



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II**

245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

April 12, 2019

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

**SUBJECT: BROWNS FERRY UNITS 1, 2, 3 – NRC TRIENNIAL FIRE PROTECTION
INSPECTION (TEAM) REPORT 05000259/2019010 AND 05000260/2019010
AND 05000296/2019010**

Dear Mr. Shea:

On February 28, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Browns Ferry Units 1, 2, 3 and discussed the results of this inspection with Lang Hughes 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. This finding involved a violation of NRC requirements.

If you contest the violation or significance or severity of the violation documented in this inspection report, 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 Browns Ferry.

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 Browns Ferry.

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/

Scott M. Shaeffer, Chief
Engineering Branch 2
Division of Reactor Safety

Docket Nos.: 05000259, 05000260
and 05000296
License Nos.: DPR-33, DPR-52
and DPR-68

Enclosure:
Inspection Report 05000259/2019010,
05000260/2019010 and 05000296/2019010

cc: Distribution via Listserv

SUBJECT: BROWNS FERRY UNITS 1, 2, 3 – BROWNS FERRY UNITS 1, 2, 3 – NRC
 TRIENNIAL FIRE PROTECTION INSPECTION (TEAM) REPORT
 05000259/2019010 AND 05000260/2019010 AND 05000296/2019010 dated
 April 12, 2019

DISTRIBUTION:

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 Public

*See previous page for concurrence

60 PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE

ADAMS: Yes ACCESSION NUMBER: **ML 19102A112** SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII/ DRS/EB2	RII/ DRS/EB2	RII/ DRS/EB2	RII/ DRS/EB2	RII/ DRS/EB2	
SIGNATURE	LJJ	ETC1	WRM1	MJS6	SMS	
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DATE	4/2/2019	3/ 28/ 2019	3/ 27 /2019	4/ 2 /2019	4/12/2019	
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	

OFFICIAL RECORD COPY DOCUMENT NAME:S:\DRS New\Eng Branch 2\REPORTS\TFPI Reactor Inspection
 Reports\Browns Ferry\2019\BF 2019010 TFPI Inspection

**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Number(s): 05000259, 05000260 and 05000296

License Number(s): DPR-33, DPR-52 and DPR-68

Report Number(s): 05000259/2019010, 05000260/2019010 and
05000296/2019010

Enterprise Identifier: I-2019-010-0036

Licensee: Tennessee Valley Authority

Facility: Browns Ferry, Units 1, 2 and 3

Location: Athens, AL 35611

Inspection Dates: February 04 - 28, 2019

Inspectors: E. Coffman, Reactor Inspector
L. Jones, Senior Reactor Inspector (Team Leader)
W. Monk, Senior Reactor Inspector
M. Singletary, Reactor Inspector

Approved By: Scott M. Shaeffer, Chief
Engineering Branch 2
Division of Reactor Safety

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an announced team triennial fire protection inspection (TFPI) at Browns Ferry Units 1, 2 and 3 in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. Findings and violations being considered in the NRC's assessment are summarized in the table below.

List of Findings and Violations

Failure to Maintain CO2 Barriers			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000259, 260, 296/2019010-01 Open	[H.11] - Challenge the Unknown	71111.05XT – 02.02c
The NRC identified a Green NCV of Operating License Condition 2.C.(13) for Unit 1, 2.C.(14) for Unit 2 and 2.C(7) for Unit 3, for the licensee's failure to identify and document non-functional CO2 doors in the Corrective Action Program.			

Additional Tracking Items

None.

INSPECTION SCOPE

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.05XT - Fire Protection - NFPA 805 (Triennial)

02.01a Fire Protection Inspection Requirements (4 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas and/or fire zones, including analyzed electrical circuits:

- (1) Fire Area 20 - Unit 1/2 Diesel Room
- (2) Fire Area 23 - 4KV Shutdown Board Room 3EC & 3ED
- (3) Fire Area 02-03 - U2 RB EL 593', North of 10', North of Column Line R
- (4) Fire Area 4 - Electrical Board Room

02.03 B.5.b Inspection Activities (1 Sample)

The inspectors evaluated the following B.5.b Mitigating Strategies:

Manual Operation of the RCIC Pump Strategy

INSPECTION RESULTS

Failure to Maintain CO2 Barriers			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000259, 260, 296/2019010-01 Open	[H.11] - Challenge the Unknown	71111.05XT – 02.02c
The NRC identified a Green NCV of Operating License Condition 2.C.(13) for Unit 1, 2.C.(14) for Unit 2 and 2.C(7) for Unit 3, for the licensee's failure to identify and document non-functional CO2 doors in the Corrective Action Program.			

Description: During site walk downs inspectors identified four Carbon Dioxide Doors (CO2 Doors) not meeting their intended design function to provide a sealing barrier in the event of a CO2 discharge. Door 480V Diesel Aux Board Room 3EB was found with its hardware duct taped such that it could not properly close. This provided a barrier within Fire Area 21 and ensured the CO2 system for that room remained functional. The other three CO2 doors in question located in the Unit 1/2 Diesel Generator Building were found to be non-functional with broken hardware. They were relied upon, as barriers, to secure CO2 in the Fuel Oil Transfer Pump Room, the C Emergency Diesel Room and the Diesel Building Auxiliary Board Room. These conditions were noted to the site staff supporting the NRC inspection. The licensee provided the team with three Corrective Action Program (CAP) documents to evaluate the issues.

The inspectors noted the site's Fire Protection Report (FPR) included a commitment to meet NFPA 12-1966 section 222 Leakage and Ventilation which states, in part, that "the efficiency of carbon dioxide systems depends upon the maintenance of an extinguishing concentration of carbon dioxide, leakage of gas from the space shall be kept to a minimum and compensated for by applying extra gas." The inspectors reviewed the Mechanical Design Standard DS-M17.1.7 Fire Protection Systems - CO2 SYSTEMS, Revision 1 section 3.8, Room Sealing which states, in part, "Leakage of CO2 from the protected compartment is the primary reason for failure to maintain design concentration during the acceptance test. The protected compartment shall be adequately sealed to prevent CO2 leakage. Doors shall be provided with sweeps and gap seals."

The doors in question were located in the Unit 1, 2 and 3 Diesel Generator Buildings. The inspectors determined, and the licensee agreed, that the doors not meeting the design requirement would impair the CO2 system design function to discharge and maintain required concentration. The inspectors questioned the identified CO2 doors not having a fire-impairment tag as required by site procedure NPG-SPP-18.4.6, Control of Fire Protection Impairments, Revision 11. In discussion with site staff it was determined that site personnel failed to recognize the significance of CO2 doors to perform their intended design function. The failure to identify impaired or non-functional CO2 doors and enter them as a condition adverse to quality into the Corrective Action Program (CAP) rendered the Fire Program Impairments procedure ineffective.

The inspectors noted the site's Fire Protection Report (FPR) Part V, Program Documentation, Configuration Control, And Quality Section 5.3.1 referenced site procedure NPG-SPP-18.4.5, Rev. 3, Section 3.2.9, which stated "Nonconforming Items and Corrective Actions Nonconforming, inoperative, or malfunctioning features including adverse conditions in program administration shall be handled in accordance with the NPG Corrective Action Program (NPG-SPP-22.300, Corrective Action Program)." In review of site procedure NPG-SPP-22.300, the inspectors noted section 3.1.23 which states, "All CAP Users (B.) Understand and implement the requirements of CAP."

Corrective Action(s): For the duct taped failed CO2 door, the licensee implemented an hourly fire watch and for the other three identified doors the licensee utilized the "Tool Pouch" program and immediately fixed the failed doors. The site also intends to implement site-wide direction to emphasize the importance of CO2 doors.

Corrective Action Reference(s): This issue is being tracked in the licensee's corrective action program by condition reports (CR) 1488740 and 1488947.

Performance Assessment:

Performance Deficiency: The failure to identify failed CO2 barriers left in a condition where they would not perform their design function in the case of a fire was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern. Specifically, the failure to identify failed CO2 barriers could be left in a condition where they would not perform their design function in the case of a fire.

Significance: The inspectors assessed the significance of the finding using Appendix F, "Fire Protection and Post - Fire Safe Shutdown SDP". Question 1.4.4-E: The finding was determined to not represent a degradation where a fire would spread from one fire area to another.

Cross-cutting Aspect: H.11 - Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding.

Enforcement:

Violation: BFN Operating License Condition 2.C.(13) for Unit 1, 2.C.(14) for Unit 2 and 2.C(7) for Unit 3 requires, in part, that the licensee shall implement and maintain in effect all provisions of the approved FPP as described in the Fire Protection Report for the facility. BFN Fire Protection Report Part V Program Documentation, Configuration Control, And Quality Section 5.3.1 referenced site procedure NPG-SPP-18.4.5, Rev. 3 Section 3.2.9, which stated that Nonconforming Items and Corrective Actions Nonconforming, inoperative, or malfunctioning features including adverse conditions in program administration shall be handled in accordance with the NPG Corrective Action Program (NPG-SPP-22.300, Corrective Action Program). In review of site procedure NPG-SPP-22.300, the inspectors noted section 1 (A) which states, in part, that "the Corrective Action Program is a program used to identify, track, and resolve conditions adverse to quality" and section 3.1.23 which states, "All CAP Users (B.) Understand and implement the requirements of CAP."

Contrary to the above, since February 4, 2019, the licensee failed to implement and maintain in effect all provisions of the approved fire protection program. The licensee failed to identify a condition adverse to quality. Specifically, the licensee did not identify and document non-functional CO2 doors in the Corrective Action Program.

Enforcement Action: This violation is being treated as a Non-Cited Violation, consistent with Section 2.3.2 of the Enforcement Policy. (NCV 05000259, 260, 296/2019010-01, Failure to Maintain CO2 Barriers)

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

On February 28, 2019, the inspector presented the inspection results to Mr. Lang Hughes and other members of the licensee staff.

LIST OF DOCUMENTS REVIEWED

Drawings:

BFN-0-47E836, Flow Diagram High Pressure Fire Protection System, Rev. 3
 0-45E710-1, Wiring Diagram Instr & Controls DC & AC Power System, Rev. 15
 0-15E500-1, Key Diagram of Standby Auxiliary Power System, Rev. 44
 0-45E644-3, Wiring Diagram Fire Protection System Auxiliary Power Schematic Diagram, 7/11/1988
 0-45E724-4, Wiring Diagram 4160V Shutdown BD D Single Line, Rev. 42
 0-45E709-1, Wiring Diagram Shutdown BDS 250V BTRY & CHGR Single Line, Rev. 38
 0-45E771-3, Wiring Diagram 480V Diesel Auxiliary Power Schematic Diagram, 8/08/1969
 0-45W708-1, Wiring Diagrams BTRY Boards, Chargers & MG Sets Connection Diagram, 6/09/1971
 0-47E216-69, NFPA 805 Fire Areas Plan El. 593 & 586, 1/16/2013
 0-47E216-74, NFPA 805 Fire Areas Plan El. 565.5, 583.5 & 595, 1/16/2013
 0-47E610-39-1, Mechanical Control Diagram CO2 Storage, Fire Protection & Purging System, 12/12/1969
 0-47E865-8, Flow Diagram Heating, Ventilating and A/C Air Flow, 5/21/1987
 1-47E811-1, Flow Diagram RHR Service Water System, Rev. 47
 1-47E858-1, Flow Diagram RHR Service Water System, Rev. 72
 1-47E859-1, Flow Diagram Emergency Equipment Cooling Water, Rev. 99
 2-45E765-4, Wiring Diagram 4160V Shutdown Aux Power Schematic Diagram, Rev. 25
 2-45E765-7, Wiring Diagram 4160V Shutdown Aux Power Schematic Diagram, Rev. 39
 2-45E779-22, Wiring Diagram 4160V Shutdown Aux Power Schematic Diagram, Rev. 20
 2-47E858-1, Flow Diagram RHR Service Water System, Rev. 28
 3-47E858-1, Flow Diagram RHR Service Water System, Rev. 33
 0-47W391-2, Fire Protection – 10CFR50 App. R Penetration Seal Details, 3/29/1988
 0-47W586-6, Mechanical Exposed Oil, Air, Water & Misc. Piping, 5/07/1976
 0-47W600-165, Mechanical Instruments and Controls, 9/16/1975
 2-47W2392-344, Fire Protection – 10CFR50 App. R Penetration Seal Tabular Drawing, 4/22/1988
 3-46W401-20, Architectural Plans – EL 565 & 583, 2/07/1973
 3-47E610-39-2, Mechanical Control Diagram CO2 Storage Fire Protection and Purging System, 5/01/1973

Calculations:

EDQ026888462, Fuse Coordination Curves
 EDQ099920110010, NFPA 850, Nuclear Safety Capability Analysis, Rev. 31
 EDQ2000870550 R34, RHR 2D, CS 2A Fuse coordination
 MDQ0009992012000101, BFN 1, 2, & 3, Detailed Fire Modeling Report, Rev. 9
 MDQ0009992014000237, NFPA 805 Credited Operator Actions, Rev. 11
 MDQ0009992014000261, NFPA 805 Monitoring Program Phase 1: Scoping, Rev 4
 MDQ0009992012000104, BFN Scoping Fire Modeling Scenario Report, Rev. 10
 MDN0009992012000100, Browns Ferry Nuclear Plants Units 1, 2 and 3, Fire Risk Evaluations, Rev. 8
 MDQ0026890091, Diesel Generator Buildings Pre-Action Fire Sprinkler System, Rev. 1
 MDQ099920100006, NFPA-14 Code Compliance Evaluation, 1/12/2012
 MDQ099920110009, NFPA 805 Fire Area Boundary Calculation, Rev. 7
 MDQ099920110009, NFPA 805 Transition – Fire Area Designation – Appendix A Fire 20 and Fire Area 27, Rev. 8
 NDN0009992012000012, TVA Fire PRA – Task 7.14: Fire Risk Quantification, Rev. 5

Procedures:

0-FSI-4B, FLEX Communication System Operation, Rev. 0
 0-FSS-001, Fire Safe Shutdown, Rev. 3
 0-FSS-001, Fire Safe Shutdown, Rev. 4
 0-FSS-004, U-1, Electric Board Room 1B EL 593', Rev. 6
 0-FSS-2-3, U-2, RB EL 593' North of Column Line R, Rev. 10
 0-FSS-23, U-3, 4kV Shutdown Board Rooms 3EC and 3ED and Mechanical Equipment Room "B" EL 565' – 595', Rev. 6
 0-FSS-23, U-3, 4kV Shutdown Board Rooms 3EC and 3ED and Mechanical Equipment Room "B" EL 565' – 595', Rev. 7
 0-SI-4.11.13.1.9, Electric Fire Pump Functional Test, Rev. 27
 0-SI-4.11.B.1.f(2), Electric Driven Fire Pump Capability Test, Rev. 26
 0-SI-4.11.B.1.f(3), Diesel Driven Fire Pump Capability Test, Rev. 41
 0-SI-4.11.B.1.a, Electric Fire Pump Functional Test, Rev. 27
 0-SI-4.11.B.1.b, High Pressure Valve Position Verification (Inside Loop), Rev. 55
 0-SI-4.11.B.2.A, Diesel Driven Fire Pump Operability Test, Rev. 55
 0-SI-4.11.G.2, Semi-Annual Fire Doors Inspection, Rev. 31
 ½-SI-4.11.D.1B, Unit 1 & 2 Diesel Bldg CO2 Sys Functional Test, Rev. 29
 0-TPP-FPP-001, NFPA 805 Fire Protection Program Change Impact Screening Process, Rev. 3
 0-TPP-FPP-002, NFPA 805 Fire Protection Program Change Evaluation Process, Rev. 2
 0-TPP-FPP-006, Implementation of the NFPA 805 Fire Protection Monitoring Program, Rev. 4
 0-TPP-FPP-008, NFPA 805 Multi-Compartment Analysis, Rev. 1
 1-EOI Appendix-13, Emergency Venting Primary Containment, Rev. 4
 BFN-50-7023, Residual Heat Removal Service Water System, Rev. 29
 BFN-50-7067, Emergency Equipment Cooling Water System, Rev. 25
 BFN-50-7074, Residual Heat Removal System, Rev. 30
 EDMG-24, Reactor Pressure Vessel Makeup, Rev. 20
 FP-0-260-INS001, Inspection & Maintenance of Architectural Doors, Rev. 25
 FP-0-000-INS005, Quarterly Inspection & Maintenance of Emergency Equipment, Rev. 41
 FP-0-000-INS006, Annual Inspection and Preventive Maintenance of Portable and Wheel Type Fire Extinguishers, Rev. 0011
 FPDP-1, Conduct of Fire Operations, Rev. 8
 FPDP-2, ADMINISTRATION OF PREFIRE PLANS, Rev. 3
 FPDP-4, Fire Emergency Response, Rev. 7
 FPDP-5, Development and Evaluation of Fire Drills, Rev. 5
 FPDP-6, Fire Protection Program Plan, Rev. 4
 FPDP-7, Fire Protection Report and Fire Protection Requirements Manual Management, Rev. 2
 G-73, INSTALLATION, MODIFICATIONS, AND MAINTENANCE OF FIRE PROTECTION SYSTEMS AND FEATURES, Rev. 8
 G-94, PIPING INSTALLATION, MODIFICATION AND MAINTENANCE, Rev. 5
 NPG-SPP-22.300, Corrective Action Program, Rev. 12
 NPG-SPP-03.6, Fire Protection Program Change Regulatory Reviews, Rev. 08
 NDQ099920100002, BFN NFPA 805 Multiple Spurious Operation Review, Rev. 0
 NPG-SPP-9.27, NFPA Monitoring Program, Rev 01
 NPG-SPP-09.16.1, System, Component and Program Health, Rev 12
 NPG-SPP-03.4, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting – 50CFR50.65, Rev. 03
 NPG-SPP-17.4, Operations Lesson Plan for Fire Protection, Rev. 17
 NPG-SPP-18.4.5, Fire Protection Quality Assurance, Rev. 3
 NPG-SPP-18.4.6, Control of Fire Protection Impairments, Rev. 13

NPG-SPP-18.4.7, Control of Transient Combustibles, Rev. 12
 NPG-SPP-18.4.8, Control of Ignition Sources (Hot Work), Rev. 7
 0-GOI-300-1/ATT-15.22, EOI Tools and Equipment Inventory Checklist, Rev. 212
 OPL171.501, Fire Safe Shutdown Procedures NFPA 805, Rev. 03

Mods:

DCN 72339, 4160V/480V Transformer Replacement
 DCN 70752, NFPA 805 Issue #24 in relation to fault propagation
 DCN 70852B, Communication System 244 UHF/NHF Radio System
 DCN 71214, Reconfigure of the RHR system valve control circuitry

Miscellaneous Documents:

2017 Browns Ferry Fire Protection Program Health Report
 2018 Browns Ferry Fire Protection Program Health Report
 DCN 71389, System 64 – Modify Hardened Containment Vent System to Comply with NRC
 Order EA-13-109, 12/15/2015
 FPDP-5-3, BFN Fire Drill Evaluation Report, 08/29/2018
 FPDP-5-3, BFN Fire Drill Evaluation Report, 09/13/2018
 FPDP-5-3, BFN Fire Drill Evaluation Report, 09/27/2018
 FPR-Volume 2, Pre-Fire Plans for Browns Ferry Nuclear Plant Reactor Building Unit 1, Rev. 64
 FPR-Volume 2, Pre-Fire Plans for Browns Ferry Nuclear Plant Reactor Building Unit 2, Rev. 64
 FPR-Volume 2, Pre-Fire Plans for Browns Ferry Nuclear Plant Diesel Generator Building Unit 1
 & 2, Rev. 64
 FPR-Volume 2, Pre-Fire Plans for Browns Ferry Nuclear Plant Diesel Generator Building Unit 3,
 Rev. 64
 TVA Browns Ferry - Fire Protection Impairment Permit #19-52, 2/15/2019
 TVA Learning Management System, Admin Qualification Matrix Report – Fire Brigade,
 2/27/2019
 U1, 2, & 3 Control Bay & U3 Diesel Bldg, Hourly Compensatory Fire Watch Route Sheet,
 1/28/2019
 U1, 2, & 3 Control Bay & U3 Diesel Bldg, Hourly Compensatory Fire Watch Route Sheet,
 1/29/2019
 U1, 2, & 3 Control Bay & U3 Diesel Bldg, Hourly Compensatory Fire Watch Route Sheet,
 1/30/2019
 U1, 2, & 3 RX Buildings, Hourly Compensatory Fire Watch Route Sheet, 1/28/2019

 U1, 2, & 3 RX Buildings, Hourly Compensatory Fire Watch Route Sheet, 1/29/2019
 U1, 2, & 3 RX Buildings, Hourly Compensatory Fire Watch Route Sheet, 1/30/2019
 FPR-Volume
 2, Fire Protection Report Volume 2, Rev. 64
 FPRM, Fire Protection Requirements Manual, Rev. 7
 RIMS R06 160202 322, Verification and validation of NFPA 805 actions for 0-FSS-2-3
 RIMS R06 160202 349, Verification and validation of NFPA 805 actions for 0-FSS-23
 RIMS R32 180418 001, Retiming Worksheet for Validation Purposes 0-FSS-001, Rev. 3
 PM 500102992, Quarterly Inspection & Maintenance of Emergency Equipment, Rev. 0
 WO 114017225, Lubricate Tracks for the Sliding Fire Doors (810, 811, 824), 4/16/2013
 WO 117448274, ½-SI-4.11.D.1B – Unit 1 & 2 Diesel Bldg CO2 Sys Functional Test, 3/26/2017
 WO 118060933, Electric Driven Fire Pump Capability Test, 11/09/2017
 WO 118060934, Diesel Driven Fire Pump Capability Test, 10/17/2017
 WO 118569947, HPFVS Valve Position Verification (Inside Loop), 1/04/2019
 WO 118569949, Electric Driven Fire Pump Capability Test, 11/7/2018
 WO 118569953, Diesel Driven Fire Pump Capability Test, 09/12/2018

WO 118060947, Diesel Driven Fire Pump Operability Test, 01/17/2018
 WO 118569933, Electric Fire Pump Functional Test, 11/07/2018
 WO 118569958, Diesel Driven Fire Pump Operability Test, 10/17/2018
 WO 118569995, ½-SI-4.11.D.1B – Unit 1 & 2 Diesel Bldg CO2 Sys Functional Test, 9/23/2018
 WO 118626331, 480V DSL AUX BD RM A INLET DAMPER Failed to Open, 3/27/2017
 WO 119214596, Quarterly Inspection & Maintenance of Emergency Equipment, 6/18/2018
 WO 119360366, Diesel Driven Fire Pump Operability Test, 1/23/2019
 WO 119414200, Quarterly Inspection & Maintenance of Emergency Equipment, 9/20/2018
 WO 119574087, Quarterly Inspection & Maintenance of Emergency Equipment, 12/20/2018
 WO 119599637, 0-SI-4.11.13.1.9, Electric Fire Pump Functional Test, 2/27/2019
 WO 120250867, 0-SI-4.11.G.2 – Semi-Annual Fire Doors Inspection, 2/15/2019

Work Packages and Documents:

WO 118959330, Harris radio unit 0-XM-244-0109 shows UPLINK alarm

Reviewed Corrective Action Program Documents:

CR 1442167, QA SSA 1808 Procedure Change Recommendation
 CR 1132573, Self Assessment BFN-ENG-FSA-16-003 for the TFPI 805 Readiness
 CR 1299677, Initiate a PMCR for Harris Radio System
 CR 1465513, Generate PMCRs to perform PMs on the Harris Radio
 CR 1353249, Open Penetration Between FA 22 & FA 24 with No FW in Place, 12/13/2017
 CR 1488273, Fire Door PM Changed without Justification, 2/04/2019
 CR 1453831, Document Review of Information Notice (IN) 2017-04 “High Energy Arcing Faults In Electrical Equipment Containing Aluminum Components”, 10/19/2018

Corrective Action Program Documents Created as a result of Inspection:

CR 1488273, PM Changed without Justification, 2/06/2019
 CR 1488589, BFN 2019 TFPI Expired WIP Tag
 CR 1488591, BFN 2019 TFPI U-12 CO2 Tank Relief Valves
 CR 1488740, BFN 2019 TFPI - U-1/2 Diesel Bldg. Door Issues, 2/06/2019
 CR 1488765, BFN 2019 TFPI - Issue Regarding Seismic Restraints, 2/06/2019
 CR 1488831, BFN 2019 TFPI - Chain and Lock for BFN-0-RTV-026-1425 was Loose, 2/06/2019
 CR 1488835, BFN 2019 TFPI Need WO for MMG to replace BFN-0-RTV-026-1425
 CR 1488947, BFN 2019 TFPI - CO2 Boundary Door Found Unsecured, 2/06/2019
 CR 1489194, BFN 2019 TFPI JBOX 4564
 CR 1489212, BFN 2019 TFPI - Procedure Change for Quarterly Inspection of Emergency Equipment, 2/07/2019
 CR 1489222, BFN 2019 TFPI - Conduction of Fire Ops Procedural Enhancement, 2/07/2019
 CR 1489239, 2019 BFN TFPI - Missing Flashlight in FF Gear Bag, 2/07/2019
 CR 1489677, A minor drawing discrepancy was identified during BFN 2019 TFPI
 CR 1490305, BFN 2019 TFPI - FPRM Revision Needed
 CR 1490451, BFN 2019 TFPI - Fire Extinguisher Placement Exceeds Allowable Distance, 2/12/2019
 CR 1490459, BFN 2019 TFPI - Need WO to Add Fire Extinguishers in the U-1/2 & U-3 Diesel Bldgs., 2/12/2019
 CR 1490600, BFN 2019 TFPI - MDQ099920110009 Revision Needed, 2/13/2019
 CR 1490658, BFN 2019 TFPI - NFPA 805 Licensing Basis Potential Non-Conformance, 2/13/2019
 CR 1490947, BFN 2019 TFPI -NGP-SPP-18.4.6 Revision Request, 2/14/2019
 CR 1491187, BFN 2019 TFPI - Pits in Fire Barrier Wall, 2/15/2019

CR 1491233, BFN 2019 TFPI - During performance of 0-SI-4.11.G.2 door BFN-3-Door-260-0811 Closed but Left a 2" Gap, 2/15/2019

CR 1491399, BFN 2019 TFPI - 0-FCO-030-0073A missing anchor bolt

CR 1493698, BFN 2019 TFPI - Bolts Missing from Us Control Bay B Chiller 480V Transformer, 2/26/2019

CR 1494060, BFN 2019 TFPI - NDN0026920065 References Sections Removed in Previous Revision

CR 1494084, BFN 2019 TFPI NRC identified issue regarding 0-FSS-023

CR 1494088, BFN 2019 TFPI Procedure Enhancements identified in 0-FSS-023

CR 1494181, BFN 2019 TFPI – Water Intrusion in Intake Pumping Station, 2/27/2019

CR 1494188 - BFN 2019 TFPI – FSS Procedure Change Request

CR 1494518 - BFN 2019 TFPI Packing Leak Identified on A FP Pump