

Sequoyah 1 3Q/2012 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Procedures for Tornado Watch/Warning

The inspectors identified a noncited violation of Units 1 & 2 Technical Specification of 6.8.1.a for the licensee's failure to adequately implement procedure AOP-N.02, "Tornado Watch/Warning," Revision 28. On March 2, 2012, the licensee entered AOP-N.02 due to a tornado watch/warning and failed to secure or remove loose material in the Switchyard/Transformer Yard as required by the procedure.

This issue was entered into the licensee's corrective action program as Problem Evaluation Report (PER) 515684.

Inspection Report# : [2012002](#) (*pdf*)

Mitigating Systems

Significance: G Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Evaluate Fire Drill

The inspectors identified a noncited violation of Units 1 & 2 Technical Specification 6.8.1.f for the licensee's failure to implement procedures required for fire protection program implementation. Specifically, the licensee failed to evaluate six minimum critical objectives on December 5, 2011, during a fire drill as required by TVA-SPP-17.16, Conduct and Evaluation of Fire Drills, revision 0. This issue was entered into the licensee's corrective action program as Problem Evaluation Reports (PERs) 538996, 568242, and 568248.

The performance deficiency was determined to be greater than minor because it was associated with the protection against external events attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the lack of adequate drill performance could negatively affect the fire brigade's capability to combat a fire. Findings associated with performance of the fire brigade are not evaluated using IMC 0609, Attachment F, "Fire Protection Significance Determination Process," and Appendix M, "Significance Determination Process Using Qualitative Criteria," as described in NRC Inspection Manual Chapter 0609.04, Table 3b, "Phase 1 - Initial Screening and Characterization of Findings." The NRC concluded that the finding was of very low safety significance (Green) because the defense-in-depth attribute of the fire brigade was minimally affected, in that, the evaluated crew was only one of four crews of the site fire brigade team, the other crews had adequately been evaluated, and that the overall condition of the fire detection and suppression systems has been satisfactory. The finding was determined to have a crosscutting aspect in the area of Problem Identification and Resolution because of inadequate oversight and self-assessment of fire operations department activities, specifically fire brigade training.

[P.3(a)] (Section 1R05)

Inspection Report# : [2012003](#) (pdf)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Turbine Throttle Valve Reactor Trip Function Degraded

The inspectors identified a Green NCV of Unit 1 TS 6.8, “Procedures & Programs,” for the licensee’s failure to provide adequate procedures for maintenance and surveillance activities involving the main turbine throttle valves and the associated solid state protection system (SSPS) function which provides a reactor trip on turbine trip signal. The failure to include applicable torque requirements for set screws associated with the limit switch lever arm assembly resulted in one of the four turbine throttle valve position limit switches being in an inoperable condition such that the SSPS function of reactor trip on turbine trip, which involves a four-out-of-four logic, was inoperable and could not have functioned if required. This issue was entered into the licensee’s corrective action program as Problem Evaluation Reports (PERs) 419594 and 518647

The finding was determined to be greater than minor because it was associated with the procedure quality attribute of the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the finding resulted in the inability of the SSPS to provide the required reactor trip signal upon closure of all four turbine throttle valves above 50 percent RTP. Using Inspection IMC 0609, “Significance Determination Process,” Attachment 4, “Phase 1 - Initial Screening and Characterization of Findings,” the finding was determined to be of very low safety significance (Green) since the trip is not credited in any Updated Final Safety Analysis (UFSAR) Chapter 15 accident analysis and the redundant reactor trip on turbine trip function that is based on low auto stop oil pressure was unaffected.

The cause of this finding was determined to have a cross-cutting aspect in the area of Human Performance, Resources component, and the aspect of complete and accurate procedures and work packages. The procedures for performing maintenance and surveillance activities associated with the turbine throttle valves and associated SSPS function were not adequate to assure nuclear safety due to the failure to include applicable torque requirements for the components associated with the valve limit switch assembly. [H.2(c)]. (Section 4OA2.2)

Inspection Report# : [2012003](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Meet Fire Drill Training Requirements

The inspectors identified a noncited violation of facility operating license DPR-77 condition 2.C.(16) and facility operating license DPR-79 condition 2.C.(13) for failure to implement and maintain in effect all provisions of the approved fire protection program. Specifically, Sequoyah’s Fire Protection Report Part II, Section 9.3.b.2 – Fire Drills requires a minimum of one drill per shift every calendar quarter, a minimum on one unannounced drill per shift per year, at least one drill per shift per year is performed on a “backshift” for each fire brigade, and fire brigade members including leaders shall participate in at least two drills per year. The inspectors identified multiple examples of the licensee’s failure to meet these requirements in calendar years 2010 and 2011. This issue was entered into the licensee’s corrective

action program as Problem Evaluation Report (PER) 513378, 512736, and 527875.
Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: FIN Finding

Failure to Follow Corrective Action Program Procedures

The inspectors identified a finding for the licensee's failure to meet the requirements of corrective action program procedure NPG-SPP-03.1.7, PER Actions, Revision 2. Specifically, the licensee failed to ensure that the corrective action plan and associated actions addressed the required action and schedule associated with PER 432510, which documented the need to address a condition involving water accumulation in manhole locations containing electrical cable runs. This issue was entered into the licensee's corrective action program as Problem Evaluation Report (PER) 433761, 432510, and 505259.

Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Turbine Driven Auxiliary Feedwater Pump Inoperable Due to Overspeed Trip

A self-revealing NCV of Unit 1 TS 6.8, "Procedures & Programs," was identified for the licensee's failure to provide adequate procedures for a maintenance activity involving the required inspection of an Essential Raw Cooling Water (ERCW) pipe leak in the Unit 1 Turbine Driven Auxiliary Feedwater Pump (TDAFW) room. This resulted in water intrusion into the governor control cabinet of the TDAFW Pump, which caused the pump to be inoperable due to an electrical overspeed trip caused by fluctuating speed indications. This issue was entered into the licensee's corrective action program as Problem Evaluation Report (PER) 470310.

Inspection Report# : [2012002](#) (*pdf*)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Change to Fire Protection Program Which Adversely Affected Safe Shutdown Without Prior NRC Approval

The inspectors identified a non-cited violation of Sequoyah operating license conditions 2.C. (16) and 2.C. (13) for Units 1 and 2 respectively, for a change made to the Sequoyah fire protection program which was determined to adversely affect safe shutdown (SSD), without prior NRC approval. Specifically, in lieu of protecting the cables and equipment to ensure that one train of equipment required for SSD was free of fire damage, the licensee made a change to the Sequoyah fire protection program in 2002 that added new operator manual actions (OMAs) to achieve SSD, without prior NRC approval. The evaluation performed in 2002 for the new OMAs was not adequate to support the conclusion that adding the OMAs did not adversely affect post-fire SSD because the evaluation only addressed OMA feasibility and did not address defense-in-depth. The licensee entered this issue in the corrective action program as problem evaluation report 324757 to track resolution.

Inspection Report# : [2012002](#) (*pdf*)

Barrier Integrity

Significance:  Dec 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Thermal Power Less Than Licensed Limit

The inspectors identified a non-cited violation of Unit 1 Operating License DPR-77 Condition 2. (C).1 “Maximum Power Level” for the licensee’s failure to take prudent action to ensure that the licensed power limit was not exceeded during a pre-planned evolution which involved manual reactivity manipulations. Prompt action was not taken by operators to reduce power when reactor thermal power exceeded the licensed power limit during a control rod full out position reset activity. Additionally, prudent action to sufficiently reduce power prior to the activity to accommodate the power transient was not taken. This issue was entered into the licensee’s corrective action program as PER 437068.

Inspection Report# : [2011005](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : November 30, 2012