

Human Ref.

2T-34A Accumulator Level Indication

Self- Revealing

Introduction: A Xxxxx [waiting for color from SRA] finding, which was self-revealing, was identified when it was found that the water volume in Safety Injection Accumulator 2T-34A exceeded the limit of 1136 cubic feet in Technical Specification (TS) Surveillance Requirement (SR) 3.5.1.2.

Description: Safety Injection Accumulator 2T-34A was drained for maintenance on October 8, 2003 during a refueling outage. The level transmitters were calibrated, filled, and vented while the accumulator was drained. The accumulator was filled on October 29, 2003 and a discrepancy was noted between level indicators 2LI-939 and 2LI-938. The level transmitters were vented and filled, and the transmitter equalizing valves were opened and closed as tool pouch maintenance. Opening the equalizing valves introduced liquid to the dry reference legs of the transmitters. When placed in service, the two indications were in agreement within tolerance. Upon completion of the refueling outage, Unit 2 entered Mode 3 on November 17, 2003. On February 14, 2004, 2LI-939 was noted to be drifting lower. The transmitter reference leg was drained. Upon return to service, the 2LT-939 indication was high off scale. Calibration found the transmitter out of calibration. On February 15, 2004, the transmitter was replaced with one from the storeroom. When placed in service, the replacement transmitter indicated high off scale. A calibration check found the output to be drifting and an attempt to calibrate the transmitter was unsuccessful. On February 22, 2004, a new transmitter from the manufacturer was installed. When placed in service, the new transmitter indicated high off scale. On March 19, 2004, 2 LT-939 was replaced with a different model under a modification. When placed in service, the new transmitter indicated high off scale. A root cause investigation was initiated. Troubleshooting and investigation continued from March 19 through March 30, 2004. On March 30, 2004 ultrasonic examination of the sensing and reference lines of both 2LT-938 and 2LT-939 identified that 2LT-939 was indicating correctly. Immediate actions were taken to enter the applicable TS Action Condition (AC), to restore the accumulator to operable status. Ultrasonic examination identified water in the reference leg of 2LT-938. Water was drained from the 2 LT-938 reference leg and 2LI-938 and 2LI-939 were in agreement within tolerance. A root cause evaluation was performed. An LER was submitted.

Analysis: Inspectors reviewed the root cause evaluation report and the LER. The inspectors determined that operating with the accumulator level high was a performance deficiency warranting a significance evaluation. The inspectors concluded that the finding was greater than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," issued on June 20, 2003. The inspectors concluded that the finding was greater than minor because it affected the Reactor Safety Mitigating Systems objective to ensure availability of systems that respond to prevent undesirable consequences (i.e., core damage).

The inspectors completed a significance determination of this issue using IMC 0609, "Significance Determination Process (SDP)," dated April 30, 2002, Appendix A. Since the finding represented a xxxx [waiting for significance from SRA], it was determined to be a finding of xxxx safety significance (Xxxxx). This finding was assigned to the reactor safety mitigating systems cornerstone for Unit 2.

Enforcement: TS 3.5.1, requires that two Safety Injection Accumulators shall be operable in Modes 1 and 2, and in Mode 3 with RCS pressure greater than 1000 psig. SR 3.5.1.2 requires that borated water volume in each accumulator be verified to be greater than or equal to 100 cubic feet, and less than or equal to 1136 cubic feet every 12 hours. Contrary to these requirements the water volume in 2T34A was greater than 1136 cubic feet from November 17, 2003 until March 30, 2004. Because this violation was of xxx safety significance and it was entered into the licensee's corrective action program, this violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy. (NCV 05000301/2004003-0X.