Sequoyah 1 – Quarterly Plant Inspection Findings

2Q/2017 – Plant Inspection Findings

On this page:

Initiating Events

Significance: G Jul 15, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Maintain Design Control of MSIV Controls
A self-revealing Green non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) 50, Appendix B, Criterion III, "Design Control", was identified for the licensee's failure to maintain design control of MSIV 1-FCV-1-22 controls. Specifically, inadequate design controls led to under tightened electrical connection following replacement of the Unit 1 MSIV Control Room handswitch (1-HS-1-22A).

On November 23, 2015, a manual reactor trip was initiated by operators as a result of a slowly closing loop # 3 main steam isolation valve. The event was reported to the NRC as event notification (EN) 51559, and documented in the licensee's CAP as CR 1107656. The licensee's root cause into the event identified the Unit 1 MSIV Control Room handswitch (1-HS-1-22A) having a loose connection (terminal lug and nut assembly - terminal E, wire 1B6) located in Panel 1-M-4 as the direct cases of 1-FCV-1-22A drifting shut and the manual reactor trip. In 1994, SQN electric shop technicians completed replacement of the MSIV 1-22 handswitch (1-HS-1-22A) under Work Order (WO) 93-000869-000. Review of WO 93- 000896-000 identified work planning and work steps were consistent with 1994 methodologies and requirements in that it provided references for fastener tightness.
Inspection Report# : 2016008 *(pdf)*

Mitigating Systems

Significance: G Mar 31, 2017
Identified By: NRC
Item Type: NCV Non-Cited Violation
Degraded Fire Barrier Penetration
The NRC identified a non-cited violation of the facility's operating license for the failure to identify a nonfunctional fire barrier penetration and enter it into the corrective action program (CAP) when the initial damage to the fire barrier occurred. The licensee also failed to implement required compensatory measures for a nonfunctional fire barrier penetration contrary to the approved fire protection report. The licensee entered the issues into their CAP as Condition Report (CR) 1263322.

The performance deficiency was determined to be more than minor because it was associated with the protection against external events (fire) attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective in that there was no assurance the fire barrier would prevent the spread of fire through the cable penetration during a design basis fire. The finding was of very low safety significance (Green) due to fully functional automatic suppression systems on either side of the fire barrier. The inspectors identified a cross-cutting aspect in the Identification component of the Problem Identification and Resolution area, because the licensee failed to enter the damaged fire barrier into their CAP after it was initially damaged [P.1]

Inspection Report# : 2017001 *(pdf)*

Significance: G Dec 19, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Degrader Fire Barrier Penetrations
The NRC identified a non-cited violation (NCV) of the facility's operating license for the licensee's failure to ensure that all fire barrier penetrations in fire zones boundaries protecting safety related areas are functional at all times. Specifically, on eight separate fire barrier penetrations, the licensee failed to recognize that the barrier had become damaged to the point of being nonfunctional. The licensee also failed to implement required compensatory measures for a nonfunctional fire barrier penetration contrary to the approved fire protection report (FPR). The licensee entered the issues into their corrective action program (CAP) as Condition Reports (CRs) 1229468, 1229470, 1243550, 1243970, 1243552, 1243554, 1243555, and 1243557. The performance deficiency was determined to be more than minor because it was associated with the protection against external events (fire) 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, with the fire barriers being damaged to the point of declaring the fire barrier penetrations nonfunctional, there was no assurance that the fire barrier would prevent the spread of fire through the cable penetration during a design basis fire. The inspectors performed the SDP using NRC Inspection Manual Chapter 0609, "Significance Determination Process", Appendix F, Attachment 2, "Degradation Rating Guidance Specific to Various Fire Protection Program Elements," and assigned a "High" degradation rating, giving no credit for Barrier Protection in accordance with the "Fire Barrier Degradation" section. The inspectors concluded, that the finding was of very low safety significance (Green) due to fully functional automatic suppression systems on either side of the fire barrier (Question 1.4.3-C). Using Manual Chapter 0310, "Aspects Within the Cross-Cutting Areas," the inspectors identified a cross-cutting aspect in the Identification component of the Problem Identification and Resolution area, because the licensee failed to enter the damaged fire barrier into their CAP after it was initially damaged [P.1].
Inspection Report# : 2016004 *(pdf)*

Significance: G Sep 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Isolation of Fire Suppression System to a Significant Portion of the Plant Site
A self-revealing Green NCV of the facility's operating license was identified for the licensee's failure ensure the fire suppression system was operable and capable of suppressing fires. Specifically, the licensee inadvertently disabled the High Pressure Fire Protection (HPFP) water system in excess of 24 hours and concurrently failed to implement required compensatory measures for the disabled header contrary to the approved fire protection report (FPR).
On March 23, 2016, the licensee established a clearance on the high pressure fire water system in order to perform planned maintenance in a valve pit.
Subsequently, it was determined that the clearance boundary was inadequate in that one of the boundary valves leaked by the seat. On March 29, the clearance boundary was expanded in order to reduce any leakage into the affected work area. On March 30, during routine fire operation testing, operators noted that water was not available at a hose station near the emergency diesel generator (EDG) building. Subsequent investigation revealed the expanded clearance had isolated the main fire suppression system from the fire pumps and fire tanks. Thus, if a fire had occurred, no suppression would have been available to most of the plant site. The affected areas included the
control building, turbine building, auxiliary building, and the EDG building. Upon discovery, the licensee implemented the requirements of the fire protection report (FPR).
This, included fire operating requirement (FOR), 14.2.1, 14.3.1, and 14.5.1 for fire water suppression system, spray/sprinkler systems, and fire hose stations, respectively. On
March 31, full functionality of the HPFP system was restored and operations exited the requirements of the FPR. The exposure time for the disabled HPFP system was approximately 41 hours.
Inspection Report# : 2016003 *(pdf)*

Barrier Integrity

Significance: G Sep 30, 2016
Identified By: NRC
Item Type: NCV Non-Cited Violation
Hydrogen Mitigation System Inoperable Longer than Allowed by Technical Specifications
A self-revealing Green NCV of TS 3.6.8 was noted for the licensee's failure to restore an inoperable train of HMS to service within the required completion time 7 days. In addition, the licensee failed to be in Mode 3 within the following 6 hours following the failure to meet the 7 day action time. The licensee estimated the entire exposure time to be approximately 91 days.
On June 7, during the performance of procedure 1-SI-EIV-268-305.A,
17
"Hydrogen Mitigation System Operability Current Check," Rev. 4, the craft personnel noted that circuit breaker, 1-BKRB-268-YA/129A, breaker 11, was open. This procedure is used to verify the operability of the HMS pursuant to Surveillance requirement 3.6.8.1 and 3.6.8.2 This breaker supplied the power to two hydrogen ignitors, 124 and 129. This was brought to the attention of the operations crew and the 'A' train HMS was declared out-of-service at 0914. The operations crew directed closure of the breaker and the 'A' train HMS was restored to operable status at 0916.
A subsequent POE determined that the last time the cabinet was accessed was on March 8 in order to replace ignitor 128. Breaker 11 was noted to be in the "OFF" position and not the "TRIP" position. The POE concluded that the breaker was accidentally bumped and moved from its normal ("ON") position. The POE established the exposure time of 91 days.
Inspection Report# : 2016003 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety
Public Radiation Safety
Security

The security cornerstone is an important component of the ROP, which includes various security inspection activities the NRC uses to verify licensee compliance with Commission regulations and thus ensure public health and safety. The Commission determined in the staff requirements memorandum (SRM) for SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure," dated November 9, 2004, that specific information related to findings and performance indicators associated with the security cornerstone will not be publicly available to ensure that security-related information is not provided to a possible adversary. Security inspection report cover letters will be available on the NRC Web site; however, security-related information on the details of inspection finding(s) will not be displayed.

Miscellaneous

Current data as of : August 03, 2017

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