UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

May 3, 2017

Mr. Joseph W. Shea
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

SUBJECT: SEQUOYAH NUCLEAR PLANT – NRC INTEGRATED INSPECTION REPORT 05000327/2017001 AND 05000328/2017001

Dear Mr. Shea:

On March 31, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Sequoyah Nuclear Plant. On April 18, 2017, the NRC inspectors discussed the results of this inspection with Mr. Rasmussen and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report which involved a violation of NRC requirements. The NRC is treating this violation as non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement; and the NRC resident inspector at the Sequoyah Nuclear Plant.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region II; and the NRC resident inspector at the Sequoyah Nuclear Plant.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Alan Blamey, Branch Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos.: 05000327, 05000328
License Nos.: DPR-77, DPR-79

Enclosure:
IR 05000327/2017001, 05000328/2017001
w/Attachment: Supplemental Information

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DATE	4/28/2017	4/28/2017	5/2/2017	

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	50-327, 50-328
License Nos.:	DPR-77, DPR-79
Report No.:	05000327/2017001, 05000328/2017001
Licensee:	Tennessee Valley Authority (TVA)
Facility:	Sequoyah Nuclear Plant
Location:	Soddy-Daisy, TN 37379
Dates:	January 1, 2017, through March 31, 2017
Inspectors:	G .Smith, Senior Resident Inspector W. Deschaine, Resident Inspector
Approved by:	Alan Blamey, Chief Reactor Projects Branch 6 Division of Reactor Projects

Enclosure

SUMMARY

Integrated Inspection Report 05000327/2017001, 05000328/2017001; January 1, 2017, through March 31, 2017; Sequoyah Nuclear Plant; Fire Protection.

The report covered a three-month period of inspection by resident inspectors. One finding/violation was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP) dated April 29, 2015. The cross-cutting aspects are determined using IMC 0310, “Aspects Within the Cross Cutting Areas” dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC’s Enforcement Policy dated November 1, 2016. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6. Documents reviewed not identified in the Report Details are listed in the Documents Reviewed section of the Attachment.

Cornerstone: Mitigating Systems

- Green. The NRC identified a non-cited violation (NCV) 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] (Section 1R05)

  .

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period in Mode 2 following a refueling outage. The unit began a power increase to full power on January 4, 2017. On January 6, 2017, power was stabilized at 44 percent rated thermal power (RTP) to repair several minor plant equipment issues. The unit was returned to 100 percent RTP on January 21, 2017 where it continued to operate for the remainder of the period.

Unit 2 operated began at 100 percent RTP for the inspection period except for a brief power reduction to 65 percent RTP for replacement of the generator terminal cooling fan filters.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment (71111.04)

Partial Walkdown

a. Inspection Scope

The inspectors performed partial walkdowns of the following two systems to verify the operability of redundant or diverse trains and components when safety equipment was inoperable. The inspectors focused on identification of discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, walked down control system components, and determined whether selected breakers, valves, and support equipment were in the correct position to support system operation. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP. Documents reviewed are listed in the Attachment. The inspectors completed two samples, as defined in Inspection Procedure (IP) 71111.04.

- 'B' Emergency Gas Treatment System (EGTS) train while 'A' EGTS train was out-of-service (OOS) for planned maintenance
- Unit 2 'B' containment spray (CS) train while the 'A' CS pump OOS for planned maintenance

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Fire Protection Tours

a. Inspection Scope

The inspectors conducted a tour of the four areas important to safety listed below to assess the material condition and operational status of fire protection features. The inspectors evaluated whether: combustibles and ignition sources were controlled in accordance with the licensee's administrative procedures; fire detection and suppression equipment was available for use; passive fire barriers were maintained in good material condition; and compensatory measures for OOS, degraded, or inoperable fire protection equipment were implemented in accordance with the licensee's fire plan. Documents reviewed are listed in the Attachment. The inspectors completed four samples, as defined in IP 71111.05.

- Control Building Elevation 706 (Cable Spreading Room)
- Vital Battery rooms I thru IV
- Auxiliary Building 734 elevation (Non-RCA Side)
- Control Building 669 elevation

b. Findings

Introduction: The NRC identified a Green NCV of the facility's operating license for the failure to identify a nonfunctional fire barrier penetration and enter it into the 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 (FPR).

Description: On February 16, 2017, while conducting a fire walkdown of the cable spreading room, the inspectors identified one nonfunctional fire barrier. The inspectors determined that this barrier had been damaged at a prior time, but had not been entered into the licensee's CAP. In addition, the applicable Feature Operating Requirement (FOR) 14.6.1 action had not been implemented. The inspectors determined that FOR 14.6.1 action A required a fire watch be established until the barrier could be repaired. The inspectors notified the licensee and they declared the fire barrier nonfunctional, entered FOR 14.6.1 for the nonfunctional barrier, established a fire watch, and entered the condition into their CAP as CR 1263322.

Analysis: The licensee's failure to ensure that all fire barrier penetrations in fire zones boundaries protecting safety related areas are functional at all times or if not they take the required actions as prescribed by FOR 14.6.1 was a performance deficiency. 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 barrier being damaged to the point of declaring the fire barrier penetration 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].

Enforcement: Facility operating licenses DPR-77 and DPR-79 conditions 2.C.(16) and 2.C.(13), respectively, state that TVA shall implement and maintain in effect all provisions of the approved fire protection program referenced in Sequoyah Nuclear Plant’s Final Safety Analysis Report as approved in applicable NRC Safety Evaluation Reports. The Sequoyah Fire Protection Report Part II, Section 14.6, “Fire Barrier Penetrations,” OR 14.6.1 requires, that all fire barrier penetrations (including cable penetration barriers, fire doors and fire dampers) in fire zone boundaries protecting safety related areas shall be functional at all times. If one or more required fire barrier penetrations are nonfunctional, then restore to functional status within one hour or establish a fire watch and restore to functional status within 30 days.

Contrary to the above, prior to when the nonfunctional fire barrier was discovered by the NRC inspector on February 16, 2017, the licensee failed to implement and maintain in effect all provisions of the approved fire protection program referenced in Sequoyah Nuclear Plant’s Final Safety Analysis Report as approved in applicable NRC Safety Evaluation Reports. Specifically, the licensee failed to ensure that all fire barrier penetrations in fire zones boundaries protecting safety related areas are functional at all times or take required actions as prescribed by OR 14.6.1. After this fire barrier was identified by the inspectors, the licensee restored compliance by declaring the barriers nonfunctional, entering OR 14.6.1, and establishing an hourly fire watch until repairs could be made. Because the finding was of very low safety significance and has been entered into the licensee’s CAP as CR 1263322, this violation is being treated as an NCV, consistent with section 2.3.2.a. of the NRC Enforcement Policy: NCV 05000327, 328/2017001-01, Degraded Fire Barrier Penetration.

.2 Annual Drill Observations

a. Inspection Scope

The inspectors evaluated the two fire drill evolutions below:

- On February 16, 2017, the inspectors observed an announced fire drill in the mechanical equipment room located in the Condensate Demineralizer Building. The inspectors assessed fire alarm effectiveness; response time for notifying and assembling the fire brigade; the selection, placement, and use of firefighting equipment; use of personnel fire protective clothing and equipment (e.g., turnout gear, self-contained breathing apparatus); communications; incident command and control; teamwork; and firefighting strategies. The inspectors also attended the post-drill critique to assess the licensee’s ability to review fire brigade performance and identify areas for improvement. Following the critique, the inspectors compared their

findings with the licensee's observations and to the requirements specified in the licensee's FPR.

- The inspectors also observed live fire training at TVA's fire training facility. The fire brigade has an annual requirement to training using real fire scenarios as defined in SQN's fire protection report part II, section 9.3.b.3

Both of the above activities constituted an overall sample as defined in IP 7111.05.

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06)

Annual Review of Cables Located in Underground Bunkers/Manholes

a. Inspection Scope

The inspectors conducted a review of licensee inspections of safety-related cables located in underground bunkers/manholes subject to flooding. Specifically, inspectors reviewed maintenance records of inspections of Manhole 14-A to determine if water was present and, if found, whether it would affect safety-related system operation. In addition, the inspectors reviewed the licensee's CAP to ensure that the licensee was identifying underground cabling issues and that they were properly addressed for resolution. The inspectors completed one sample, as defined in IP 71111.06.

b. Findings

No findings were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspectors observed the inspection of the 1A emergency diesel generator (EDG) heat exchangers, 2A EDG heat exchangers, and the 1A shutdown board chiller heat exchanger to verify that inspection results were appropriately categorized against the pre-established acceptance criteria described in procedure NPG-SPP-09.14, Generic Letter 89-13 Implementation, Revision 4. The inspectors also verified that the frequency of inspection was sufficient to detect degradation prior to loss of heat removal capability below design basis values. The inspectors completed three samples, as defined in IP 71111.07.

b. Findings

No findings were identified

1R11 Licensed Operator Requalification Program (71111.11)

.1 Resident Inspector Quarterly Review of Licensed Operator Requalification

a. Inspection Scope

The inspectors performed one licensed operator requalification program review. The inspectors observed a simulator session on February 17, 2017. The training scenario involved a pressurizer level channel (LI-68-339) failing low, followed by a main steam line leak, a 125V DC battery board one failure, an anticipated transient without scram and a main steam line break. The inspectors observed crew performance in terms of: communications; ability to take timely and proper actions; prioritizing, interpreting and verifying alarms; correct use and implementation of procedures, including the alarm response procedures; timely control board operation and manipulation, including high risk operator actions; oversight and direction provided by shift manager, including the ability to identify and implement appropriate Technical Specification (TS) action; and, group dynamics involved in crew performance. The inspectors also observed the evaluators' critique and reviewed simulator fidelity to verify that it matched actual plant response. This activity constituted one inspection sample, as defined in IP 71111.11.

b. Findings

No findings were identified

.2 Resident Inspector Quarterly Review of Licensed Operator Performance

a. Inspection Scope

The inspectors observed and assessed licensed operator performance in the main control room during periods of heightened activity or risk. The inspectors reviewed various licensee policies and procedures such as OPDP-1, Conduct of Operations, NPG-SPP-10.0, Plant Operations, and 0-GO-5, Normal Power Operation. The inspectors utilized activities such as post-maintenance testing, surveillance testing, unplanned transients, infrequent plant evolutions, plant startups and shutdowns, reactor power and turbine load changes, and refueling and other outage activities to focus on the following conduct of operations as appropriate:

- operator compliance and use of procedures
- control board manipulations
- communication between crew members
- use and interpretation of plant instruments, indications, and alarms
- use of human error prevention techniques
- documentation of activities, including initials and sign-offs in procedures
- supervision of activities, including risk and reactivity management
- pre-job briefs

Specifically, the inspectors observed licensed operator performance as a result of the following activities:

- Response to Unit 2 power operated relief valve spurious opening

- Response to Unit 1 pressurizer code safety valve leakage

This activity constituted one inspection sample as defined in IP 71111.11.

b. Findings

No findings were identified

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed the maintenance issue listed below to verify the effectiveness of the licensee's activities in terms of: appropriate work practices; identifying and addressing common cause failures; scoping in accordance with 10 CFR 50.65(b); characterizing reliability issues for performance; trending key parameters for condition monitoring; charging unavailability for performance; classification in accordance with 10 CFR 50.65(a)(1) or (a)(2); appropriateness of performance criteria for structure, system, or components (SSCs) and functions classified as (a)(2); and appropriateness of goals and corrective actions for SSCs and functions classified as (a)(1). The inspectors completed one sample, as defined in IP 71111.12.

- Cause Determination Evaluation #2944 – Vital Battery Charger failure

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

a. Inspection Scope

The inspectors reviewed the following five activities to determine whether appropriate risk assessments were performed prior to removing equipment from service for maintenance. The inspectors evaluated whether risk assessments were performed as required by 10 CFR 50.65(a)(4), and were accurate and complete. When emergent work was performed, the inspectors reviewed whether plant risk was promptly reassessed and managed. The inspectors also assessed whether the licensee's risk assessment tool use and risk categories were in accordance with Standard Programs and Processes Procedure NPG-SPP-07.1, "On-Line Work Management," Revision 16, and Instruction 0-TI-DSM-000-007.1, "Risk Assessment Guidelines," Revision 9. The inspectors completed five samples, as defined in IP 71111.13.

- 'C' CSST outage with 2B Start Bus De-energized
- 1A Emergency Diesel Generator maintenance outage
- 2A Emergency Diesel Generator maintenance outage
- 1B Emergency Diesel Generator maintenance outage
- Failure Unit 1 S/G loop 2 level transmitter

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

For the four operability evaluations described in the CRs listed below, the inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available, such that no unrecognized increase in risk occurred. The inspectors compared the operability evaluations to the updated final safety analysis report (UFSAR) descriptions to determine if the system or component's intended function(s) were adversely impacted. In addition, the inspectors reviewed compensatory measures implemented to determine whether the compensatory measures worked as stated and the measures were adequately controlled. The inspectors also reviewed a sampling of CRs to assess whether the licensee was identifying and correcting any deficiencies associated with operability evaluations. The inspectors completed four samples as defined in IP 71111.15.

- CR 1246635: PDO for In Core thermocouple failure rate
- CR 1253527: 1A Emergency Diesel Generator rotor failed electrical bridge test
- CR 1273862: Unit 1 Pressurizer code safety valve simmering
- CR 1222397: 1A CCP elevated vibes and lowering mini-flow

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests associated with the two work orders (WOs) listed below to assess whether procedures and test activities ensured system operability and functional capability. The inspectors reviewed the licensee's test procedure to evaluate whether: the procedure adequately tested the safety function(s) that may have been affected by the maintenance activity; the acceptance criteria in the procedure were consistent with information in the applicable licensing basis and/or design basis documents; and the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed the test data to determine whether test results adequately demonstrated restoration of the affected safety function(s). The inspectors completed two samples as defined in IP 71111.19.

- WO118488964, Source range startup meter failed downscale
- WO118239423, Starting air pressure alarm is annunciating before alarm setpoint

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

For the two surveillance tests identified below, the inspectors assessed whether the SSCs involved in these tests satisfied the requirements described in the TS surveillance requirements, the UFSAR, applicable licensee procedures, and whether the tests demonstrated that the SSCs were capable of performing their intended safety functions. This was accomplished by witnessing testing and/or reviewing the test data. Documents reviewed are listed in the Attachment. The inspectors completed two samples, as defined in IP 71111.22.

RCS Leakage Test

- 0-SI-OPS-068-137.0, Reactor Coolant System Water Inventory, Rev. 35

Routine Surveillance Test

- 0-RT-NUC-000-003.0, Low Power Physics Testing, Rev. 26,

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

a. Inspection Scope

The inspectors sampled licensee submittals for the two PIs listed below for the period from January, 2016 through December, 2016 for both Unit 1 and Unit 2. Definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Indicator Guideline, Revision 6, were used to determine the reporting basis for each data element in order to verify the accuracy of the PI data reported during that period.

Cornerstone: Barrier Integrity

- Reactor Coolant System Activity
- Reactor Coolant System Leakage

The inspectors reviewed portions of the operations and chemistry logs to verify whether the licensee had accurately determined and reported the Reactor Coolant System (RCS) activity and leakage during the previous four quarters for both units. The inspectors also observed the performance of Procedure 0-SI-OPS-068-137.0, RCS Water Inventory, which determines the amount of RCS leakage.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.1 Daily Review

As required by IP 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This was accomplished by reviewing the description of each new CR and attending daily management review committee meetings.

4OA5 Other Activities

(Closed) NRC Temporary Instruction (TI) 2515/192, "Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems."

a. Inspection Scope

The objective of this performance based TI is to verify implementation of interim compensatory measures associated with an open phase condition design vulnerability in electric power system for operating reactors. The inspectors conducted an inspection to determine if the licensee had implemented the following interim compensatory measures. These compensatory measures are to remain in place until permanent automatic detection and protection schemes are installed and declared operable for open phase condition design vulnerability. The inspectors verified the following:

- The licensee identified and discussed with plant staff the lessons-learned from the open phase condition events at U.S. operating plants including the Byron Station open phase condition and its consequences. This included conducting operator training for promptly diagnosing, recognizing consequences, and responding to an open phase condition.

- The licensee updated plant operating procedures to help operators promptly diagnose and respond to open phase conditions on off-site power sources credited for safe shutdown of the plant.

- The licensee established and implemented periodic walkdown activities to inspect switchyard equipment such as insulators, disconnect switches, and transmission line and transformer connections associated with the offsite power circuits to detect a visible open phase condition.

- The licensee ensured that routine maintenance and testing activities on switchyard components have been implemented and maintained. As part of the maintenance and testing activities, the licensee assessed and managed plant risk in accordance with 10 CFR 50.65(a) (4) requirements.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On April 18, 2017, the resident inspectors presented the inspection results to Mr. Rasmussen and other members of his staff who acknowledged the results. The licensee did not identify any of the material examined during the inspection as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Dimopoulos, Director Plant Support
M. Halter, Senior Manager Radiation Protection
H. Howle, Superintendent Nuclear Operations
J. Johnson, Program Manager Licensing
C. Lockhart, Director Maintenance
M. Lovitt, Chemistry Manager
T. Marshall, Director Operations
M. McBrearty, Licensing Manager
W. Pierce, Director Engineering
M. Rasmussen, Plant Manager
K. Smith, Director Training
A. Williams, Site Vice President

NRC Personnel

A. Hon, Project Manager, Office of Nuclear Reactor Regulation

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000327, 328/2017001-01	NCV	Degraded Fire Barrier Penetration (Section 1R05)

Closed

2515/192	TI	Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems (Section 4OA5)

LIST OF DOCUMENTS REVIEWED

Section R04: Equipment Alignment
Partial System Walkdowns
Procedures
0-SO-65-1, Emergency Gas Treatment Air Cleanup and Annulus Vacuum, Revision 30
0-SO-72-1, Containment Spray Systems, Revision 47

Drawings
0-47W812-1, Flow Diagram Containment Spray System, Revision 48
0-47W610-65-1, Flow Diagram Emergency Gas Treatment System, Revision 25

Section R05: Fire Protection
Procedures
NPG-SPP-18.4.5, Fire Protection Quality Assurance, Revision 2
SQN-FPR-Part-II, SQN Fire Protection Report Part II – Fire Protection Plan, Revision 35

CRs
1263322

Other documents
AUX-0-749-00, Fire Protection Pre-Fire Plans Auxiliary Building - El. 749, Revision 4
AUX-0-749-01, Fire Protection Pre-Fire Plans Auxiliary Building - El. 749 Unit 1 Side, Revision 9
AUX-0-749-02, Fire Protection Pre-Fire Plans Auxiliary Building - El. 749 Unit 2 Side, Revision 10
AUX-0-734-00, Fire Protection Pre-Fire Plans Auxiliary Building - El. 734, Revision 4
AUX-0-734-01, Fire Protection Pre-Fire Plans Auxiliary Building - El. 734 Unit 1 Side, Revision 9
AUX-0-734-02, Fire Protection Pre-Fire Plans Auxiliary Building - El. 734 Unit 2 Side, Revision 8
CON-0-706-00, Fire Protection Pre-Fire Plans Control Building - El. 706, Revision 7
CON-0-669-00, Fire Protection Pre-Fire Plans Control Building - El. 669, Revision 5
Fire Drill Evaluation Report for announced drill on 2/16/2017

Section R07: Heat Sink Performance
Procedures
NPG-SPP-09.14, Generic Letter (GL) 89-13 Implementation, Revision 4

Other documents
Heat Exchanger Visual Inspection and Evaluation Form for WO 117618925, 1/23/2017
Heat Exchanger Visual Inspection and Evaluation Form for WO 117618850, 1/23/2017

Section R12: Maintenance Effectiveness
Procedures
TI-4, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting - 10CFR50.65, Revision 30
NPG-SPP-03.4, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting - 10CFR50.65, Revision 3

Other documents
CDE #2944 - Vital Battery Charger failure

Section R13: Maintenance Risk Assessments and Emergent Work Evaluation

Procedures

NPG-SPP-07.3, Work Activity Risk Management Process, Revision 21
NPG-SPP-07.2.4, Forced Outage or Short Duration Planned Outage Management, Revision 7
NPG-SPP-07.2, Outage Management, Revision 6
GOI-6, Apparatus Operations, Revision 174

Section R15: Operability Evaluations

Procedures

NEDP-22, Operability Determinations and Functional Evaluations, Rev. 17
OPDP-8, Operability Determination Process/Limiting Conditions for Operation Tracking, Rev. 23
NPG-SPP-03.5, Regulatory Reporting Requirements, Revision 13
GOI-6, Apparatus Operations, Revision 174

CRs

1246635: PDO for In Core thermocouple failure rate
1253527: 1A Emergency Diesel Generator rotor failed electrical bridge test
1273862: Unit 1 Pressurizer code safety valve simmering
1222397: 1A CCP elevated vibes and lowering mini-flow

Section R19: Post Maintenance Testing

Procedures

MMDP-1, Maintenance Management System, Revision 33
NPG-SPP-06.5, Foreign Material Control, Revision 11
NPG-SPP-06.1, Work Order Process, Revision 6
NPG-SPP-06.3, Pre-/Post-Maintenance Testing, Revision 1
NPG-SPP-06.9, Testing Programs, Revision 1
NPG-SPP-06.9.1, Conduct of Testing, Revision 10
NPG-SPP-06.9.3, Post-Modification Testing, Revision 8

Section R22: Surveillance Testing

Procedures

NPG-SPP-06.9.1, Conduct of Testing, Revision 10
0-RT-NUC-000-003.0, Low Power Physics Testing, Rev. 26,
0-SI-OPS-068-137.0, Reactor Coolant System Water Inventory, Revision 35

Section 4OA1: Performance Indicator Verification

Procedures

NPG-SPP-02.2, Performance Indicator Program, Revision 10
NEI 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 7

Section 4OA5: Other Activities

Other Documents

Class 1E Protection (Unbalanced Voltage Relays) presentation at the NRC Public Meeting December 7-8, 2016 (ML 16327A369)
Browns Ferry, Units 1, 2, & 3, Sequoyah, Units 1 & 2, Watts Bar, Units 1 & 2, 90-Day Response to NRC Bulletin 2012-01, “Design Vulnerability in Electric Power System.” (ML 12312A167)