

Limerick 1

Initiating Events



Significance: Jun 29, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to follow station procedures for analyzing degraded main control room indications.

The inspector identified a finding of very low safety significance (Green) that is also a non-cited violation of Technical Specification 6.8.1, "Procedures." Exelon did not assess the operational impact of a degraded '1A' recirculation loop temperature instrument. Consequently, when operators used this degraded temperature instrument to monitor coolant temperature while in a Cold Shutdown condition, the operators did not recognize, due to erroneous temperature indication by the degraded instrument, that the actual reactor coolant temperature had exceeded 200 degrees and resulted in an inadvertent operational condition change to a Hot Shutdown condition. This finding was determined to be of very low safety significance (Green) by the Reactor Inspection Findings for At-Power Situations because it did not increase the likelihood of a primary system LOCA, did not contribute to the likelihood of a reactor trip, and did not increase the likelihood of a fire or internal/external flood.

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

Mitigating Systems



Significance: Dec 28, 2002

Identified By: NRC

Item Type: FIN Finding

Preventive Maintenance on the 10 Bus Transformer Load Tap Changer was Deficient

The inspectors identified a finding of very low safety significance because the work order for preventive maintenance on the 10 Bus transformer load tap changer was deficient, in that, it did not address the impact on operations as required by Exelon procedures. This led to unplanned inoperability of the offsite power source. This finding was determined to be of very low safety significance by the Reactor Inspection Findings for At-Power Situations Significance Determination Process because it did not result in an actual loss of safety function of a system or train, and it did not screen as risk significant due to a seismic, fire, flooding, or severe weather initiating event.

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



Significance: Jun 29, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to fully implement station procedure requirements for post-scrum reviews.

The inspector identified a non-cited violation of Technical Specification 6.8.1, "Procedures," because Exelon did not follow post scrum station procedures during the investigation of the cause of an unexpected high reactor water level condition that led to the trip of all three reactor feedwater pumps following a Unit 1 scrum on May 19, 2002. Exelon's post scrum review did not identify that the level control setpoint setdown function of the feedwater control system did not actuate which caused the unexpected high reactor water level condition. Exelon's failure to properly investigate the cause of the reactor high water level condition was determined to have very low safety significance (Green) using a Phase 3 analysis.

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



Significance: May 19, 2002

Identified By: NRC

Item Type: FIN Finding

Post Maintenance Testing

The inspectors identified a finding of very low safety significance, because Exelon maintenance personnel did not follow the work order for conducting preventive maintenance on the feedwater control system. Consequently, a wire that was disconnected during the activity was improperly restored, which disabled the setpoint setdown function of the feedwater control system. The wiring error led to a post-scrum high reactor level and a trip of the reactor feed pumps, which caused the loss of the power conversion system function following the scrum. This

finding involved a human performance error by the maintenance technician because he did not restore the setpoint setdown function to service in a manner specified by the maintenance work order. This finding was determined to have very low safety significance using a Phase 3 analysis. (Section 1R19)

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

G

Significance: May 19, 2002

Identified By: NRC

Item Type: FIN Finding

Unit 1 "A" Reactor Feed Pump Discharge Valve Breaker

The inspectors identified a finding of very low safety significance, because Exelon maintenance technicians did not follow maintenance procedures and improperly assembled the Unit 1 "A" reactor feed pump discharge valve breaker during preventive maintenance activities. Consequently, the breaker did not properly respond and its associated feed pump discharge valve could not be closed when demanded by control room operators during post-scrum feedwater system manipulations. This complicated the operators' ability to control the reactor level while performing post-scrum emergency operating procedures. This finding involved a human performance error because maintenance technicians did not assemble the breaker in the manner specified by the maintenance procedure. This finding was determined to be of very low safety significance by the Reactor Inspection Findings for At-Power Situations Significance Determination Process because it did not result in an actual loss of safety function of a non-Technical Specification Train of equipment for greater than 24 hours, and it did not screen as risk significant due to a seismic, fire, flooding, or severe weather initiating event. (Section 1R12)

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

G

Significance: Mar 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to meet TS 3.0.4 due to change in Operational Conditions with unsatisfactory results on a Unit 1 Division II battery charger surveillance test.

Technical Specification 3.0.4 states that entry into an Operational Condition shall not be made when the conditions for the Limiting Condition for Operation are not met and the associated Action requires a shutdown if they are not met within a specified time interval. Contrary to the above, on or about March 19, 2002, Unit 1 entered Operational Condition 2 (startup), with the Division II DC Battery Charger 1B1D103 inoperable due to an unsatisfactory surveillance test, a condition that requires a shutdown. This item is documented in the licensee corrective action program as CR 100013. This is being treated as a Non-Cited Violation.

Inspection Report# : [2002002\(pdf\)](#)

G

Significance: Mar 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to meet TS 3.8.2.2 due to unsatisfactory results on a Unit 1 Division II battery charger surveillance test, with two other DC Power Divisions inoperable during a refueling outage

Technical Specification 3.8.2.2 requires that two of the four divisions of DC power be operable in Operational Conditions 4, 5, and *. Contrary to the above, during the period March 14 through March 17, 2002, while in refueling outage 1R09, the Unit 1 DC Power Divisions I, II and III were inoperable concurrently. This condition occurred due to an unsatisfactory surveillance test and lack of supervisory review. This item is documented in the licensee corrective action program as CR 100013. This is being treated as a Non-Cited Violation.

Inspection Report# : [2002002\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

G**Significance:** May 11, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to secure five bags of trash, marked as containing radioactive material and stored in an unrestricted area, from unauthorized removal in accordance with 10 CFR 20.1801

The inspector identified a non-cited violation of 10 CFR 20.1801 having very low safety significance. On March 11, 2002, Exelon failed to prevent five bags of trash, marked as containing radioactive material and stored in an unrestricted area within the protected area, from being transported to the Pottstown Landfill for disposal. The Pottstown Landfill was not licensed under 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste," to dispose of radioactive materials. Exelon's failure to prevent the removal of five bags of radioactive material from the protected area to the Pottstown Landfill for disposal was determined to have very low safety significance using the Public Radiation Significance Determination Process. The finding involved radiation material control but not transportation. Public exposure was not greater than 0.005 rem, and there have not been more than 5 instances of such occurrences in the current inspection period. (Section 2PS2) Inspection Report# : [2002003\(pdf\)](#)

Physical Protection

Miscellaneous

Significance: N/A Jun 26, 2002

Identified By: NRC

Item Type: FIN Finding

Biennial baseline inspection of Problem Identification and Resolution

The team concluded that the implementation of the corrective action program at Limerick Generating Station (LGS) was adequate. The licensee was effective at identifying problems and putting them in the corrective action process. Issues were prioritized and evaluated appropriately and in a timely fashion. The evaluations of significant problems were of sufficient depth to identify likely root or apparent causes, and to address the potential extent of the circumstances contributing to the problem. Corrective actions that addressed the causes of problems were generally identified and implemented. However, the team identified that some elements of the corrective action program had not been fully effective in resolving component mis-positioning events and errors associated with equipment clearance and tagging. The team also noted that the licensee's oversight committees identified similar findings and that increased management attention has been directed to this area.

Inspection Report# : [2002010\(pdf\)](#)G**Significance:** May 11, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Transfer of byproduct material to an Agreement State licensee without verifying license authorized receipt of the type, form, and quantity of byproduct material to transferred (10 CFR 30.41(c)).

The inspector identified a non-cited violation of 10 CFR 30.41 having very low safety significance. On December 21, 2001, Exelon transferred byproduct material to General Electric (GE), Wilmington, North Carolina, an Agreement State licensee, without verifying that GE-Wilmington's license authorized receipt of the type, form, and quantity of byproduct material prior to transfer, in accordance with 10 CFR 30.41, "Transfer of byproduct material," section (c). Exelon transferred 1.28 curies of Kr-85 byproduct material in the form of sealed sources to GE-Wilmington licensee that was only authorized to receive sealed sources in the amount of 0.2 curies. The nature of this particular finding is not encompassed by any existing cornerstone or Safety Significance Determination Process, but has been reviewed by NRC management and was determined to be a finding having very low safety significance. The inspector determined that there was no actual safety consequence associated with this condition in that the GE-Wilmington facility was able to appropriately receive, control, repackage, and ship the sealed sources to a licensee authorized to receive such material. (Section 4OA2)

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

Last modified : March 25, 2003