## **Nine Mile Point 1**

# **Initiating Events**



Feb 16, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions led to trippoing of two reactor recirculation pumps at full power.

Green. The inspectors identified a Non-Cited Violation for the failure to have taken appropriate corrective actions for previous similar deficiencies involving the use of temporary test leads, in accordance with 10CFR50, Appendix B, Criterion XVI. The failure to have taken proper corrective actions directly contributed to the inadvertent trip of two reactor recirculation pumps during power operation on January 17, 2002, while workers were performing on-line service water pump motor testing with an alligator clip temporary test lead, which inadvertently contacted a grounding terminal in the power board. This finding was of very low safety significance because, although the unit experienced a power transient, the transient was small and easily recoverable, as operators were appropriately trained to cope with transients of this nature. (Section 1R13)

Inspection Report#: 2001011(pdf)



Feb 16, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Removal of AC supply power fuse was not performed in accordance with an approved troubleshooting procedure.

Green. The inspectors identified a Non-Cited Violation for the failure to have followed established procedures for the troubleshooting, contrary to 10CFR50 Appendix B, Criterion V, Instructions, Procedures and Drawings and Administrative Procedure GAP-PSH-10, Troubleshooting and Testing Control Process. The failure to follow troubleshooting procedures resulted in the January 30, 2002, loss of power to the drywell and torus pressure transmitters. This finding was of very low safety significance because the loss of the drywell and torus pressure indication in the control room was for a short duration and is not used for accident monitoring.

Inspection Report#: 2001011(pdf)

# Mitigating Systems



Significance: Feb 16, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Preventive maintenance schedule for EDGs not appropriate to the circumstances.

Green. The inspectors identified a Non-Cited Violation for the failure to have performed preventive maintenance on the Unit 1 emergency diesel generator (EDG) air start motors in accordance with 10CFR50, Appendix B, Criterion V and the EMD owners' group air start motor service life recommendations, which resulted in the failure of the 102 EDG to start on demand from the control room on January 29, 2002. This finding was of very low safety significance because although the 102 EDG was inoperable, the 103 EDG and both 115 kV off-site power lines were available during the time the EDG was inoperable. (Section1R14)

Inspection Report#: 2001011(pdf)



cance: Nov 09, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

UNIT 1 TORUS TO DRYWELL VACUUM BREAKER POSITION INDICATION.

A non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, regarding the failure to determine the cause and take corrective actions to preclude the recurrent setpoint drift of some torus to drywell vacuum breaker position indication limit switches. The setpoint drift beyond technical specification requirements each operating cycle was considered to be a significant condition adverse to quality since the alarms ensure the torus is configured in accordance with design assumptions. The finding was determined to be of very low safety significance (Green) since vacuum breaker leak rate tests and surveillance test inspections conducted during each refueling outage did not identify a condition where vacuum breakers were not seating in accordance with their design.

Inspection Report#: 2001009(pdf)



Nov 11, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

## EVENT FOLLOWUP - STUCK OPEN ELECTROMATIC RELIEF VALVE (UNIT 1).

The inspectoridentified that the Unit 1 control room operators were not maintaining a suppression pool temperature log in accordance with Technical Specification (TS) 4.3.2.c. for approximately 20 minutes following the electromatic relief valve opening on October 2, 2000. The root cause of this TS violation was the temporary lock-up of the plant process computer. This finding was of very low safety significance because the suppression pool temperature rise was very slow and remained within TS limits. This violation of TS was treated as a Non-Cited Violation. (Section 1R53)

Inspection Report#: 2000008(pdf)



Nov 11, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

### UNIT 1, FAILURE TO TAKE CORRECTIVE ACTIONS AS A RESULT OF PREVIOUS ERV BENT STEM.

During Unit 1 start-up on October 2, 2000, an electromatic relief valve (ERV) inadvertently opened. The stuck opn ERV resulted in a continuous discharge of steam and subsequent failure of the tailpipe vacuum breaker. Failure of the vacuum breaker resulted in discharge of steam directly to the drywell. The inspectors identified a Non-Cited Violoation for ineffective corrective actions involving previously identified conditions which were not corrected and contributed to the ERV inadvertent opening. The ERV open was of very low safety significance because of low levels of reactor power (3.0%), temperature (254 degrees F), pressure (38 psig), and decay heat (less than 0.5%), and all emergency core cooling systems were available. Licensee corrective actions for this event were appropriate. (Section 1R53)

Inspection Report#: 2000008(pdf)



Nov 11, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

UNIT 1, FAILURE TO TAKE CORRECTIVE ACTIONS FOR LONGSTANDING REACTOR WATER CLEANUP SYSTEM ISOLATION VALVES. On September 27, 2000, while Unit 1 was shutdown, a low reactor vessel level condition occurred when placing the reactor water cleanup (RWCU) system in service. The low level was a result of reactor vessell water inventory being displaced to the RWCU system due to leaking isolation vales and inadequate fill and vent of the RWCU system prior to being placed in service. The inspectors identified a Non-Cited Violation for ineffective corrective action for the longstanding RWCU isolation valve degradation which contributed to this event. This issue was of very low safety significance because the unit was shutdown at the time of the reactor vessel level transient and all shutdown emergency core cooling systems were available for reactor inventory control, if needed. The licensee's corrective action program was not effective in precluding this specific event.

(Section 4OA3)

Inspection Report# : 2000008(pdf)



Sep 29, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate design inputs and failure to translate design into specifications and procedures (six examples)

Green. The team identified that NMPC reclassified the safety function of the containment spray raw water system inter-tie check valves from active to passive components with only a pressure boundary safety function. This reclassification was used to provide the bases for removing the valves from the in-service test (IST) program. The team also found that several safety evaluations and calculations credited the valves with closing to prevent reverse flow from the containment spray and core spray systems into the containment spray raw water system. The failure to properly classify these valves was determined to be of very low risk significance (Green) by the SDP phase 1 screening. This conclusion was based on the finding that although the safety classification determination allowed removal of the valves from the IST program, the valves had not yet been removed from the test procedure and continued to receive a reverse flow closure test. Therefore, there were no actual consequences caused by this error. The failure to identify and translate the design basis requirements of the inter-tie check valves into the IST program is considered a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section 1R21.1, Design-Mechanical, Electrical and Instrumentation and Control) Green. The team identified that the pump developed head acceptance criteria in the Unit 1 containment spray pump surveillance tests was non-conservative with respect to the design bases. The team determined this issue to be of very low risk significance (Green) by the SDP phase 1 screening. This conclusion was based the team's review of current surveillance test results which found the pumps had adequate margin between the measured values and the test acceptance criteria is considered a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section

1R21.1, Design-Mechanical, Electrical and Instrumentation and Control) Green. The team identified that NMPC did not consider the most limiting scenario when evaluating the adequacy of the net positive suction head (NPSH) for the containment spray system pumps. As a result, operating procedures were not consistent with the design bases. This issue was evaluated using the SDP phase 1 screening and was determined to be an issue of very low risk significance (Green). This conclusion was based on a consideration that system functionality would not be affected since pressure in the containment peaks, and then decreases to below 3.5 psig within approximately 12.5 minutes of a LOCA, resulting in the short term operation of two pumps on one suction strainer. Also, until containment pressure is reduced to 0 psig, at which time the pumps would be secured, the existing containment pressure serves to counteract the adverse effects of elevated torus water temperature and pressure drop across the strainer on NPSH. Additionally, if pump cavitation were to result from two pump operation on one strainer, it would be recognized by the operators and, once a cavitating pump was secured, additional NPSH would be available for the remaining operating pump. The failure to validate design assumptions is considered a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section 1R21.1, Design-Mechanical, Electrical and Instrumentation and Control) Green. The team identified that, due to improper design assumptions, assumed margins in the Unit 2 service water system hydraulic performance analysis were incorrect. The analysis concluded that there was 20% margin to account for pump degradation and instrument uncertainty. However, as a result of the incorrect assumption the margin was not 20% and, if the pumps were assumed to be degraded by 10%, there would be no margin to account for instrument uncertainty. The team determined this issue was of very low safety significance (Green) by the SDP phase 1 screening. This conclusion was based on the team's review of the most recent surveillance procedure test results which were found to be acceptable and did not indicate significant loss of margin due to pump degradation. Therefore, the service water system was functional and the service water pumps remained operable. The failure to validate the design assumption is considered a non-cited violation of 10 CFR 50 Appendix B. Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section 1R21.1, Design-Mechanical, Electrical and Instrumentation and Control) Green. The team identified that plant procedures did not include directions to start a containment spray raw water pump within 15 minutes following a loss-of-coolant accident (LOCA). This issue was evaluated using the SDP phase 1 screening and was determined to be of very low risk significance (Green). This conclusion was based on a consideration that system functionality would not be impaired. Following an accident, the operators monitor key parameters that include containment and torus temperature. In the event of an adverse trend, and/or actuation of the torus high temperature annunciator, plant procedures would result in the starting of a CSRW pump. However, the failure to translate design basis information into operating procedures is considered a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section 1R21.2, Operations, Maintenance and Testing) Green. The team reviewed Unit 2 Nuclear Engineering Report NER-2M-037, which provides the requirements for taking reactor building unit coolers out of service for testing. The team identified that these requirements had not been incorporated in the service water operating procedure. The team determined this issue was of very low risk significance (Green) based on SDP phase 1 screening. This conclusion was based on the observation that, while not specified in the procedure, the current practice was to route all work orders that take a reactor building unit coolers out of service to engineering for approval. Also, the team did not identify any instances where the reactor building coolers were removed from service without the engineering requirements being met. The failure to properly translate design basis information into the operating procedure is considered a non-cited violation of 10 CFR 50 Appendix B, Criterion III, Design Control. The issue was entered in the NMPC corrective action program. (Section 1R21.2, Operations, Maintenance and

Inspection Report# : 2000007 (pdf)

Barrier Integrity		
Emergency Preparedness		
Occupational Radiation Safety		
Public Radiation Safety		
Physical Protection		

### **Miscellaneous**



Dec 29, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

## FAILURE TO VERIFY THE ADEQUACY OF DESIGN FOR THE MODIFICATION TO THE DEGRADED VOLTAGE RELAYS.

This issue was greater than minor because the failure to conduct an adequate design review could result in structures, systems and components not fulfilling required designfunctions. The issue was of very low safety significance based on the results of a probabilistic risk assessment of a loss of coolant accident with line 4 unavailable. The licensee's failure to verify the adequacy of the design of the degraded voltage relays was a violation of 10CFR50 Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing Plants, specifically Criterion III, Design Control, which, in part, requires that design control measures provide for checking the adequacy of the design. However, because of the very low safety significance, it is being treated as a non-cited violation, consistent with SEction VI.A.1 of the NRC Enforcement Policy. This issue is in the licensee's corrective action program under DER-NM-2001-3251 and is documented in section 4OA7 of this report.

Inspection Report#: 2001010(pdf)

Significance: N/A Feb 10, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### SERVICE WATER CHECK VALVE FAILS REVERSE FLOW TEST. LER 2000-002.

The licensee failed to comply with the limiting condition for operation specified in TS 3.6.14.b, when a grab sample was not obtained within the

twelve-hour time limit.

Inspection Report#: 2000011(pdf)

Significance: N/A Feb 10, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

LOSS OF SECONDARY CONTAINMENT DUE TO BOTH REACTOR BUILDING TRACK BAY DOORS BEING OPEN SIMULTANEOUSLY.

The licensee failed to maintain secondary containment integrity in accordance with TS 3.4.1.b. duirng a maintenance activity.

Inspection Report#: 2000011(pdf)

Significance: N/A Dec 30, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

## OPERATOR ACTIVATED HIS LICENSE & PERFORMED LICENSED DUTIES W/O MEETING REQUIREMENTS OF 10CFR55.53(f).

Violations of very low significance, which were identified by the licensee, have been reviewed by the inspector. Corrective actions taken or planned

by the licensee appear reasonable. This violation is summarized in Section 4OA7 of this report.

Inspection Report#: 2000010(pdf)

Significance:

Sep 29, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

#### Failure to properly implement corrective actions.

Green. The team identified that NMPC had determined that the containment spray raw water system radiation monitors could alarm due to background radiation levels following a LOCA. However, the associated alarm response procedures had not been revised to alert operators to this potential and to provide appropriate response actions. The team determined this issue to be of very low risk significance (Green) by the SDP phase 1 screening. The team determined this issue to be of very low risk significance (Green) by the SDP phase 1 screening. This conclusion was based on a recognition that the simultaneous actuation of all four alarms following a LOCA, without a corresponding indication on the downstream service water system radiation monitor, would be sufficient information for the operators to recognize the alarms as spurious due to background radiation. The failure to implement corrective actions to correct the affected procedure is considered a non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action. This item was entered into the NMPC corrective action program. (Section 4OA1, Identification and Resolution of Problems) Green. The team identified that an Emergency Operating Procedure (EOP) attachment, intended to be a standalone procedure, did not contain all the directions necessary to perform the procedure without referring to other operations procedures. The team determined this issue to be of very low risk significance (Green) by the SDP phase 1 screening. This conclusion was based on the fact that the system operating procedure included the appropriate guidance, as did operator training, and the issue did not affect the operability of the service water system. The failure of NMPC to implement appropriate corrective actions to ensure adequacy of operating procedures is considered a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action. This item was entered into the NMPC corrective action program. (Section 4OA1, Identification and Resolution of Problems)

Inspection Report#: 2000007(pdf)

Significance: N/A Jul 01, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement the SAT process for the licensed operator training program.

NO COLOR. NMPC failed to consistently implement the systems approach to training (SAT) process for the licensed operator training program as required by 10 CFR 55.59(c). Specifically, training programs were not evaluated and revised based on observed performance deficiencies of licensed operators in the job setting. Corrective actions to the self-revealing deficiencies addressed the apparent symptoms, but corrective actions to prevent recurrence were missing or erratic. There was reasonable assurance that licensed operators have received adequate training to perform acceptably in the job setting, based on immediate corrective actions taken. This failure to implement the SAT process is being treated as a Non-Cited Violation, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65 FR 25368). (Section 4OA4b1) Inspection Report#: 2000004(pdf)

Significance: N/A Jul 01, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to implement the SAT process for the non-licensed operator training program.

NO COLOR. NMPC failed to consistently implement the systems approach to training (SAT) process for the non-licensed operator (shift technical advisors, auxiliary operators, licensed operator candidates) training program as required by 10 CFR 50.120. Specifically, training programs were not evaluated and revised based on observed performance deficiencies of non-licensed personnel in the job setting. Corrective actions to the self-revealing deficiencies addressed the apparent symptoms, but long term corrective actions to prevent recurrence were missing or erratic. There was reasonable assurance that non-licensed operators have received adequate training to perform acceptably in the job setting, based on immediate corrective actions taken. This failure to implement the SAT process is being treated as a Non-Cited Violation, consistent with Section VI.A of the Enforcement Policy, issued on May 1, 2000 (65 FR 25368). (Section 4OA4b2)

Inspection Report#: 2000004(pdf)

Significance: N/A Jun 09, 2000

Identified By: NRC Item Type: FIN Finding

Corrective actions for DERS reviewed appeared appropriate.

The prescribed C/As for DERs reviewed appeared appropriate to correct the problems. The backlog of C/As was being managed well and the team did not identify any backlogged action that represented an adverse effect on plant risk. (Section 4OA2.3)

Inspection Report#: 2000003(pdf)

Significance: N/A Jun 09, 2000

Identified By: NRC Item Type: FIN Finding

Licensee's resolution of problems was adequate.

Based on the sample reviewed, the licensee's resolution of problems was adequate. Items entered into the C/A program were properly classified and prioritized for resolution. The evaluations and root causes analyses reviewed were of good depth and quality. Although the team found a few instances where the evaluation of some DERs had not been completed within the specified time, the team did not identify any instance that represented a significant concern. The licensee was already aware of these delays and was taking action to correct the problem. (Section 4OA2.2) Inspection Report#: 2000003(pdf)

Significance: N/A Jun 09, 2000

Identified By: NRC Item Type: FIN Finding

QA, Self-assessments, and oversight review committee actions were appropirate.

Issues identified in the QA Audits and self assessment reports reviewed had been properly entered into the DER process. Some assessment findings resulted in recommendations and identification of issues not previously included in the DER process. Based upon a review of a sample of meeting minutes of the SORC and CARB, and observation of some CARB meetings, the team found that the committees provided good oversight

of the C/A Program. (Section 4OA2.4) Inspection Report# : 2000003(pdf)

Significance: N/A Jun 09, 2000

Identified By: NRC

Item Type: NCV NonCited Violation

Seven examples of equipment problems/failures which were not entered into the DER process for operability assessments or trending. NO COLOR. The licensee was effective at identifying and tracking problems. The team did not identify any issues that were not already being tracked. However, the team identified seven examples where issues involving equipment failures documented in the Problem Identification process had work orders to conduct the repairs, but no DERs were written as required. This failure to initiate DERs is a violation of TS, but being treated as a non-cited violation. (Section 4OA2.1)

Inspection Report# : 2000003(pdf)

Last modified: April 01, 2002