

Limerick 1

3Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform timely corrective actions for a revision to an Offsite Electrical Power Voltage Calculation

The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50 Appendix B Criterion XVI, "Corrective Actions," because a condition adverse to quality related to a non-conservative offsite electrical voltage calculation was identified by Exelon in March 2005, but was not promptly corrected. The untimely corrective actions contributed to a missed Technical Specification limiting condition for operation for the required offsite electrical power supplies for Units 1 and 2 in July 2006. Exelon completed a revision to the electrical grid voltage calculation, in September 2006, and adjusted the safeguards transformer tap changer settings to prevent a potential loss of offsite electrical power for a postulated single Unit trip in conjunction with a loss of coolant accident event. Exelon has entered this issue into their corrective action program for resolution.

The Region I SRA determined that this issue was of very low safety significance (Green) based on a Phase 3 risk evaluation, conducted after determining that a Phase 2 analysis was not appropriate for this issue. Phase 1 of the SDP screened the issue as needing further evaluation because the finding results in the offsite power safety function being inoperable for longer than its TS limiting condition of operation. The Phase 3 analysis used the Limerick SPAR model, assuming that, for a two day period, any LOCA initiating event would also cause a loss of offsite power. The SPAR model identified a core damage increase that was several orders of magnitude below the 1 in 10,000,000 year range (E-7). This very small increase was driven by the low frequency of LOCA initiating events and the short exposure time. The dominate core damage sequence, given a LOCA without offsite power, was a failure of all EDGs due to a common cause.

This issue has a cross-cutting aspect in the Problem Identification and Resolution area for corrective action program. Specifically, the voltage regulation study calculation was not revised in a timely manner.

Inspection Report# : [2006005](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : December 07, 2007