

## Perry 1

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### Initiating Events

**Significance:**  Jun 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Follow Procedures While Paralleling to the Grid**

The inspectors identified a Non-Cited Violation of Technical Specification 5.4.1.a for failure to follow procedures while paralleling to the grid. Licensee personnel failed to verify synchronization prior to closure of a main generator output breaker. The finding was of very low safety significance because the event did not effect the likelihood of a loss of coolant accident, contribute to both a scram and loss of mitigation equipment, nor increase the likelihood of flooding or fire.

Inspection Report# : [2002005\(pdf\)](#)

**Significance:**  Feb 17, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Remove Temporary Lights From the Reactor Water Cleanup Heat Exchanger Room After One Cycle**

The inspectors identified a Non-Cited Violation of 10CFR50 Appendix B, Criterion III, for failure to remove temporary lighting from the reactor water cleanup room after one-cycle as required by Field Clarification Request. The lights eventually degraded and caught fire. The finding was greater than minor because it had an actual impact of causing a small fire in a room containing plant operating, fire protection and safety-related equipment. The event was of very low safety significance because, although the finding contributed to the likelihood of an external event initiator, no equipment was damaged from the event.

Inspection Report# : [2001016\(pdf\)](#)

**Significance:**  Dec 29, 2001

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

#### **PROCEDURE FOR REACTOR VESSEL LEVEL NOT FOLLOWED**

The inspectors identified a Non-Cited Violation for failure to follow procedures for controlling reactor vessel level within the required band. This issue was determined to be of very low safety significance because all mitigating systems remained available and no pressure or temperature limits were exceeded.

Inspection Report# : [2001015\(pdf\)](#)

**Significance:**  May 18, 2001

Identified By: Self Disclosing

Item Type: FIN Finding

#### **Incorrect torque applied to moisture separator reheater drain tank manway covers resulted in loss of condenser vacuum after a reactor scram.**

An unplanned manual scram on April 29, 2001 was complicated by a loss of condenser vacuum. The cause of the loss of main condenser vacuum was leaking manway covers on the moisture separator reheater (MSR) drain tanks. The manway covers had been worked on during the recent refueling outage (March 2001) and leaked during the event because incorrect torque values had been used during reassembly. This finding was of very low safety significance because the issue affected only the initiating event "transient without power conversion system available" and did not

increase the likelihood of any other initiating events or impact any mitigation systems.

Inspection Report# : [2001008\(pdf\)](#)

**Significance:**  Dec 31, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Use of an inadequate test procedure resulted in one safety relief valve unexpectedly opening during testing.**

As a result of an inadequate test procedure, one safety relief valve unexpectedly opened during testing on December 18, 2000. The procedure failed to provide instructions to reset the low low set logic before applying an input signal to the trip unit. A Non-Cited Violation was identified for the inadequate procedure. The finding was of very low safety significance because, although the issue increased the frequency of an initiating event, all mitigation systems were available during the event. The inspectors used the Perry-specific worksheets in the Phase 2 Significance Determination Process (SDP) analysis to assess the safety significance of the issue.

Inspection Report# : [2000014\(pdf\)](#)

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## Mitigating Systems

**Significance:**  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO DEMONSTRATE EFFECTIVE MAINTENANCE FOR THE ROD CONTROL AND INFORMATION SYSTEM**

Green. The inspectors identified a NCV of 10 CFR 50.65 (a)(2) for the licensee's failure to demonstrate that the performance of the rod control and information system (RCIS) was being effectively controlled through the performance of appropriate maintenance. The licensee's failure to consider the rod insertion function of the RCIS when evaluating system performance was determined to be the cause of the error. The issue was evaluated as having very low risk significance (Green) since, although the mitigation system cornerstone was affected in that reactivity control was degraded by loss of a RCIS safety, no actual loss rod insertion ability occurred due to other methods being available. (Section 1R12)

Inspection Report# : [2002006\(pdf\)](#)

**Significance:**  Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO FOLLOW PROCEDURES FOR IMPROPERLY FUNCTIONING CONTROL ROOM INDICATIONS**

Green. The inspectors identified a NCV of Technical Specification (TS) 5.4 for the licensee's failure to follow procedures regarding tagging of improperly reading equipment. The primary cause was the crosscutting issue of human performance since the technicians and operators failed to recognize out-of-specification data in the partially completed surveillance indicated equipment degradation. The finding was more than minor because an indication used by control room personnel for vessel level did not read correctly and under other circumstances a failure of a control function could have been overlooked. The finding was of low safety significance because no loss of automatic protective functions occurred and other indications of vessel level were available to operators. (Section 1R22)

Inspection Report# : [2002006\(pdf\)](#)

**Significance:**  Jun 30, 2002

Identified By: NRC

Item Type: FIN Finding

### **Inadequate Posting of Protected Equipment During Risk Significant Maintenance Activities**

The inspectors identified a licensee performance deficiency associated with the protection of Emergency Service Water 'B' and 'C' trains during a Division 1 ('A' train) outage. Although the 'B' and 'C' pumps were posted as protected equipment, the motor control centers were not. The finding was of very low safety significance because, although the inspectors observed considerable work activities in the immediate vicinity of the motor control centers, the mitigation systems remained operable.

Inspection Report# : [2002005\(pdf\)](#)

**Significance:**  Jun 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Correct Procedure Deficiency Involving Surveillance Test Equipment**

A Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI for failure to ensure conditions adverse to quality are corrected. The licensee failed to correct a previously identified procedure deficiency associated with test equipment used to test the level 3 and level 8 Reactor Protection System and Residual Heat Removal shutdown insulation functions. As a result, during the April 2002 performance of the 24-month surveillance, the licensee experienced a similar failure. The finding was of very low safety significance because, although the procedure deficiency had an actual impact causing the loss of one channel of level protective functions for several hours, no actual loss of safety function occurred.

Inspection Report# : [2002005\(pdf\)](#)

**Significance:**  Jun 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Incorporate Instrument Uncertainty Into Design Basis Calculations and Procedures**

(GREEN) The inspection team identified a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control." Specifically, the emergency service water system forebay temperature limit was not properly incorporated into plant procedures. Specifically, the plant procedures did not include margin to account for temperature instrument uncertainty. As a result, the emergency service water forebay temperature could have exceeded its design limit during plant operation without being detected. The finding was greater than minor because it impacted the ability of the emergency service water system to perform its design basis function and lake temperatures had previously approached the design basis limit. The finding was of low safety significance because the emergency service water system was operable. (Section 1R21.1).

Inspection Report# : [2002004\(pdf\)](#)

**Significance:**  Feb 17, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Follow Procedures for Maintaining Electrical Separation Criteria**

The inspectors identified a Non-Cited Violation of 10CFR50 Appendix B, Criterion V, for failing to follow plant procedures to maintain electrical separation between Class 1E and Non-class 1E cables and conduits. The finding was greater than minor because if left uncorrected, routing the extension cords near safety-related power cables increased the likelihood of rendering multiple trains of safety-related equipment inoperable given a fire from those temporary cables. Further, the multiple examples of violating the electrical separation criteria indicated a lack of plant personnel knowledge of the requirement. The finding was of low safety significance because an actual fire had not occurred that rendered the associated equipment unavailable.

Inspection Report# : [2001016\(pdf\)](#)

**Significance:**  Nov 18, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **INADEQUATE PROCEDURES FOR SLUICE GATE MAINTENANCE**

The licensee failed to have procedures appropriate to the circumstances to prescribe maintenance on the emergency service water sluice gates. As a result, all three trains of emergency service water were rendered inoperable for the periods of time that the gates were disabled in the open position. This was considered to be a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V. This issue was determined to be of very low safety significance due to the availability of the nonsafety-related service water system and credit for manual operator action, either of which would fully mitigate the adverse effects of the open sluice gates.

Inspection Report# : [2001013\(pdf\)](#)

**Significance:**  Jun 30, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **Design Control of Modification to EDG Dampers**

The licensee's failure to properly control the design, manufacture, and installation of a modification to the emergency diesel generator ventilation system was self-revealed during post-maintenance testing. One damper failed and other dampers showed evidence of degradation. A Non-Cited Violation was identified for inadequate design control. The finding was of very low safety significance because, although supporting equipment for a mitigating system was failed or degraded, the allowed outage time for the mitigating system was not exceeded. The inspectors used the Phase 1 worksheet to assess the safety significance of the issue.

Inspection Report# : [2001009\(pdf\)](#)

**Significance:**  Feb 24, 2001

Identified By: NRC

Item Type: FIN Finding

### **Inadequate engineering review for the Inclined Fuel Transfer System**

As a result of inadequate engineering reviews, the inventory in the suppression pool makeup system was potentially impacted when the inclined fuel transfer system blind flange was removed at power. This issue was reported to the NRC as LER 50-440/2000-001. The finding was of very low safety significance because, although the issue potentially impacted a mitigating system, the duration was small and there was a nonsafety-related valve in the system that maintained the water inventory.

Inspection Report# : [2001002\(pdf\)](#)

**Significance:** N/A Nov 15, 2000

Identified By: NRC

Item Type: FIN Finding

### **Supplemental Inspection for Safety System Unavailability - Heat Removal System Performance Indicator**

This supplemental inspection was conducted by the NRC to assess the licensee's evaluation associated with the white performance indicator (PI) for Safety System Unavailability, Heat Removal System for 2nd Quarter, 2000. The inspection was conducted by the Senior Resident Inspector. During this supplemental inspection, which was conducted in accordance with Inspection Procedure 95001, the inspector concluded that the licensee conducted an adequate evaluation of the reactor core isolation cooling (RCIC) system unavailability time that resulted in the white PI, that the extent of condition was appropriately addressed, and that corrective actions were initiated to prevent recurrence of this issue. During the 3rd Quarter, 2000, the PI data for the RCIC system returned to the green band. No findings were identified during this inspection.

Inspection Report# : [2000013\(pdf\)](#)

**Significance:** N/A Nov 02, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to update procedures**

The team identified that Attachment 2 of procedure ONI-P54, "Off-Normal Instruction - Fire," Revision 3, did not include potential fire impacts upon selected RHR valves in Room 1CC-3a and CC-2a, despite the fact that such potential impacts were identified in the safe shutdown capability report (SSCR). Failure to update procedure ONI-054, in a timely manner, to include information used to alert operators as to which components could be potentially impacted by a fire is considered a nonconforming condition and is an example of a violation of Perry's license condition (Section 1R05.1).

Inspection Report# : [2000010\(pdf\)](#)

**Significance:**  Nov 02, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to address extended inoperability of the control room sub floor CO2 system.**

The team determined that the licensee failed to promptly address extended inoperability of the control room subfloor CO2 system. This was a violation of the facilities license condition. The CO2 system inoperability resulted in an extended degradation of the manual fire fighting capability, one of the defense-in-depth elements for fire protection, for the control room (Section 1R05.12).

Inspection Report# : [2000010\(pdf\)](#)

**Significance:**  Aug 04, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to promptly correct a degraded emergency closed cooling system motor-operated valve**

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.

Inspection Report# : [2000009\(pdf\)](#)

**Significance:**  Jul 16, 2000

Identified By: NRC

Item Type: FIN Finding

**Failure to properly implement the on-line risk assessment for a Division 1 maintenance outage.**

Green. While reviewing the licensee's implementation of the on-line risk assessment for a Division I outage, the inspectors identified that the licensee failed to properly implement the on-line risk assessment for a Division I outage. Specifically, control room operators placed the reactor core isolation cooling (RCIC) system in a secured status rather than in standby readiness as was planned in the risk assessment. This resulted in the RCIC system being unavailable for a station blackout event without operator action. The issue was considered to be of very low safety significance because it resulted in only slightly higher plant risk than originally planned and other mitigating systems were available during the outage.

Inspection Report# : [2000008\(pdf\)](#)

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## Barrier Integrity

**Significance:**  Dec 29, 2001

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

### **INOPERABLE CONTAINMENT ISOLATION VALVE**

The inspectors identified a Non-Cited Violation for failure to follow procedures for invoking a Technical Specification (TS) when a containment isolation valve failed to automatically close upon receipt of an isolation signal. The failure of the valve to automatically close was not made known to the oncoming shift crew and as a result, the operability of the valve was unknown for approximately 14 hours. This finding was determined to be of very low safety significance because the redundant isolation valve remained operable and the actual duration did not exceed allowable times per TS. Inspection Report# : [2001015\(pdf\)](#)

**Significance:**  May 15, 2000

Identified By: Licensee

Item Type: FIN Finding

### **Both trains of annulus exhaust gas treatment system inoperable.**

Green. The licensee identified that both trains of the annulus exhaust gas treatment system were inoperable at the same time. The licensee entered Technical Specification 3.0.3. The condition was restored within approximately four hours. This issue was determined to have very low risk significance because the system inoperability has minimal impact on large early release frequency (LERF).

Inspection Report# : [2000003\(pdf\)](#)

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## **Emergency Preparedness**

**Significance:**  Apr 12, 2002

Identified By: NRC

Item Type: FIN Finding

### **Inadequate critique of certain exercise controller and participant actions in the Operations Support Center**

The licensee's exercise critique did not identify inappropriate exercise controller interactions with some participants who were involved in Operations Support Center (OSC) activities. Specifically, on multiple occasions various participants were given information by a licensee exercise controller during the exercise before they had opportunities to demonstrate how they would either earn such information or how they could identify and correct mis-information. Also, the licensee's critique did not identify a few instances of exercise participants' failure to implement adequate protective measures associated with OSC activities. The NRC has determined that the above finding on the inadequate critique of certain OSC controller and exercise participants' performances was of very low safety significance (Green). In accordance with NRC's Enforcement Policy, the critique issue is not a violation of NRC requirements since it was associated with an exercise, rather than with an actual emergency response.

Inspection Report# : [2002003\(pdf\)](#)

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## **Occupational Radiation Safety**

**Significance:**  Feb 20, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure To Adequately Barricade A Locked High Radiation Area**



On 2/20/01 two maintenance workers were assigned to a job in the steam tunnel pit. One worker left and locked the other worker (with his knowledge) in the area. The worker who left the area lost the Locked High Radiation Area gate key and reported this to radiation protection. An RP technician directed the worker inside the LHRA to leave by climbing over the waist high gate. The area was also defined by a safety railing which could easily be climbed through. The locked gate and safety railing did not constitute an adequate barrier to preclude unauthorized entry. In a second example, a traversing incore probe area did not have an adequate barrier as the concrete wall that formed part of the barrier had an opening large enough to crawl through.

Inspection Report# : [2001006\(pdf\)](#)

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## Public Radiation Safety

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## Physical Protection

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## Miscellaneous

**Significance:** SL-III Dec 31, 2001

Identified By: NRC

Item Type: VIO Violation

### **EMPLOYEE PROTECTION**

On May 31, 2001, the NRC Atomic Safety and Licensing Board issued a Memorandum and Order Approving the Settlement Agreement and Terminating Proceeding between the NRC and FirstEnergy Nuclear Operating Company (EA-99-012). The agreement provided for an \$80,000 civil monetary penalty based on a Severity Level III Violation of 10 CFR 50.7.

Inspection Report# : [2001015\(pdf\)](#)

**Significance:** N/A Aug 22, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

### **Operators failed to perform a TS required surveillance to record the overlap data between the SRM and the IRM prior to withdrawing the SRMs from the core.**

Technical Specification 3.3.1.1.6 requires that the licensee verify the source range monitor (SRM) and intermediate range monitor (IRM) channel overlap prior to withdrawing the SRMs from the fully inserted position. Technical Specification 5.4.1 requires, in part, that written procedures/instructions shall be established, implemented and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Appendix A of Regulatory Guide 1.33, Revision 2, February 1978, specifies hot standby to minimum load (nuclear startup) as an example of a general plant operating procedure. During the plant startup on July 29, 2001, operators failed to perform the TS required surveillance in that they failed to record the overlap data between the SRM and the IRM prior to withdrawing the SRMs from the core as required by procedure IOI-1, Cold Startup.

Inspection Report# : [2001010\(pdf\)](#)

**Significance:** N/A Jul 27, 2001

Identified By: NRC

Item Type: FIN Finding

### **Problem Identification and Resolution Inspection Results**

The team concluded that the licensee effectively identified, evaluated, and corrected plant problems. Problem identification was determined to be effective based on a low condition report initiation threshold. Licensee audits and assessments identified issues similar to NRC observations. Formal root cause evaluations were thorough. Corrective

actions specified were appropriate based on the identified causes and were effective in preventing recurrence of significant conditions adverse to quality. Plant staff willingness to identify safety issues and a low threshold for initiating condition reports supported a safety conscious work environment. However, room for improvement in the areas of evaluation of issues and corrective actions still exists. Some evaluations could have been more rigorous. Extent of condition reviews could be broader in scope. Several equipment failure problems could have been assigned a more in-depth evaluation method. A few equipment related condition reports were not immediately reviewed by licensed operators. Operators could benefit from Generic Letter 91-18 operability guidance training to ensure accurate operability determinations.

Inspection Report# : [2001011\(pdf\)](#)

**Significance:** N/A Aug 04, 2000

Identified By: NRC

Item Type: FIN Finding

#### **Effectiveness of Problem Identification and Resolution**

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.

Inspection Report# : [2000009\(pdf\)](#)

**Significance:** N/A Aug 04, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to follow procedure requirements for condition report review**

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.

Inspection Report# : [2000009\(pdf\)](#)

Last modified : December 02, 2002