Beaver Valley 1
3Q/2003 Plant Inspection Findings

Initiating Events

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO ADEQUATELY CONTROL SCAFFOLD ACTIVITIES CAUSES MAIN STEAM ISOLATION VALVE CLOSURE AND REACTOR TRIP
Failure to properly preplan and control maintenance activities (scaffold erection) in the vicinity of the ‘C' main steam isolation valve (MSIV) actuator led to an unplanned Unit 1 safety injection (SI) actuation and reactor trip on February 24, 2003. Procedure BVSG-002, "Scaffold Erection and Tagging," Rev. 3, required an operations department review and approval of the scaffold erection activity. The review for this activity failed to identify precautions to protect safety-related equipment such as the MSIV actuator rupture disk. This represented human performance errors in both the pre-evolution risk review and the scaffold erection activity.

This finding was an NCV of Technical Specification (TS) 6.8.1 and was of very low safety significance because the issue did not affect the availability of mitigation equipment.
Inspection Report# : 2003002*(pdf)*

Significance: G Mar 29, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY TEST 4.16 kV BUS PROTECTION RELAY MODIFICATION CAUSES LOSS OF 4160 VOLT BUS EVENT
Human performance errors during preparation of a ground fault relay setpoint modification caused an inadvertent deenergization of the Unit 1 ‘D' 4.16 kilovolt (kV) switchgear. The event resulted in a partial loss of feedwater transient, brief deenergization of the ‘DF' emergency 4.16 kV switchgear, and auto start of the 1-1 emergency diesel generator (EDG). The modification lowered the relay setpoint from 200 amperes to 120 amperes without adequately evaluating sensor error or motor starting current for large loads on the bus. The existing ground fault current error was not measured nor accounted for in development of the test procedure which could have prevented the loss of the ‘D' bus and subsequent unplanned plant transient.

The finding was an NCV of 10 CFR 50, Appendix B, Criterion XI "Test Control" for failure to address and test the effect the modified relay setpoint had on normal ‘D' 4.16 kV electrical bus operation. The finding increased the likelihood of an initiating event, but remained of very low safety significance because alternate power supplies remained available.
Inspection Report# : 2003002*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: FIN Finding

INEFFECTIVE PROBLEM IDENTIFICATION AND RESOLUTION OF DEGRADED PRESSURE INSTRUMENT RESULTS IN MANUAL REACTOR TRIP
Station personnel failed to fully identify and resolve degradation of the Unit 1 turbine motoring condition alarm differential pressure instrument in 1999 and again in 2002. Ineffective problem identification and resolution, and a resulting lack of preventive maintenance led to an unplanned Unit 1 reactor trip.

This finding was of very low significance because the issue did not effect the availability of mitigation equipment. The issue was not a violation because the differential pressure instrument is not subject to the requirements of 10 CFR 50, Appendix B.
Inspection Report# : 2002007*(pdf)*

Mitigating Systems

Significance: G Jul 25, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO TAKE CORRECTIVE ACTIONS FOR A SIGNIFICANT CONDITION ADVERSE TO QUALITY INVOLVING THE USE OF UNCALIBRATED M&TE
The inspectors identified a non-cited violation of 10CFR50, Appendix B, Criterion XVI, "Corrective Action," for failure to ensure that a significant condition adverse to quality was promptly identified and corrected. Specifically, the licensee used uncalibrated measuring and test equipment (M&TE) during a surveillance test of safety-related equipment.

The finding was greater that minor because the use of un-calibrated M&TE during surveillance tests of safety-related systems affected the availability and reliability of safety-related mitigating systems required to respond to initiating events. The use of un-calibrated test equipment could result in the failure to identify unavailable mitigating equipment. The finding was of very low safety significance since an actual loss of the safety function of any mitigating system did not occur or go undetected.
Inspection Report# : 2003008*(pdf)*

Significance: G Jul 25, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO RE-EVALUATE A CONDITION ADVERSE TO QUALITY ASSOCIATED WITH THE PERFORMANCE OF MCCBs DURING TESTING
The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," because First Energy Nuclear Operating Company (FENOC) failed to properly evaluate a condition adverse to quality involving the trip function of molded case circuit breakers (MCCBs).

The finding was greater than minor since potentially degraded MCCBs remained in- service and a fault on a supplied load could have resulted in the loss of an entire motor control center and, hence, affect the ability of multiple safety-related systems to perform their safety-related function. The finding was of very low safety significance since no actual conditions were identified where a motor control center was lost as a result of this problem.
Inspection Report# : 2003008*(pdf)*

Significance: G Jun 28, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURE FOR MANUAL OPERATOR ACTION CAUSES EMERGENCY DIESEL GENERATOR TO BE UNAVAILABLE
The inspectors identified a non-cited violation of Technical Specification 6.8.1 because a procedure associated with safety-related equipment was not adequately implemented. This resulted in an increased unavailability of the Unit 1, No. 1 emergency diesel generator (EDG). Procedure 1/2OM-48.1.I, "Technical Specification Compliance," Rev. 13 required written restoration instructions be provided to a remotely-stationed operator in order to maintain continued EDG availability. Although verbally covered in the pre-job brief, the written instructions were not given to the designated operator.

This finding is greater than minor because it affects the mitigating systems cornerstone objective of ensuring availability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Without written instructions in the field, operator actions could not be considered a virtual certainty (i.e., probability nearly equal to one) as described in Nuclear Energy Institute 99-02, Rev 2. The finding was of very low safety significance because the EDG was unavailable for less than the technical specification allowed outage time of 72 hours.
Inspection Report# : 2003003*(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: W Apr 30, 2003
Identified By: NRC
Item Type: VIO Violation
ADEQUATE AND TIMELY EMERGENCY RESPONSE STAFFING IN FOUR KEY FUNCTIONAL ARES NOT MAINTAINED AT ALL TIMES
The 12 augmented radiation protection (RP) technician responders (i.e., six to respond in 30 minutes (M) and six to respond in 60 M) in the Emergency Response Organization (ERO) were not capable of meeting the minimum and timely staffing requirements in Emergency Preparedness Plan (EPP), Section 5, Table 5-1. EPP Section 5.2 states that Table 5-1 identifies the staffing requirements and capabilities for additions of the ERO. Table 5-1 requires that 12 RP technicians must respond to augment the shift crew in the four functional areas of offsite surveys (two in 30M and two in 60M), onsite surveys (one in 30M and one in 60M), in-plant surveys (one in 30M and one in 60M), and in-plant protective actions (two in 30M and two in 60M).

This was an apparent violation of 10 CFR 50.47(b)(2) and the EPP for not ensuring that adequate and timely emergency response staffing, in the four stated functional areas, was maintained at all times. This finding was of low to moderate safety significance because staffing augmentation processes were not capable of ensuring augmentation of the initial response staff in accordance with EPP facility activation commitments for RP technicians.

A violation of 10 CFR 50.47(b)(2), 10 CFR 50.54(q), and The 'Emergency Preparedness Plan, Table 5.1, was issued by EA Letter 03-054, dated July 10, 2003. Reference NRC Inspection Report 50-334(412)2003-003.

Inspection Report# : 2003003*(pdf)*
Inspection Report# : 2003006*(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : December 01, 2003