Duane Arnold

Initiating Events

Mitigating Systems

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Seismic Evaluation on 1D1 Cell #53 Battery Jumper
A finding of very low safety significance was identified by the inspectors when the licensee failed to follow Administrative Control Procedure (ACP) 1203.01 "Design Verification" procedure and adequately evaluate the seismic qualification of the jumper cable around cell #53 of the "1D1" 125 Volts Direct Current (Vdc) battery. The inspectors concluded that the issue was more than minor since the finding had greater safety significance than a similar issue described in IMC 0612, Appendix E, Section 4.a. The finding was determined to be of very low safety significance, since the licensee was able to show operability of the 1D1 battery. A Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion V, related to the failure to adequately perform ACP 1203.01 "Design Verification" procedure when evaluating the seismic qualification of the jumper cable around cell #53 of the 1D1 battery was identified by the inspectors.
Inspection Report# : 2002007*(pdf)*

Significance: G Dec 28, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate RCIC Troubleshooting Procedure
A finding of very low safety significance was identified by the inspectors when the licensee failed to adequately plan the procedure for filling and venting the Reactor Core Isolation Cooling (RCIC) lubricating oil system. The finding was more than minor since the finding resulted in increased unavailability of the RCIC system. The finding was determined to be of very low safety significance, since the licensee did not exceed the Allowable Outage Time (AOT) and High Pressure Coolant Injection (HPCI) was always available. A NCV of 10 CFR 50, Appendix B, Criterion V, related to inadequate procedure for filling and venting the RCIC lubricating oil system was identified by the inspectors. (Section 1R19)
Inspection Report# : 2002007*(pdf)*

Significance: G Aug 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Risk Assessment due to RCIC.
A finding of very low safety significance was identified by the inspectors when the licensee failed to perform an adequate risk assessment when the reactor core isolation cooling (RCIC) system was unavailable. The overall plant risk was actually yellow when identified as green by the licensee. The finding was more than minor since it involved a change in risk level from green to yellow and, if left uncorrected, would become a more significant safety concern. The finding was of very low safety significance since the high pressure core injection (HPCI) system was working as designed and the incremental core damage probability (ICDP) of having RCIC system unavailable for 12 days was 3E-7. An NCV of 10 CFR 50.65 (a)(4) was identified for the failure to properly perform an adequate risk assessment.
Inspection Report# : 2002006*(pdf)*

Significance: G Aug 06, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Corrective Actions RHRSW Strainer.
A finding of very low safety significance was identified by the inspectors when inadequate corrective actions resulted in a repeat event where algae growth was plugging the residual heat removal service water (RHRSW) strainers. The finding was more than minor since it impacted the operability of the RHRSW system. The finding was of very low safety significance because this event did not result in the flow of any of the RHRSW pumps to decrease below the Technical Specification (TS) 3.7.1 allowable minimum flow rate of 2040 gallons per minute (GPM). An

NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," was identified for the failure to properly correct the algae buildup condition.
Inspection Report# : 2002006*(pdf)*

Significance: G Mar 29, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
The licensee failed to establish adequate measures to assure that the design requirements in calculations E92-007 and E92-008
Green. The licensee failed to establish adequate measures to assure that the design requirements in calculations E92-007 and E92-008, specifically the number of battery cells, were correctly translated into work instructions in Work Order A5250. This was required to insure that the 1D1 125Vdc battery would remain capable of performing it's design function (operable) with 57 instead of the nominal 58 connected cells. The finding was determined to be of very low safety significance because, although the calculated number of cells in the battery was not conservative and not consistent with the technical specification bases, the 125Vdc system was judged to be capable of supporting the plant during a station blackout or similar design basis accident. Additionally, there was no actual loss of safety function. A Non-Cited Violation of 10CFR Part 50, Appendix B, Criterion III, was identified(Section 1R21. 2).
Inspection Report# : 2002011*(pdf)*

Barrier Integrity

Emergency Preparedness

Significance: G Nov 08, 2002
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to provide vision correction for respirator users
A Non-Cited Violation of 10 CFR 20.1703 (e) was identified for failing to provide for vision correction, when personnel used respiratory protective equipment. This was related to the emergency planning standards of 10 CFR 50.47(b) (10). The deficiency concerned a failure to implement a regulatory requirement (i.e. to provide equipment necessary to protect personnel or emergency workers). The licensee provided self-contained breathing apparatus (SCBA) equipment for all personnel who would be expected to respond in the event of an emergency. However, the licensee failed to provide vision correction lenses for some eyeglass wearing (i.e. non-soft contact wearing) emergency responders. Their ability to perform emergency response functions would have be impaired or hampered, due to inadequate vision correction while wearing SCBAs. Proper vision is required to ensure the capability of all emergency responders to provide emergency services under accident conditions, as required by the Duane Arnold Energy Center Emergency Plan.The finding was determined to be of very low safety significance because the majority of emergency response personnel that wore eyeglasses (i.e. non-soft contact wearing), had been issued vision correction lenses by the licensee. Additionally, an adequate number of SCBA qualified plant personnel/staff, which were designated emergency responders, (i.e. with no vision correction needed, wearers of soft contacts, or personnel with vision correction lenses) would have been available to respond in the event of an actual emergency. Therefore, the issue did not result in the failure to meet a planning standard
Inspection Report# : 2002007*(pdf)*

Significance: TBD Oct 25, 2002
Identified By: NRC
Item Type: URI Unresolved item
URI 50-331/02-12-01: Licensee needs to reassess accuracy of its Drill & Exercise PI data since effective date of Rev 1 of NEI 99-02 document.

Inspection Report# : 2002012*(pdf)*

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : March 25, 2003