October 23, 2000

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

SUBJECT: NRC'S BEAVER VALLEY POWER STATION - NRC INSPECTION REPORT NO. 50-334/2000-009; 50-412/2000-009

Dear Mr. Myers:

On September 14, 2000, the NRC completed a team inspection at the Beaver Valley Power Station, Units 1 & 2. The enclosed report presents the results of that inspection. The preliminary results of this inspection were discussed with you and other members of your staff, on September 14, 2000. A subsequent follow-up telephone conversation with Mr. B. Sepelak of your staff was conducted on October 6, 2000, to discuss the one green finding of the inspection.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, compliance with the Commission's rules and regulations, and with the conditions of your license at the Beaver Valley Power Station. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

In general, the team concluded that over the past year implementation of the corrective action program was acceptable at the Beaver Valley Station. However, the team identified a number of instances of ineffective and untimely implementation of corrective actions, including a GREEN finding for the RWST level transmitter failures. The team observed that condition report investigations, corrective actions, and preventive maintenance (PM) task deferrals were not receiving proper management approval to extend the due dates.

Based on the results of this inspection, there was one green finding identified during this inspection associated with inadequate and untimely corrective actions. This finding was determined to be a violation of NRC requirements. Specifically, failure to implement timely and effective corrective actions for three Unit 1 level transmitter failures that occurred after the transmitters were replaced in 1998 is considered a violation of 10 CFR 50, Appendix B, Criterion XVI. However, in accordance with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65FR25368), the violation was not cited due to its very low safety significance and because the finding was entered into your corrective action program. If you contest the non-cited violation, 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; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; and the NRC Resident Inspector at the Beaver Valley facility.

Mr. L. W. Myers

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Sincerely,

/RA/

Wayne D. Lanning, Director Division of Reactor Safety

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

Enclosure: Inspection Report 05000334/2000-009; 05000412/2000-009

<u>cc w/encl:</u>

- L. W. Pearce, Plant General Manager
- R. Fast, Director, Plant Maintenance
- F. von Ahn, Director, Plant Engineering
- R. Donnellon, Director, Projects and Scheduling
- M. Pearson, Director, Plant Services
- T. Cosgrove, Manager, Licensing
- J. A. Hultz, Manager, Projects and Support Services, FirstEnergy
- M. Clancy, Mayor, Shippingport, PA
- Commonwealth of Pennsylvania

State of Ohio

State of West Virginia

Mr. L. W. Myers

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D. Thatcher, NRR

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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.	05000334, 05000412
License Nos.	DPR-66, NPF-73
Report Nos.	05000334/2000-009, 05000412/2000-009
Licensee:	FirstEnergy Nuclear Operating Company
Facility:	Beaver Valley Power Station, Units 1 and 2
Location:	Post Office Box 4 Shippingport, PA 15077
Dates:	August 28 - September 1, 2000 September 11-14, 2000
Inspectors:	 P. Kaufman, Senior Reactor Inspector, Team Leader S. Pindale, Reactor Inspector F. Arner, Reactor Inspector G. Dentel, Resident Inspector J. McFadden, Health Physicist
Approved by:	Lawrence T. Doerflein, Chief Systems Branch Division Reactor Safety

SUMMARY OF FINDINGS

IR 05000334-00-09; 05000412-00-09; on 08/28-9/14/2000; Beaver Valley Power Station, Units 1&2; Other activities. Annual baseline inspection of the Identification and Resolution of Problems. Findings in evaluation of issues and effectiveness of corrective actions.

The inspection was conducted by three regional inspectors, a regional health physicist, and a resident inspector. This inspection identified one green issue which was a non-cited violation. The significance of issues is indicated by their color (green, white, yellow, red) and is determined by the Significance Determination Process (SDP). (Refer to Attachment 1)

Identification and Resolution of Problems:

The team concluded that implementation of the corrective action program was acceptable at the Beaver Valley Station. In general, problems are identified and corrective actions implemented adequately for risk significant problems. The team identified a number of instances of ineffective and untimely implementation of corrective actions to properly resolve identified deficiencies. In addition, some root cause analyses were found to be narrowly focused. The team's evaluation of FENOC's recently completed assessment of the corrective action program by the Quality Services section was thorough and critical. Based on interviews and review of issues contained in the Ombudsman program, individuals working at the Beaver Valley Station felt free to identify safety issues without fear of retaliation.

Cornerstone: Mitigating Systems

• GREEN. A Non-cited Violation of 10 CFR 50, Appendix B, Criterion XVI, was identified associated with the failure to implement timely and effective corrective actions for degraded components which had safety significance. Specifically, FENOC had not determined the cause of three Unit 1 level transmitter failures that occurred after the transmitters were replaced in 1998, a Part 21 notification associated with the same model series transmitters had not been recognized or evaluated prior to the actual installation of the components, and an evaluation of extent of condition and potential generic failure modes had not been performed. The team determined that this represented inadequate corrective actions. The risk associated with the failure of the RWST level transmitters had been determined to be very low safety significance, based on the results of the phase 3 analyses. (4OA2.3)

Report Details

4. OTHER ACTIVITIES Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Occupational Radiation Safety, Public Radiation Safety, and Physical Protection

4OA2 Identification and Resolution of Problems

.1 <u>Effectiveness of Problem Identification</u>

a. Inspection Scope

The team reviewed various items selected from FENOC's condition report program across the seven cornerstones of safety to determine if problems were being properly identified. The team performed plant walkdowns and conducted interviews with plant personnel to determine if risk significant problems were appropriately identified and entered into the condition report system for evaluation and resolution. In addition, FENOC's efforts in establishing the scope of problems were evaluated by reviewing control room logs, engineering memorandum, self-assessment results, system health reports for the top five risk significant plant systems for Unit 1 and Unit 2, results from post-maintenance tests, and preventive maintenance tasks. The condition reports and other documents listed in Attachment 2 were used to facilitate the review.

b. Issues and Findings

There were no findings identified regarding the effectiveness of problem identification. In general, problems and issues were appropriately identified and entered into the Beaver Valley Station corrective action program. Also, adequate identification of problems was completed in a timely manner commensurate with their significance.

Regarding the utilization of the Condition Report system, the team found one instance where an issue concerning unqualified paint in the Unit 1 Containment had not been entered and evaluated through the Condition Report system. However, FENOC had been tracking this issue through engineering memorandum 200539. Nevertheless, the team determined that the condition report process would have been more appropriate in order to ensure disposition of the nonconforming unqualified paint. In addition, a recent NRC Inspection Report 50000334/412-00-006 identified several occasions where condition reports had not been written for some deficiencies that were conditions adverse to quality.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The team reviewed selected issues from the Condition Report (CR) system to determine whether FENOC is adequately prioritizing and evaluating issues for conditions adverse to quality. The condition reports listed in Attachment 2 were used to facilitate the review.

b. Issues and Findings

The team identified the following examples of narrowly focused root cause evaluations:

- The root cause for CR 99-2186, related to inadequate logs/equipment labeling gaseous waste oxygen analyzer, did not address broader implications of the problem. Specifically, the root cause was determined to be change management (a process problem) in that a controlling design change document did not identify all necessary revisions for procedures and operating limits. However, the extent of condition review narrowly considered only the oxygen analyzer issue and not the specific design change process that could have resulted in additional similar configuration deficiencies. FENOC intends to reexamine CR 99-2186 and associated corrective actions to determine if additional corrective actions are needed and has generated CR 00-3197 to track this review.
- The root cause analysis for CR 00-2216, which identified a human performance error during a power range calibration, was considered to be ineffective because the investigation was not thorough enough to determine why technicians incorrectly interpreted calibration data. Two additional items were also relevant. A similar error had occurred previously, and subsequent to closing the CR, an independent reviewer had identified another possible cause not previously considered or identified related to the technicians' qualifications. FENOC has subsequently re-opened the CR for re-analysis.
- The root cause for CR 99-3062 (Refueling Water Storage Tank Low Level) was incorrect or too narrowly focused. An extent of condition review or a 10 CFR Part 21 screen was not performed for the repetitive failures of the same model series transmitters. (see section .3.b.)

Overall, causal analysis was determined to be adequate. This was based on the review of approximately 50 evaluations. Three evaluations were found to be narrowly focused but had very low safety significance. In addition, the characterization and prioritization of problems identified in condition reports generally reflected their safety significance with the exception of several Refueling Water Storage Tank (RWST) transmitter failures discussed in Section .3.b. of this report.

.3 Effectiveness of Corrective Actions

a. Inspection Scope

The team reviewed the effectiveness of corrective actions to verify that corrective actions, commensurate with the problem or issue, were identified and implemented. The review included an evaluation to determine: whether FENOC considered extent of condition, generic implications, common cause, and previous occurrences; and, that condition report investigations and resulting corrective actions were implemented in a timely matter commensurate with safety and risk significance. A listing of condition reports selected for review is shown in Attachment 2 of this report.

b. Issues and Findings

The team identified a number of instances related to ineffective and untimely corrective actions, including the GREEN finding for inadequate corrective actions for the RWST level transmitter failures which had very low safety significance. The team also determined a continuing weakness exists in this area because the previous NRC inspection of the corrective action program in August 1999 at the Beaver Valley Station identified similar problems with implementation of effective and timely corrective actions. Even though problems with timely and effective corrective actions continued to be identified during this inspection, the team concluded that FENOC generally implemented adequate corrective actions for risk significant problems. The team identified the following examples of untimely and ineffective corrective actions.

The team found that 26 condition report investigations and 38 corrective actions were overdue and no management approved extension was performed. The overdue items included issues associated with measurement and testing equipment (M&TE) issues and the Preventive Maintenance (PM) program. The absence of approved extension requests was not significant in itself; however, a cognitive decision to extend the due date and to evaluate the risk significance of the overdue investigations and corrective actions was not completed as required by Nuclear Power Division Administrative Procedure (NPDAP) 5.6, "Initiation and Processing of Condition Reports." The team examined the overdue investigations and corrective actions and did not identify any individual issue or collective risk significant issues in the overdue items. Based on this observation by the team, FENOC acknowledged the lack of risk analysis review in the corrective action process and issued CR 00-3195 on September 22, 2000.

A recent NRC supplemental inspection was conducted in June 2000, NRC Inspection Report 50-334/412-2008, that identified additional examples of preventive maintenance (PM) task deferrals entering their grace period without receiving proper level of management approval required by the PM Program. Additionally, the PM Program weaknesses were documented and evaluated in several CRs, including Level 2 CR 99-3581. Corrective action No. 22 for that CR stated to perform an effectiveness review (due date August 25, 2000), however, the team found that the review had not been started nor was an extension requested.

Recurring deficiencies in the area of equipment trending by system engineers also indicated ineffective corrective actions. Specifically, Audit BV-C-99-18, and Self-Assessments BV-SA-99-18 and BV-SA-00-64 had findings that indicated a lack of a systematic approach to selecting and analyzing key parameters. This resulted in not providing early warning of equipment failures such as the Unit 1 RWST level transmitters, Unit 1 river water vacuum break check valves, and Unit 1 auxiliary river water pump packing issues documented in NRC Inspection report 50-334/412-2005.

FENOC was slow to collectively characterize multiple human performance errors (mostly related to instrument maintenance) to identify root causes and to develop comprehensive and appropriate corrective actions. Examples of human performance errors are documented in CRs 99-2389, 00-2216, 00-2244, and 00-2285. FENOC initiated CR 00-2336 to investigate the adverse trend in human performance errors after the NRC resident inspectors identified this trend to station management in July 2000. FENOC has subsequently initiated related CR 00-2939 specific to instrument technician performance.

FENOC has experienced a high failure rate, 5 failures in 3 years, on the RWST level instruments. These instruments are important to safety because they allow the automatic swap-over from injection phase to recirculation phase following a Safety Injection (SI) signal. If the swap- over occurs prior to adequate accumulated inventory in the containment sump, the SI pumps would be damaged resulting in the loss of all Emergency Core Cooling Systems (ECCS) and containment cooling. Therefore, the scenario/sequence of concern would be any SI signal and the failure of 2/4 RWST level transmitters low. The team determined the categorization assigned to condition reports associated with three refueling water storage tank (RWST) level transmitter failures on Unit 1 had contributed to less than effective corrective actions. Specifically, the same downscale failure occurred in three independent level channels since the installation of replacement transmitters in 1998, however, FENOC had not evaluated the extent of condition or determined the cause of the failures.

Two recent RWST level transmitter failures had occurred in April and June of 2000. Condition reports 00-1505 and 00-2121 had been categorized as level (3b) and (3a) respectively. NPDAP 5.6, "Initiation and Processing of Condition Reports," defined category 3 condition reports as requiring remediation with minimal (3a) or no (3b) investigation. Therefore, an extent of condition review, root cause determination, or a 10 CFR Part 21 screen was not required, nor performed, for the repetitive failures of the same model series transmitters. In response to the teams concerns, FENOC initiated condition reports 00-3050 and 00-3052 to document the trend of the instrument failures and determine the cause of the failures. The inspection team discovered that a 10 CFR Part 21 notification had been previously made by the vendor, in 1996, relative to these commercial grade transmitters. The notification discussed the potential for electronic modules to fail if high thermal cycles existed in common with potting stresses on plated pins within the module. The team notified FENOC of this information.

FENOC initiated condition report 00-3185 to investigate the applicability of the Part 21 relative to the subject transmitters installed in 1998. Additionally, condition report 00-3189 was initiated to determine the impact of the vendor Part 21 notification on the installed instruments. FENOC intends to inspect the installed transmitters to determine the applicability of the Part 21 report and insulation was planned to be installed over the transmitters to maintain the transmitters at a more stable temperature. FENOC determined that the RWST level transmitters were operable based on current surveillance test results but exhibited a degraded trend with regard to failure rates.

The RWST transmitter issue affected the Mitigating Systems Cornerstone and was evaluated using the Significance Determination Process (SDP). Because of the high failure rate, risk increased and the issue was considered more than minor by the phase 1 SDP. The team was unable to use phase 2 SDP because the RWST level transmitters are not included in the Unit 1 Beaver Valley SDP worksheets. Additionally, the FENOC PRA staff indicated that this sequence was not currently modeled in the PRA and may be considered during a future PRA model update. The team requested the NRC Senior Reactor Analyst perform a phase 3 SDP assessment. FENOC PRA staff also performed a phase 3 SDP assessment.

There are clear indications of a channel failure to the operators in the control room, so it is unlikely that a latent transmitter failure would occur and the logic is such that an inadvertent swap-over event would require 2 of the 4 RWST level transmitter failures following an SI signal. Since FENOC's root cause evaluation has not been completed, there has been no clear evidence of a common cause for the failures experienced. Therefore, for this condition to adversely affect safety-related equipment a low frequency initiating event would need to occur followed by the independent failure of 2 RWST level transmitters during the short period of time between the start of the event and the recirculation swap-over. The frequency of the combination of events occurring is very low. Based on the results of the phase 3 analyses the team concluded that the risk associated with the failure of the RWST level transmitters has very low safety significance (GREEN).

The RWST level transmitters are included in the Maintenance Rule as risk significant and were modeled in the PRA based on their failure late in the accident sequence. However, were not included for an early failure which may have resulted in a swapover to a dry sump.

Overall, the cause of the failures had not been identified, a Part 21 notification associated with the same model series transmitters had not been recognized or evaluated prior to the actual components installation, and an evaluation of extent of condition and potential generic failure modes had not been performed. The team determined that the evaluation of the deficiency was inadequate, and corrective action resolution was ineffective. This issue represented a failure to implement timely and effective corrective actions for an identified deficiency and is considered a violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action." This is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy, issued on May 1, 2000 (65FR25368). This issue was entered into the Beaver Valley corrective action program as CR 00-3185 and CR 00-3189. (NCV 050000334/2000-009-01; 050000412/2000-009-01)

.4 Effectiveness of Licensee Audits and Assessments

a. <u>Inspection Scope</u>

The team reviewed samples of departmental self-assessments and Quality Services Section audits to evaluate the effectiveness of these activities in assessing performance and identifying problems. The review included various plant functional area selfassessments and the FENOC Quality Service Section audit of the corrective action program. The review was performed to determine whether current licensee assessments of its performance in the area of corrective actions were consistent with the team's findings.

b. Issues and Findings

There were no findings regarding the effectiveness of licensee audits and assessments. FENOC's audit findings of the corrective action program were consistent with this NRC team's inspection observations. The Quality Service Section Audit BV-C-00-08, September 7, 2000, found similar weaknesses as this NRC inspection team did with respect to implementation of certain aspects of the corrective action program. In particular, actions to address and resolve identified deficiencies have not been effective and investigations and corrective actions have not always been timely. The Quality Services audit concluded that implementation of the corrective action program was not fully effective. Quality Services provided good oversight of the corrective action program and generated nine condition reports from the audit findings. The NRC team concluded that the audit was thorough and critical of the corrective action program.

.5 Assessment of Safety Conscious Work Environment

a. Inspection Scope

The inspectors assessed whether there was indication that licensee personnel may be reluctant to report safety issues. Interviews were conducted with station personnel at levels within the various organizations to determine if conditions existed that would challenge the establishment of a safety conscious work environment. In addition, a sample of open and resolved concerns documented over the past year within the employee concerns program (the Ombudsman) were reviewed.

b. Issues and Findings

There were no findings regarding the safety conscious work environment. FENOC is maintaining a culture within the workplace in which employees are encouraged, rewarded, or acknowledged for identifying safety issues without fear of retaliation. Safety concerns identified through the Ombudsman process were being adequately resolved while maintaining the confidentiality of the concerned individual.

4OA6 Exit Meeting Summary

Preliminary inspection results were discussed with you and other members of your staff on September 14, 2000. A subsequent follow-up telephone conversation on October 6, 2000, with B. Sepelak, Senior Licensing Supervisor was held to discuss the non-cited violation (GREEN finding) for untimely and ineffective corrective actions associated with the RWST level transmitter failures.

PARTIAL LIST OF PERSONNEL CONTACTED

FENOC

- L. Myers Senior Vice President, Nuclear
- W. Pearce Plant Manager
- F. von Ahn Director, Plant Engineering
- R. Fast Director, Plant Maintenance
- R. Donnellon Director, Projects and Scheduling
- M. Pearson Director, Plant Services
- T. Cosgrove Licensing Manager
- L. Freeland Manager, Corrective Actions
- R. Hansen Manager, Quality Services
- B. Sepelak Senior Licensing Supervisor
- D. Mickinac Licensing Engineer
- R. Freund Acting Supervisor-Rad Ops Unit 1
- J. Habuda Chemistry Specialist
- R. Harris Supervisor-Chemistry Operations
- C. Miller Technician-Radiological Control
- J. Tomsic Chemistry Specialist
- J. Venzon Manager-Chemistry
- J. Ankney Senior Engineer
- D. Gratta System Engineer

<u>NRC</u>

- L. Doerflein Chief, Systems Branch, DRS
- J. Rogge Chief, Projects Branch 7, DRP
- G. Wertz Resident Inspector, Beaver Valley

INSPECTION PROCEDURES USED

71152, Identification and Resolution of Problems

ITEMS OPENED, CLOSED, AND DISCUSSED/UPDATED

Opened/Closed

05000334&05000412/2000-009-01 NCV

An NCV of 10 CFR 50, Appendix B, Criterion XVI was identified for ineffective corrective actions associated with Unit 1 RWST level transmitter failures.

LIST OF ACRONYMS USED

- FENOC FirstEnergy Nuclear Operating Company
- M&TE Measuring and Test Equipment
- NRC Nuclear Regulatory Commission
- NPDAP Nuclear Power Division Administrative Procedure
- PM Preventive Maintenance
- SDP Significance Determination Process

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

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.

ATTACHMENT 2

LIST OF DOCUMENTS REVIEWED

TEMPORARY MODIFICATIONS

- 2-98-10 Resistor Installed on Termination Board of 2RSS-LT151A
- 2-99-11 2CHS-1 Capped and Seal Welded
- 2-99-16 2RCS-50 Capped and Seal Welded

BASIS FOR CONTINUED OPERATION

- 1-00-006 Back Flow through Unit 1 HHSI Discharge Check Valve
- 1-99-003 Unit 1 Diesel Air Start High Dew Points

WORK ORDERS

99-204975	00-004458
99-207858	00-004459
99-210631	00-004461
99-216139	00-006957
99-219873	00-007450
00-001708	

PROCEDURES

Nuclear Power Division Administrative Procedure (NPDAP) 5.6, Revision 9, Initiation and Processing of Condition Reports NPDAP 8.10, Onsite Safety Committee, Revision 7 NPDAP 8.13, Nuclear Safety Review Board, Revision 2 NPDAP 7.4, Temporary Modifications, Revision 8

ENGINEERING MEMORANDUMS

- 200099 1QS-P-4A, B, C, and D
- 200381 SI-P-1A Recirculation Flow Rate
- 200438 Evaluation for Flood Doors 1IS05-09 and 1IS05-11
- 200539 Unqualified Paint in Unit 1 Containment
- 117470 Evaluation of UFSAR Accident Analysis Review Results
- 118455 Westinghouse NSAL-94-016 R1, "Core Recriticality During Hot Leg Switchover"
- 118595 Relief Valve RV-SI-894 Design Criteria
- 118463 River Water Pump Seismic Ring Clearance
- 200733 Reevaluation of EOP-Related Channel Inaccuracies
- 116203 Minimum 125VDC Voltage for 4KV and 480V Circuit Breaker Testing

CONDITION REPORTS

- 98-1262 Failure of Safety Related PAM Indication during a Seismic
- 98-1564 RWST Level Channel IV
- 99-0166 Clearances that have been in Effect for >60 Days
- 99-0244 Insufficient Corrosion Monitoring/control of Emergency Diesel Generator Jacket Water System
- 99-0282 2CCP-DCV101B Oscillations in Auto
- 99-1378 Unit 2 Feedwater Iron Concentration
- 99-1684 Incomplete Assessment for Deferral of Equipment Maintenance
- 99-1685 Preventive Maintenance Deferrals
- 99-1686 Degradation of Equipment Performance and Materiel Condition
- 99-1689 Inappropriate Procedure Changes
- 99-1774 Maintenance Department Has Not Demonstrated the Ability to Independently Identify and Effectively Correct M&TE Problems
- 99-2074 Security Alarm Not Activated
- 99-2240 Difficulty in Balancing Biocide Treatment
- 99-2643 NRC Identified Ineffective Use of PRA Risk Insights
- 99-2813 Service Water System Thickness Examinations
- 99-2821 Unit 2 EDG Operating Temperatures/Margins need Evaluation
- 99-2961 Pressurizer PORV Retest Failure
- 99-3062 RWST Low Level
- 99-3362 Chemistry OJT Records Could Not Be Located
- 99-3426 Lifetime and Non-Lifetime QA Records Not Transmitted to the Records Center
- 99-3459 Latching mechanism of HELB door
- 99-3460 Site Access
- 99-3652 2MSS-SOV105C Turbine Driven AFW Pump Steam Line Isolation Valve Reoccurring Problem (Rollup of 9 CRs over 4 month period)
- 00-0004 DRMS Setpoint/Setpoint Log Error
- 00-0128 Unit 2 Containment Instrument Air Compressor
- 00-0187 Scope and Frequency of 2CHS-P21C PM
- 00-0351 Weakness in Rework Trending Program
- 00-0440 U2 Exceeds AFW WANO Unavailability Index Indicator for January
- 00-0839 Anti-C Laundry Bag Removed from FME Area on Spent Fuel Pool Crane
- 00-0924 MOV-1SI-862A Position Anomaly
- 00-0939 Channel Calibration Procedure Problems
- 00-1099 Spread of Contamination from RHR System Work
- 00-1379 RWIA Issue Biocide Injections
- 00-1378 RWIA Issue Chemistry Concerns
- 00-1401 Quench Spray Pump Venting
- 00-1432 Recorder Work Causes Steam Generator Level Transient
- 00-1505 RWST Level Channel
- 00-1650 Unit 1 Sewage Treatment Plant Monthly Average TSS Exceeds Specification
- 00-1758 NPDES Records Inadequacies
- 00-1870 Possible Adverse Trend in Rework
- 00-1904 2CHS-P21B Priming of Lube Oil Pump
- 00-1971 Davis Besse Condition Report on Diesel Fuel Needs Evaluation at BVPS
- 00-2002 BV2 System 37 Failed it's a(1) Goals due to a 2nd Safety Related Breaker Failure
- 00-2007 Deformed Expansion Joint

CONDITION REPORTS(cont.)

- 00-2036 Unexpected Source of Radiation in the Unit 2 Fuel Handling Building
- 00-2043 Failure to Document M&TE Usage
- 00-2044 Failure to Document M&TE Usage
- 00-2047 2SWS-408 Found Corroded in the Shut Position
- 00-2072 Individual Discovered in Unit 1 Radiologically Controlled Area Without a TLD
- 00-2075 Missed Daily Reviews of Chemistry Source Accountability Log
- 00-2121 RWST Level Transmitter Failure Channel 1
- 00-2122 Review of Second Quarter Trending Data by the Corrective Action Section and the Human Performance Coordinator Found Potential Adverse Trends
- 00-2126 Untimely Chemistry Independent Verification
- 00-2187 Chemistry Closed Loop Cooling Monitoring Program
- 00-2196 Adverse Rework Percentage Within the Unit 2 FIN Group
- 00-2201 Use Of Wrong Effluent Rad Monitor Channel Dose Projection
- 00-2205 EPP Evaluated Exercise equipment malfunctions
- 00-2207 Performance Weakness by Rad Tech During 2000 Evaluated Exercise
- 00-2216 Human Performance Error Causes Power Range Calibration Error
- 00-2236 NRC Identified Weakness in Corrective Actions Human Performance
- 00-2244 N44 Power Range Re-calibration
- 00-2285 Unintended Entry Into TS 3.3.1.1 Table 3.3-1 Item 7 and 8 (OPDT, OTDT)
- 00-2334 NRC Identified Weakness in Corrective Action Program Response Auxiliary River Water Pump 9A
- 00-2361 Pass Material Condition Deficiencies
- 00-2383 1RW-409 Still Leaks After Replacement Rework
- 00-2405 Sampling Problems with Unit #2 Main Unit Generator
- 00-2406 Ineffective Communications Causes Delay in Plant Chemistry Control
- 00-2414 Contaminated Chemical Treatment Discovered
- 00-2419 Increased U2 Steam Generator Sodium Concentration
- 00-2426 Lost Offsite Environmental TLD
- 00-2453 Compliance to Chemistry Manual for M&TE Logs
- 00-2456 Maintenance of Chemistry Manual Controlled Copies
- 00-2755 Inadequate Investigation and Approval of Category 2 Condition Report
- 00-2939 Negative CR Trend Identified in Relation to I&C Attention to Detail
- 00-3050 RWST Level Channels I, II & IV
- 00-3052 RWST Level Channels I, II & IV

SELF-ASSESSMENT & QUALITY SERVICES AUDIT REPORTS

- BV-C-98-10 Audit of Nonconformance Control and Corrective Actions
- BV-SA-99-21 Condition Report Program Self-Assessment
- BV-SA-00-05 Evaluation of BVPS Corrective Action Program for Compliance to INPO Principles
- BV-C-99-19 Audit of the Maintenance Programs Unit
- BV-C-99-06 Audit of Control and Calibration of Measuring and Test Equipment Program
- BV-C-00-05 Audit of Chemistry
- BV-SA-00-17 Self-assessment of the Conduct of Radiation and Contamination Surveys and Follow-up Activities
- BV-SA-00-33 Self-assessment of Control/reduction of Contamination Areas
- BV-C-99-04 SPED Audit
- BV-C-99-10 Engineering Design Control Audit
- BV-SA-99-18 Department Trending Program
- BV-SA-00-64 Trending and Monitoring Program
- BV-SA-00-59 Maintenance Rule Program

NON-CITED VIOLATIONS

- 99-04-01 Containment Equipment Hatch Not Completely Closed During Refueling Operations
- 99-05-01 Failure to Properly Implement OM-48.3.D During Operations Troubleshooting Activities
- 99-06-01 Failure to Adequately Translate a Gaseous Waste System Oxygen Analyzer Design Change (TER 9786) Into Operator Logs and Equipment Labeling
- 99-07-01 Failure to Implement Alarm Response Procedure A2-4D Following a Loss of RCP Seal Injection Flow and Thermal Barrier Cooling Flow
- 99-07-02 Failure to Have Loss of Power Procedures as Required by Reg. Guide 1.33 and Tech Spec 6.8.1
- 99-07-05 Unexpected Low Biocide Concentration in the "A" Service Water Header
- 99-09-01 Failure to Verify Off-Site Power Alignment as Required by Tech Spec 4.8.1.1.1.a.
- 99-10-02 Failure to Perform Preventive Maintenance on Safety Related Equipment as Required by Procedures
- 00-02-03 Failure to Follow Procedures During Incore Flux Thimble Tube Replacement
- 00-05-01 Instrument Mis-calibration Results in Inoperable Over Temperature Delta Temperature Instrument Channel and Violation of Technical Specification 3.3.1.1
- 99-05-02 Failure to Promptly Evaluate and Correct Identified Engineering Deficiencies