August 23, 2000

Mr. John K. Wood
Vice President - Nuclear
FirstEnergy Nuclear Operating Company
P. O. Box 97, A200
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT - NRC INSPECTION REPORT NO. 50-440/00-09

Dear Mr. Wood:

On August 3, 2000, the NRC completed the baseline problem identification and resolution inspection at the Perry Nuclear Power Plant. The enclosed report presents the results of that inspection. The results were discussed on August 3, 2000, with you and members of your staff.

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

Based on the results of the inspection, the inspectors concluded that, in general, the Perry Plant effectively identified and corrected problems. Two violations of NRC requirements were identified. One violation was associated with the evaluation process for condition reports. In several instances, condition reports were not sent to the control room for operability reviews as required by procedure. This violation did not affect a cornerstone of safety, and was not assessed using the Significance Determination Process. The second violation involved untimely corrective action for a degraded motor-operated valve. This violation was evaluated under the risk significance determination process and was determined to have very low safety significance (Green). Both violations are being treated as Non-Cited Violations, consistent with Section VI.A of the Enforcement Policy. If you contest these NCVs, 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 III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-001; and the NRC Resident Inspector at the Perry facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available **electronically** for public inspection in the NRC Public Document Room **or** from the *Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from* the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Thomas J. Kozak, Chief
Reactor Projects Branch 4

Docket No. 50-440
License No. NPF-58

Enclosure: Inspection Report 50-440/00-09

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-440
License No:	NPF-58
Report No:	50-440/00-09
Licensee:	FirstEnergy Nuclear Operating Company (FENOC)
Facility:	Perry Nuclear Power Plant
Location:	P.O. Box 97 A200 Perry, OH 44081
Inspection Dates:	July 24 through August 3, 2000
Inspectors:	L. Collins, Lead Inspector C. Lipa, Senior Resident Inspector, Perry R. Winter, Reactor Engineer
Approved by:	Thomas J. Kozak, Chief Reactor Projects Branch 4 Division of Reactor Projects

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.

SUMMARY OF FINDINGS

IR 05000440-00-09, on 7/24-8/03/00; FirstEnergy Nuclear Operating Company; Perry Nuclear Power Plant; Unit 1; Identification and Resolution of Problems; Two findings were identified in the areas of prioritization and evaluation of issues and effectiveness of corrective action.

The inspection was conducted by two region-based inspectors and one senior resident inspector. This inspection identified one green finding and one no color finding, both of which were Non-Cited Violations. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process.

Identification and Resolution of Problems

- The inspectors concluded that the licensee effectively identified and corrected plant problems. The problem identification threshold within the condition report process was generally low, although a few safety-related equipment problems were not initially entered into the condition report system until prompted by the NRC, in part due to the lack of a well-defined threshold for initiating condition reports. Issues were prioritized and evaluated properly, according to the significance of the problem. Operability and reportability evaluations were normally completed as required. However, procedural requirements for control room personnel to evaluate operability and reportability aspects of issues in condition reports were not always followed. Corrective actions were normally timely and effective in preventing recurrence of problems. Audits and self-assessments were good evaluations and identified issues for the licensee to resolve. Plant staff acknowledged a responsibility to identify and report safety issues.

- NO COLOR. The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, Drawings,” concerning the failure of licensee personnel to always follow the procedural requirements for control room personnel to review condition reports involving plant equipment problems.

  Since this finding did not affect a cornerstone of safety, it was not assessed with the Significance Determination Process, and was not assigned a color. (Section 4OA2.2)

Cornerstone: Mitigating Systems

- GREEN. The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, “Corrective Action,” concerning the failure of licensee personnel to take prompt corrective actions after testing showed significant degradation in seating torque for an emergency closed cooling (ECC) system motor-operated valve. Although the condition was identified and documented by the licensee, corrective action was not taken to evaluate and address the condition for six months.

  The finding was of very low safety significance because the ECC system would remain functional even if the valve failed to close. (Section 4OA2.3)

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

.1 Effectiveness of Problem Identification

a. Inspection Scope

The inspectors reviewed inspection reports issued over the last year, selected plant modifications and maintenance work orders for three high risk systems (high pressure core spray, emergency closed cooling water, 13.8 kV electrical), various condition reports (CR) and corrective action documents, audits, and self-assessments, in order to determine if problems were being identified at the proper threshold and entered into the corrective action process. The documents listed in Attachment 1 were used during the review.

While onsite, the inspectors attended the daily management meeting and on several occasions observed the daily morning meeting conducted by the engineering department to see how plant problems were entered into the corrective action program.

b. Issues and Findings

There were no findings in this inspection area. Plant problems were generally recognized at a low threshold. The licensee considered the corrective action program to include many plant processes, including the CR process, work order (WO) process, and field observation card process. Plant issues were entered into one of these or other processes for correction. The inspectors found that this corrective action program philosophy was not defined or documented and that the threshold for initiating CRs versus using a different corrective action process to resolve issues was not clear. The inspectors identified three safety-related equipment problems that were entered into the WO process. Although management expectations were that these issues would also be entered into the CR process, CRs were not initiated until it was identified by the inspectors that management expectations were not met in these cases. The significance of these three examples is that it provides the insight that certain plant employees do not recognize the expected threshold for initiating CRs.

The CR process was central to the licensee's corrective action program as CRs and associated corrective actions were tracked and trended, and reviewed for operability, reportability and maintenance rule applications. In addition, CRs received significance classification such as condition adverse to quality or significant condition adverse to quality which determined the appropriate level of cause investigation. The lack of a defined and clearly understood threshold for entering plant problems into the CR process could impact the effectiveness of this process.

.2 Prioritization and Evaluation of Issues

a. Inspection Scope

The inspectors conducted an independent assessment of the prioritization and evaluation of a selected sample of CRs. The assessment included a review of the category assigned, operability and reportability determinations, extent of condition evaluations, cause investigations, and the appropriateness of the assigned corrective actions. The inspectors also reviewed the licensee's process for using risk insights to prioritize corrective actions. The documents listed in Attachment 1 were used during the review.

The inspectors attended daily management meetings and one corrective action review board to observe the assignment of condition report categories for current issues and the review of root cause analyses and corrective actions.

b. Issues and Findings

There was one finding associated with this inspection area. The inspectors determined that Perry personnel generally evaluated and categorized issues appropriately. Cause evaluations and corrective actions were of sufficient depth for the problem identified. The inspection finding in this area involved the failure to follow the procedure for sending CRs to the control room for review by plant operators. Several other issues related to prioritization and evaluation effectiveness are discussed and provided insight into the licensee's corrective action process but did not constitute an inspection finding.

The inspectors identified several CRs that described plant equipment performance problems that were not reviewed by control room personnel for operability and reportability as required by the administrative procedure for the CR process. Two of the more significant CRs that were identified are discussed below. In one instance, CR 99-429, the licensee declared two reactor core isolation cooling (RCIC) system steam line drain valves inoperable due to exceeding American Society of Mechanical Engineers (ASME) stroke time test limits during surveillance testing on May 6, 1999. The valves had not been repaired at the time of the inspection and continued to fail the quarterly stroke time testing. The inspectors questioned whether there was any impact to the RCIC system operability or to leakage outside containment as a result of the valve failures. The licensee indicated that since control room personnel were involved when the surveillance was performed, there was no need for the CR to go to the control room and the impact on the system would already have been addressed. However, there was no documentation on the CR or Potential Limiting Condition for Operation (PLCO) forms that system impact had been addressed. After further discussion with the licensee, CR 00-2312 was initiated to document the impact of the valve failures. As part of this investigation, the licensee modified the surveillance test stroke time criteria according to the ASME Code and demonstrated that the valves were, in fact, operable. In a second example, CR 99-3153 documented a degraded condition for an emergency closed cooling (ECC) system isolation valve. This CR also was not sent to the control room for review and is further discussed in section 4OA2.3.

These two examples of the failure to follow the station procedure were determined to be a violation of NRC requirements. The examples occurred under two different revisions of

PAP 1608, “Corrective Action Program,” although the requirements were essentially the same. The first example occurred under Revision 4 which was effective April 28, 1998. Step 6.2.1.a, required the cognizant supervisor to screen the condition report for potential operability, notification, and reportability requirements using the screening criteria on Attachment 13 and deliver the CR to the control room if the criteria were met. Attachment 13 criteria included a condition involving plant equipment or components. Revision 5 of the procedure was effective June 3, 1999 and was in effect when the second example of the violation occurred. Step 6.2.5 required that the supervisor review the condition report for impact on plant operations and indicate if plant operations review was required. Impact on plant operations was defined as any condition or situation that affects, or could affect, the performance or operation of plant equipment. Step 6.2.7 required that a plant operations individual complete the “Plant Operations” section of the CR form. The failure to follow the procedure in both examples was determined to be a violation of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, Drawings,” which required that activities affecting quality be accomplished in accordance with procedures. This violation was considered to be more than minor because it involves several examples of a programmatic problem that has the potential to impact safety. This Severity Level IV violation is being treated as a **Non-Cited Violation (NCV 50-440/2000009-01)** consistent with Section VI.A. of the NRC Enforcement Policy. This violation is in the licensee’s corrective action program as CR 00-2337. Since this finding did not affect a cornerstone, it was not assessed with the Significance Determination Process, and was not assigned a color.

The licensee’s condition report and operability determination processes discussed the need to consider compensatory measures when addressing system operability questions. The inspectors identified that the compensatory measures specified in CR 00-0760 were not completely implemented to address residual heat removal (RHR) system minimum flow line erosion. The operability determination in the CR stated that the RHR trains would remain operable, provided that the time the system was in a minimum flow condition was minimized. This compensatory measure was properly implemented by the licensee in the form of a Standing Instruction and Potential Limiting Condition for Operation (PLCO). However, the operability determination also stated that should the emergency operating procedures direct operators to start and run RHR in minimum flow for extended periods of time, then the RHR system should be realigned. This second compensatory measure was not documented in the licensee’s PLCO form, or discussed in the Standing Instruction. After discussion with the inspectors, the licensee updated the PLCO and Standing Instruction and initiated CR 00-2354. The licensee also indicated that this item would be evaluated for inclusion as an operator workaround.

The inspectors identified several additional issues regarding the prioritization and evaluation of issues. These included:

- Several examples of corrective actions involving modifications where the action was closed to the initiation of the modification rather than to the complete installation of the modification.
- Occasional issues that had limited corrective actions or were administratively deficient in not identifying a corrective action to prevent recurrence (CATPR).

- Two condition reports described significant conditions adverse to quality but were processed as conditions adverse to quality.
- Several examples in which the procedural tool intended to upgrade the lowest category condition reports to receive a full root cause evaluation was misapplied.

The inspectors discussed these issues with licensee. The licensee acknowledged the issues and entered them into the CR process.

.3 Effectiveness of Corrective Action

a. Inspection Scope

The inspectors reviewed selected condition reports and associated corrective actions to evaluate the effectiveness of corrective actions. The documents listed in Attachment 1 were used during the review.

b. Issues and Findings

There was one finding in this inspection area. The majority of corrective actions reviewed were timely, complete, and effective in preventing recurrence of the problem. The inspectors identified one example of untimely corrective action which was determined to be a violation of NRC requirements. A few additional examples of limited or no corrective action were identified but the problem had not recurred.

The inspectors identified a violation of NRC requirements for the failure to take timely corrective actions when a degraded condition was identified. The licensee identified that the margin between the required torque and the available torque to close emergency closed cooling (ECC) water system valve OP42F0295B had decreased from 53% in June, 1997, to only 3% in December, 1999. The valve was considered to be operable because there was remaining margin to ensure the valve could close if required; however, an evaluation was not conducted and actions to address the margin degradation were not taken until approximately 6 months later. There was no documentation that addressed continued system operability, given the extent of degradation that had already occurred. If the rate of degradation continued, the valve would have been rendered inoperable shortly after the degradation was identified. The safety significance of the issue was determined to be very low using the Significance Determination Process because, even if the valve degraded to a point of being inoperable, the ECC B train would still be functional due to other isolation valves in the system. In June 2000, the torque switch setting was changed to improve the margin.

Criterion XVI of 10 CFR 50, Appendix B, “Corrective Action,” requires that measures shall be established to assure that conditions adverse to quality, such as deficiencies, are promptly identified and corrected. The failure to promptly correct the degraded condition of the valve, a condition adverse to quality, was considered a violation of Criterion XVI. This violation is associated with an inspection finding that is characterized by the Significance Determination Process as having very low safety significance (i.e., green) and is being treated as a **Non-Cited Violation (NCV 50 - 440/2000009-02)**, consistent

with Section VI.A of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CR 00-2358.

The inspectors also questioned the generic implications of the degradation seen on this and other butterfly MOVs at Perry. The licensee had identified degradation on several Contromatics butterfly valves and initiated CRs in 1997 to evaluate issues associated with local leak rate test failures and seating torque increases. Through discussions with engineering department personnel and a review of test records, the inspectors determined that the Contromatics butterfly valves showed significant changes in required seating torque from test to test. In some cases, the torque required to seat the valve decreased and in other cases, the torque increased. In three cases, the required seating torque approximately doubled over 4 to 5 years. The licensee explained that the frequency of testing was increased from once per 6 years to once per 2 years in some cases and that four of the valves in the population of 34 had modifications to the seats to improve the condition. The inspectors questioned how the varying amount of degradation identified through periodic verification testing of the butterfly valves in the MOV program had been factored back into the program and accounted for. In the licensee's response to Generic Letter 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," the licensee stated that MOV margin requirements would account for degradation between verification tests. The response also stated that the torque and limit switches were set based on conservative factors which bound any expected degradation. Based on the data available, the inspectors determined that the licensee had not applied a specific margin to account for the degradation seen on some of the valves. During the inspection, the licensee indicated that a review of the response to GL 96-05 would be conducted as part of the investigation for CR 00-2358.

.4 Effectiveness of Licensee Audits and Assessments

a. Inspection Scope

The inspectors reviewed a total of seven audits and self-assessments related to operations, maintenance, and the corrective action process to evaluate the effectiveness of these activities in assessing licensee performance and identifying problems. The selected audits and assessments are listed in Attachment 1.

b. Issues and Findings

There were no findings in this inspection area. The audits and assessments reviewed were of generally good quality and identified issues for the licensee to resolve. The inspectors identified similar issues to those identified by the licensee during audit PA 99-12 on Corrective Action. These issues are further discussed in 4OA2.5, "Assessment of Safety Conscious Work Environment".

.5 Assessment of Safety Conscious Work Environment

a. Inspection Scope

The inspectors conducted interviews with plant staff to assess whether there were impediments to the establishment of a safety conscious work environment. During these interviews, the inspectors used Appendix 1 to Inspection Procedure 71152, "Suggested Questions for Use in Discussions with Licensee Individuals Concerning PI&R Issues," as a guide to gather information and develop insights. The inspectors also discussed the implementation of the Employee Concerns/Ombudsman Program with the Ombudsman.

b. Issues and Findings

There were no findings associated with this inspection area. During a corrective action audit conducted in 1999, the licensee identified that some plant staff expressed fear of reprisal for reporting human performance errors via the corrective action program. The licensee performed an extensive investigation which involved interviews with approximately 200 personnel and concluded that 17% of those interviewed were reluctant to identify lower level human performance issues due to fear of repercussions but that 94% of the work force would self-identify high impact human performance errors. The licensee's investigation also concluded that 100% of site personnel understood that the identification of issues was everyone's responsibility. Plant management took immediate corrective action to train all supervisors to convey the current expectations with respect to the corrective action program. Other corrective actions included the development of a site-wide communication plan and training session for all employees. The licensee planned to conduct an effectiveness review in November 2000 of the corrective actions implemented in response to the 1999 audit finding.

During the inspectors' interviews with plant personnel, the majority of individuals indicated that the corrective action process worked well. However, a small percentage of people expressed similar concerns to those previously identified by the licensee. Some interviewees also felt that the corrective actions implemented as a result of the audit had been effective in alleviating the plant staffs' concerns about repercussions for identifying lower level human performance issues. Similar to the licensee's investigation results, the inspectors found that all plant staff acknowledged a responsibility to identify and report safety issues.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. John K. Wood and other members of licensee management in an exit meeting on August 3, 2000. Licensee management acknowledged the findings presented and indicated that no proprietary information was provided to the inspectors.

PARTIAL LIST OF PERSONS CONTACTED

Commonwealth Edison Company

J. Wood, Vice President-Nuclear
R. Schrauder, Plant Manager
B. Boles, Manager, Operations
G. Dunn, Manager, Regulatory Affairs
H. Hegrat, Manager, Quality Assurance
R. Lockwood, Supervisor, Quality Assurance
J. Hubbartt, Quality Evaluator
S. Sanford, Senior Compliance Engineer

NRC

S. Reynolds, Deputy Director, Division of Reactor Safety, RIII
T. Kozak, Chief, Reactor Projects Branch 4, Division of Reactor Projects

ITEMS OPENED, CLOSED, AND DISCUSSED

OPENED

50-440/2000009-01	NCV	Failure to follow procedure for Control Room review of Condition Reports
50-440/2000009-02	NCV	Untimely Corrective Action for MOV Degradation

CLOSED

50-440/2000009-01	NCV	Failure to follow procedure for Control Room review of Condition Reports
50-440/2000009-02	NCV	Untimely Corrective Action for MOV Degradation

DISCUSSED

None

ATTACHMENT 1

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion of a document on this list does not imply that NRC inspectors reviewed the entire document, but, rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. In addition, inclusion of a document on this list does not imply NRC acceptance of the document, unless specifically stated in the body of the inspection report.

Procedures

Self-Assessment Handbook, Revision 0 June 2000
PAP-1608, "Condition Report Process," Revision 6
PAP-1608, "Corrective Action Program," Revision 5
PAP-1608, "Corrective Action Program," Revision 4
PAP-0905, "Work Order Process," Revision 16
PAP-0205,"Operability of Plant Systems," Revision 8
PAP-0902, "Work Requests," Revision 10

Condition Reports

CR 97-0984	P43 butterfly valve failed to close during surveillance test
CR 97-0947	Unacceptable MOVATS test on P42F0325B, butterfly valve
CR 97-2203	Failed local leak rate tests for containment isolation valves in NCC system - resulted in LER 97-015.
CR 97-2428	Butterfly valve to be inspected was lost after removal from system
CR 98-1903	Increase in Xe-133
CR 98-2331	HPCS pump room cooler test results
CR 99-0174	RCIC relief valve leakage outside of containment
CR 99-0364	Division 3 battery service life
CR 99-0603	Tornado Depressurization
CR 99-1435	1C11F010 and 1C11F181 failed to close within the required time
CR 99-1563	SVI E22-T2001 went late on 6/7/99
CR 99-1567	Surveillance Test Data
CR 99-1569	Division 3 TRD test results
CR 99-1721	DIV II annunciator
CR 99-1755	Unanticipated ½ MSIV isolation
CR 99-1892	Corrective actions deferred to ACTONS
CR 99-1918	Revised accident source term methodology not approved for licensing basis use
CR 99-2011	Reference for pump dP may be in error
CR 99-2052	Drawings and instructions inadvertently not updated after DCP 97-5031
CR 99-2062	Battery surveillances
CR 99-2082	Fire protection /fire door violations
CR 99-2087	Discharge header for P42 relief valves
CR 99-2092	Transient combustible audit findings

CR 99-2119 Division 3 battery load profile
CR 99-2168 ECCS room coolers had loose and deteriorated insulation
CR 99-2221 Human Performance issues
CR 99-2244 scram discharge volume vent/drain
CR 99-2250 scram discharge volume vent/drain
CR 99-2312 No isolation valve to separate safety-related ESW lines from non safety-related SW
CR 99-2340 20 amp fuses installed where drawing called for 2 amp fuses
CR 99-2439 ESW strainer blowdown valve found open
CR 99-2440 ECC B heat exchanger testing RFA
CR 99-2529 Suppression Pool hydrodynamic loads
CR 99-2677 RCIC min flow orifice
CR 99-2705 Unexpected voltage found even with isolating clearance
CR 99-2923 Standby liquid relay had disengaged locking spring
CR 99-2972 Inattentive operator
CR 99-3005 Significant decrease from previous trend in the HPCS diesel acceleration time
CR 99-3086 P42 orifice out of specifications
CR 99-3153 Significant torque increase for ECC isolation valve
CR 00-0009 Potential fuel leak
CR 00-0052 High rad levels
CR 00-0113 Request for Assistance for PSA
CR 00-0474 Ineffective implementation of a corrective action
CR 00-0532 Operability Determination
CR 00-0563 Documents the recommendations of Self Assessment 114POS99, Control Room Administrative Burden
CR 00-0609 RCIC turbine trip
CR 00-0628 Core thermal limit calcs
CR 00-0644 Reference value could not be reached
CR 00-0686 RCIC vacuum breakers and MOVs
CR 00-0759 RHR min flow
CR 00-0760 RHR minimum flow
CR 00-0827 Locking devices not in the correct position
CR 00-0833 AEGTS
CR 00-0837 Tornado depressurization Issue
CR 00-0915 Operability Determination - DG frequency
CR 00-0946 Unit 1 Division 3 battery voltage drift
CR 00-0953 Main transformer deluge
CR 00-0988 Review of work preparation and activities after Main transformer deluge
CR 00-1170 Thermal limits
CR 00-1398 ESW A vacuum breaker failed to close during test
CR 00-1398 Essential Service Water vacuum breaker failure
CR 00-1399 Operability Determination - Master Trip Unit
CR 00-1407 Relay information had been incorrectly transferred onto surveillance
CR 00-1414 Tubing from lube oil cooler in contact with conduit
CR 00-1445 HPCS surveillance acceptance criteria not met
CR 00-1458 West heater bay roof not posted
CR 00-1487 Tag hung in on position
CR 00-1497 Riley module replace d 5 times
CR 00-1533 Unexpected ½ scram during APRM “B” work

CR 00-1549 Unexpected ½ MSIV isolation
CR 00-1616 Unexpected Alarm received during troubleshooting
CR 00-2020 Incorrect parts procured and issued to the field
CR 00-2234 Emergency Diesel Generator day tank level switch failed to calibrate

Miscellaneous Documents

PES-99-108	Maintenance rule expert panel meeting minutes 2/22/99
LER 99-003	Post-accident dose limits exceeded for relief valve leakage
DCP 00-5005	Add insulation to HPCS piping
Calculation ECA-064	HPCS pump room cooler load for specific steady state pump room temperatures
DCP 00-6009	Replace division 3 TRD
DCP 99-5010	Replace division 3 battery
Calculation M39-009	High pressure core spray pump room cooler performance test results 10/28/98, revisions 0 and 1
Calculation M 39-010	High pressure core spray pump room cooler performance test results 12/09/98 revision 1
ECP 00-8008	Relocate P42 temp elements farther from heat exchanger
DCP 00-5018	Level switch setpoint change for ECC surge tank volume
WO 98-2566	Overhaul P42 valve

Assessment and Audits

PA 99-08	Maintenance; June 14 - August 4,1999
PA 99-12	Corrective Action; August 30 - October 6, 1999
112DES99	Operability Determination Review for Quality November 1, 1999
136WMS99	Preventive Maintenance (PM) Program; June 1 - November 30, 1999
235POS2000	Fuse Control in POS; February 21 - March 27, 2000
114POS99	Control Room Administrative Burden, December 1999
PA 00-02	Conduct of Operations, March 6, 2000

NRC Violations and Non-Cited Violations

NCV 2000-002-03	Ineffective implementation of a corrective action resulted in the failure to maintain Division 3 switchgear room temperature within specified limits (licensee CR 00-0474)
VIO 1999-013-03	Failure to correctly derive ECCS pump TS surveillance requirements (licensee CR 99-1917)
NCV 1999-010-01	Improper storage of ladders in the suppression pool swell region (licensee CRs 99-2405 and 99-2385)
NCV 1999-013-04	Failure to report leakage outside of containment to the NRC (licensee CR 99-1918)
NCV 1999-014-02	Inadequate tagout for electrical work (licensee CR 99-2705)

CR's initiated during the NRC inspection

CR 00-2234 Day tank level switches not in calibration
CR 00-2258 Category 2 CR closed without a CATPR as required by program

CR 00-2239	Incorrect Due Date in CR tracking database for CR 00-0009
CR 00-2273	Licensee downgraded a cat 2 to a 2M which is not allowed by procedure for conditions adverse to quality (CR on thermal limits 00-1170).
CR 00-2312	No operability evaluation was completed for ASME failures on RCIC valves
CR 00-2358	Timeliness of corrective actions for P42 MOV issue documented in CR 99-3153.
CR 00-2354	The compensatory actions specified within CR 00-0760 Operability Determination for RHR minimum flow erosion were not implemented.
CR 00-2337	Some CRs were not being sent to the control room for review as required by PAP-1608.
CR 00-2338	Some category 2 CRs did not have a designated CATPR as required by program.
CR 00-2339	Several examples where CRs were closed based on initiation of a corrective action, rather than completion of the action

ATTACHMENT 2

Identification and Resolution of Problems - Initial Document Request sent to licensee via fax prior to the inspection.

The following information is requested to be provided as soon as possible (to be received in the Region by July 10, 2000).

- Copy of the administrative procedure(s) governing the identification and resolution of problems
- Copy of most recent Quality Assurance audit of the corrective action program
- List of maintenance rule (a)(1) systems since June 1, 1999
- List of all significant conditions adverse to quality Condition Reports since June 1, 1999
- List of all root cause evaluations since June 1, 1999
- List of operator workarounds and temporary modifications since June 1, 1999
- List of all Condition Reports involving human performance or corrective action problems since June 1, 1999
- List of Operability Evaluation performed since June 1, 1999
- List of Quality Assurance audits and self assessments performed since June 1, 1999
- List of top 10 risk significant systems

LIST OF ACRONYMS USED

ACTON	list of items to “Act on”
AEGTS	Annulus Exhaust Gas Treatment System
APRM	Average Power Range Monitor
ASME	American Society of Mechanical Engineers
CARB	Corrective Action Review Board
CATPR	Corrective Action to Prevent Recurrence
CAQ	Conditions Adverse to Quality
CR	Condition Report
DCP	Design Change Package
DRP	Division of Reactor Projects
ECC	Emergency Closed Cooling
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
ESW	Emergency Service Water
FENOC	FirstEnergy Nuclear Operating Company
HPCS	High Pressure Core Spray
IR	Inspection Report
LER	Licensee Event Report
LPCS	Low Pressure Core Spray
MOV	Motor Operated Valves
MSIV	Main Steam Isolation Valve
NCV	Non-cited Violation
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
PSA	Probabilistic Safety Assessment
RCIC	Reactor Core Isolation Cooling
RFA	Request for Assistance
SCAQ	Significant Conditions Adverse to Quality
SDP	Significance Determination Process
SRI	Senior Resident Inspector
TRD	Testable Rupture Disk
TS	Technical Specification
WO	Work Order