99
 Tube Side Heat Exchanger Inspection Sheet - Diesel Generator 1A dated 3/16/00
 Tube Side Heat Exchanger Inspection Sheet - Diesel Generator 1B dated 10/21/99
 Tube Side Heat Exchanger Inspection Sheet - Charging Pump Lube Oil Cooler A dated 4/14/00
 Tube Side Heat Exchanger Inspection Sheet - Charging Pump Lube Oil Cooler A dated 1/18/01
 Tube Side Heat Exchanger Inspection Sheet - Charging Pump Lube Oil Cooler B dated 1/5/99
 Tube Side Heat Exchanger Inspection Sheet - Charging Pump Lube Oil Cooler B dated 12/7/99
 Tube Side Heat Exchanger Inspection Sheet - Charging Pump Lube Oil Cooler C dated 7/6/00

Condition Reports

CR-00-0459	Unit 1 Cooling Tower De-Icing Pump
CR-00-1439	RWIA - Heat Exchanger Inspection Program
CR-00-1627	WR-P-1B Removed From Service due to Seal Water/Motor Cooling
CR-00-1798	Water Found in Oil Sample for WR-P-1B Motor Upper Bearing
CR-01-0771	1WR-P-9A Motor Lube Oil Cooler Damaged Undetected Condition
CR-01-0567	1/2OST 33.19 Intake Structure Bay Cleaning
CR-01-1102	Inadequate Silt Checks in Portions of the Intake Structure

Miscellaneous

Beaver Valley NRC GL 89-13 Response, dated January 29, 1990
 Self Assessment BV-SA-00-70 Report for Asiatic Clam and Zebra Mussel Control Program

NDISEG:1231, dated September 10, 1999 - Review of Generic Letter 89-13
 Commitments
 Beaver Valley Power Station River Water Latent Issues Report
 VTI 08700-01.030-0034 - Technical Manual EDG Lube Oil Coolers, 1E-EE-1A, 1B
 HX Inspection Cleanliness Trending Table (1994 to 2001) for Charging Pump Lube Oil
 Coolers
 'A', 'B', 'C' Charging Pump Lube Oil Cooler SWS Flow Trending Graph - 6/97 to 4/01
 'A', 'B', 'C' SWS Motor Bearing Temperature Trending (2OST-36.14) - 12/00 to 4/01
 Unit 1 Diesel Generator Engine Fuel Oil and Cooling Water Parameters Trend - 7/97 to
 3/01
 Heat Exchanger Specification Sheet - Charging Pump Lube Oil Coolers
 Heat Exchanger Specification Sheet - Diesel Generator Heat Exchanger
 Service Water System Health Reports - Quarter 1, 2000 to Quarter 4, 2000
 River Water System Health Reports - Quarter 1, 2000 to Quarter 4, 2000
 Safeguards Event Reports - 2nd, 3rd, and 4th Quarter, 2000, and 1st Quarter 2001
 Beaver Valley Training and Qualifications Plan
 Beaver Valley Physical Security Plan
 Selected personnel training records
 Beaver Valley Drill and Exercise Program Manual

c. List of Acronyms

AFW	Auxiliary Feedwater
ASME	American Society of Mechanical Engineers
BCO	Basis for Continued Operation
BVT	Beaver Valley Test
CFR	Code of Federal Regulations
CR	Condition Report
EDG	Emergency Diesel Generator
EM	Engineering Memorandum
EHC	Electro-Hydraulic Control
FENOC	FirstEnergy Nuclear Operating Company
GL	Generic Letter
HHSI	High Head Safety Injection
IST	Inservice Testing
MSP	Maintenance Surveillance Procedure
NPDAP	Nuclear Power Division Administrative Procedure
NRC	Nuclear Regulatory Commission
OM	Operating Manual
OST	Operating Surveillance Test
PMT	Post-Maintenance Test
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RW	River Water
SW	Service Water
TS	Technical Specification
UE	Unusual Event
WO	Work Order