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

April 23, 2018

Mr. Daniel G. Stoddard
Senior Vice President
and Chief Nuclear Officer
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: SURRY POWER STATION – NRC TRIENNIAL FIRE PROTECTION INSPECTION (TEAM) REPORT 05000280/2018010 AND 05000281/2018010

Dear Mr. Stoddard:

On March 15, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Surry Power Station (SNS), Units 1 and 2, and the NRC inspectors discussed the results of this inspection with Mr. Fred Mladen and other members of your staff. The results of this Triennial Fire Protection Inspection (TFPI) 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. 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 Surry Power Station.

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.: 50-280, 50-281
License Nos.: DPR-32, DPR-37

Enclosure:
Inspection Report 05000280/2018010
and 05000281/2018010

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number(s):	50-280, 50-281
License Number(s):	DPR-32, DPR-37
Report Number(s):	05000280/2018010, 05000281/2018010
Enterprise Identifier:	I-2018-010-0021
Licensee:	Virginia Electric & Power Company
Facility:	Surry Power Station, Units 1 and 2
Location:	5850 Hog Island Road Surry, VA 23883
Inspection Dates:	February 26, 2018 to March 16, 2018
Inspectors:	R. Fanner, Senior Reactor Inspector (Team Leader) P. Braaten, Reactor Inspector J. Dymek, Reactor Inspector D. Strickland, Reactor Inspector E. Coffman, Reactor Inspector (Training)
Approved By:	Scott M. Shaeffer, Chief Engineering Branch 2 Division of Reactor Safety

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring Dominions' performance by conducting an announced team (TFPI) at the Surry Power Station, Units 1 and 2, in accordance with the NRC 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. NRC-identified findings and violations are summarized in the table below.

List of Findings and Violations

Failure to implement the 10 CFR, Part 50, Appendix R, III.G.3 requirements consistent with fire protection license condition 3I.			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000280-281/2018010-01 Open/Closed	Not indicative of current performance	71111.05T – 02.02e
The NRC identified a Green finding and associated non-cited violation (NCV) of the requirements consistent with license condition 3.I, Surry Units 1 and Unit 2. Specifically, the licensee failed to adequately protect fiberglass pipe that is susceptible to fire damage and required for safe shutdown. By not protecting the pipe, the licensee did not ensure the alternative shutdown methodology was implemented with the independence as defined by the 10 CFR 50 Appendix R section III.G.3 requirements.			

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INSPECTION SCOPES

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 the 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

71111.05T - Fire Protection (Triennial)

The team evaluated applicable fire protection licensing commitments from February 26, 2018 to March 16, 2018 by review of the following:

Fire Protection Inspection Requirements (3 Sample(s))

The inspectors evaluated fire protection program implementation in the following selected areas:

(1) Fire Area 28B, Intake Structure – Emergency Service Water Pump Room (Rm)
(2) Fire Area 45, Mechanical Equipment (Rm) #3
(3) Fire Area 47, Unit 2 Cable Tray (Rm)

B.5.b Inspection Activities (1 Sample)

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

(1) The team reviewed the strategy for make-up to the steam generator using auxiliary feed water (AFW).

OTHER ACTIVITIES – BASELINE

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (2 Sample(s))

To support the completion of the 71111.05T procedure, the inspectors reviewed the following issues related to the licensee's implementation of its corrective action program:

(1) CR-556095, CR-556099, CR-556101, CR-556104, SAR2940
(2) SU-12-01065, Service Water Pump Conduit Wrapping

INSPECTION RESULTS

Failure to implement the 10 CFR, Part 50, Appendix R, III.G.3 requirements consistent with fire protection license condition 3I.			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating systems	*Green* Finding *50-280, 50-281/*2018-010-01 Open & *Closed*	Not indicative of current performance	*71111.05T-02.02e*
The NRC identified a Green finding and associated non-cited violation (NCV) of the requirements consistent with license condition 3.I, Surry Units 1 and Unit 2. Specifically, the licensee failed to adequately protect fiberglass pipe that is susceptible to fire damage and required for safe shutdown. By not protecting the pipe, the licensee did not ensure the alternative shutdown methodology was implemented with the independence as defined by the 10 CFR 50 Appendix R section III.G.3 requirements.			

Description:

On March 13, 2018, while conducting a fire protection walk-down of Appendix R Fire Area 45, the Mechanical Equipment Room (MER) #3, the inspectors identified that a fire barrier protecting approximately 2 feet of bondstrand (e.g. fiberglass) service water (SW) discharge piping for charging service water (CPSW) pumps 1-SW-P-10B and 2-SW-P-10B had been previously removed and not replaced by the licensee.

In order to gain insights into the system's design, the team reviewed the System Design Basis Document for Service Water System, SDBD-SPS-SW, and Revision 13, which stated in part that design change package "DCP 84-067," Charging Pump Service Water Piping Replacement, modified the CPSW piping The majority of the CPSW piping was composed of fiberglass reinforced plastic (FRP). As specified in the DBD, the characteristics of the fiberglass pipe was susceptible to burning, spread flame, and would create dense smoke in a fire. As a result, the DBD stated that the integrity of the pipe must be maintained in order to ensure proper cooling of the charging pumps, to conserve the available service water inventory, and to eliminate the potential sources of flooding. As some point in the past, most of the fiberglass pipe for the system was replaced with copper-nickel pipe. The remaining fiberglass pipe was protected by the installation of a 3-hour fire barrier to achieve compliance with Appendix R."

Given the statements above found in SDBD-SPS-SW, the inspectors postulated that a fire-induced failure to the unprotected section of fiberglass pipe would lead to the degradation of the pipe integrity, which could then allow backflow from the opposite train of charging service water pumps (CPSW) 1-SW-P-10A and 2-SW-P-10A, for units 1 and 2 respectively. The licensee immediately declared the associated charging service water pumps and fire barrier non-functional, and initiated condition report CR1091963 to evaluate the missing fire barrier and the effect of an associated postulated internal flooding event resulting from a postulated fire.

During review of CR1091963, the inspectors noted that the fire barrier covering the aforementioned section of 'B' train pipe was removed under design change package DCP 06-007, approved on 9/16/2008, and that the DCP stated the removal was in compliance with Appendix R.

The inspectors also noted that procedure 0-FCA-7.00, "Limiting Mechanical Equipment Room 3 or 4 Fire," Revision 11, detailed specific response actions in the event of fire in MER #3, and that the credited alternative shutdown strategy for fire area 45 is to use the 'A' train charging service water pumps found in fire area 54 for coiling lube oil on the associated

charging pumps being used for safe shutdown. Given this, the inspectors concluded that the removal of the fire barrier represented an inadequate analysis since the alternative or dedicated shutdown capability requirements were not satisfied in that a fire in FA 45 could potentially damage 'B' train SW discharge piping downstream of the associated check valves, which would allow backflow from the 'A' train pumps found in fire area 54.

Corrective Action(s): The licensee initiated fire watches as compensatory measures in designated areas for each pump IAW TRM 3.7.9 requirements for the nonconformance and initiated actions to either repair/replace missing fire barrier or replace piping exposed within the fire area.

Corrective Action Reference(s): CR1091963

Performance Assessment:

Performance Deficiency: The licensee's failure to ensure SSCs credited for the alternate shutdown strategy was independent and free from fire damage was a performance deficiency.

Screening: 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. In this instance, the credited fire barrier was removed and not replaced. As a result of having no protection for the exposed section of piping, damage was postulated since the material was considered to be flammable, thus could allow for backflow from the opposite train.

Significance: The team assessed the issue using NRC Inspection Manual Chapter 0609.04, "Initial Characterization of Findings," and determined the Mitigating System cornerstone was degraded. The team further assessed the issue using NRC Inspection Manual Chapter 0609, Appendix F, Attachment 1, "Fire Protection Significance Determination Process Worksheet," and assigned the finding to category 1.4.5, Post-fire Safe shutdown (SSD). The finding was screened as Green because the finding did not affect the ability to reach and maintain a stable plant condition within the first 24 hours of a fire event (Task 1.4.5-B).

Cross-cutting Aspect: The inspectors concluded that the removal of the fire barrier was not indicative of current licensee performance since it occurred in 2008, and therefore no cross-cutting aspect was assigned.

Enforcement:

Facility operating license condition 3.I for Surry Units 1 and 2 stated in part that the licensee shall implement and maintain in effect the provisions of the approved fire protection program as described in the UFSAR and as approved in the SER dated September 19, 1979 and subsequent supplements. Supplemental SER dated December 4, 1981 stated that the licensee has met the requirements of 10 CFR Appendix R III.G.3. 10 CFR 50 Appendix R section III.G.3 stated, in part that, "Alternative or dedicated shutdown capability of components in the area, room, zone under consideration should be provided."

Contrary to the above, following the approval of a design package on September 16, 2008, the licensee failed to ensure the alternative shutdown capability for a fire in fire area 45 was independent of the area. This violation was entered into the licensee's corrective action program as CR1091963, which implemented the appropriate compensatory measures.

Disposition: This violation is being treated as an NCV, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

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

The inspectors confirmed that proprietary information was controlled to protect from public disclosure.

On March 15, 2018, the lead inspector and team presented the TFPI results to the Site Vice President, Mr. Fred Mladen, and other members of the Surry staff.

THIRD PARTY REVIEWS

The inspectors did not perform any reviews of the Institute on Nuclear Power Reactor reports during the inspection period.

DOCUMENTS REVIEWED

Licensing Basis, Design Basis, & Regulatory

ML052490337, "Approval of Dominion Nuclear Connecticut and Virginia Electric and Power Company Quality Assurance Program Description Topical Report for Millstone Power Station, Unit NOS. 1, 2 AND 3, North Anna Power Station, Unit Nos. 1 and 2, and Surry Power Station, Unit NOs.1 and 2 (TAC NOS. MC4414, MC4415, MC4416, MC4417, MC4418, MC4419, and MC4420)
ML012840065, "Surry Units 1 and 2 – Issuance of Amendment RE: Core Exit Thermocouples and Smoke Detectors (TAC Nos. 65413, 65414, 65899 and 65900), dated March 15, 1988
Safety Evaluation Report (SER) dated 1979-9-17
SER letter dated 1980-10-09
SER Supplement 1 dated 1980-12-18
SER Supplement 2 dated 1981-2-13
SER letter dated 1982-04-27
SER letter dated 1982-11-18
SER supplement dated 1988-2-25
SER supplement dated 1992-7-23
SPS Appendix R Report, Rev. 38
SPS Appendix R Report, "Emergency Communication, Section 3.5.11," Rev. 38
SPS Appendix R Report, "Electric Distribution Coordination Study, Section 9.3.2," Rev. 38
SPS Appendix R Report, "Emergency Lighting, Section 3.5.12," Rev. 38
SU-FSAR-000-CG0000243117 (SPS UFSAR), "Updated Final Safety Analysis Report," Rev. 49
Technical Report EP-0013, "Fire Protection Information Relating to Appendix A to BTP 9.5-1, 1979 FP-SER and National Fire Protection Association (NFPA) Codes
SU-ETE-000-ETE-SU-2011-0012, "Appendix R Multiple Spurious Operation (MSO) Identification – Surry," Rev. 2
SU-ETE-000-ETE-SU-2011-0051, "Appendix R Multiple Spurious Operation (MSO) Evaluation – Surry Units 1 and 2," Rev. 2
SU-ETE-000-ETE-CEP-2015-0002, "Appendix R Input for Thermal-Hydraulic Analysis of Loss of All Reactor Coolant Pump Seal Cooling with Flowserve N-9000," Rev. 0
Surry Power Station Unit 1 and Unit 2 Technical Specifications, Change 53 (Amendment 290)
Surry Power Station Technical Requirements Manual, Rev. 39
Surry Emergency Plan Letters of Agreement Surry VFD (9/15/16) and Smithfield VFD (9/2/16)

Calculations

DNES-VA-GN-0008, "Equipment Mark Numbers," Rev. 0
EE-0035, "Surry EDG Loading Calculation-Bus 1H, Appendix R Scenario," Rev. 2
ET-S-09-0036, "Appendix R Assumptions for Implementing Manual Actions," Rev. 0
ET No. CEE-99-0001, "Appendix R Report, Review of Ch. 9," dated 2/1/1999
ET-CEP-99-0017, Fire Barrier Rating of Service Building Stairwell, 5/12/99
ET-CEP-06-0018, Results of Low Pressure CO2 Leakage Test, 5/18/09
ETE-SU-2017-0056, Evaluation of Blue Matting Material at the CC Heat Exchangers, 7/16/17
ME-0166, "Surry Power Station Intake Canal Inventory," Rev. 3
SM-1149, "Surry Loss of Feedwater Due to High Energy Line Break," Rev. 1
SM-1507, "SPS Appendix R RETRAN Cases to Determine Operator Action Times in Case of Main Control Room Fire," Rev. 0

SM-1789, “Appendix R Worst Case Fire Natural Circulation Cooldown for SPS,” Rev. 0
ME-0835, Low Pressure Fire Protection System for the Cable Spreading Room, Rev. 0
ME-0836, High Pressure Fire Protection System for the Emergency Service Water Pump Tank Room, Rev. 0
SU-CALC-222-1250-111-C01, Penetration Seal Configuration Documentation 10” DC3-6548
Silicone Foam, 2/11/91
SU-ETE-000-ETE-SU-2015-0015, “Evaluation of Transient Combustible Placement at Network 90 Panel,” Rev. 0
SU-REPORT-000-EP-0012, “Combustible Loading Analysis – Surry Power Station, Units 1 and 2,” Rev. 25

Procedures

SU-PROCSU-ADM-CM-AA-TCA-101, “Operator Time Critical Actions,” Rev. 1
SU-PROCSU-ADM-CM-FPA-100, “Fire Protection/Appendix R (Fire Safe Shutdown) Program,” Rev. 13
SU-PROCSU-ADM-CM-FPA-101, “Control of Combustible and Flammable Materials,” Rev. 8
SU-PROCSU-ADM-CM-FPA-102, “Fire Protection and Fire Safe Shutdown Review and Preparation Process and Design Change Process,” Rev. 8
SU-PROCSU-ADM-PI-AA-200, “Corrective Action,” Rev. 34
SU-PROCSU-ADM-OP-AA-102, “Operability Determination,” Rev. 15
SU-PROC-000-0-AP-12.01, “Loss of Intake Canal Level,” Rev. 29
SU-PROC-000-0-AP-13.00, “Turbine Building or MER 3 Flooding,” Rev. 30
SU-PROC-000-0-AP-48.00, “Fire Protection – Operations Response,” Rev. 34
0-AP-12.01, “Loss of Intake Canal Level,” Rev. 36
0-AP-13.00, “Turbine Building or MER 3 Flooding,” Rev. 30
0-AP-48.00, “Fire Protection – Operations Response,” Rev. 34
0-DRP-049, “Time Critical Operator Actions,” Rev. 14
0-ECM-0105-01, “Appendix R ELT Inspection and Rework,” Rev. 36
0-FCA-7.00, “Limiting Mechanical Equipment Room 3 or 4 Fire,” Rev. 11
0-FCA-9.00, “Limiting Intake Structure Fire,” Rev. 001
0-FS-FP-300, “Loss Prevention Strategy,” Rev. 12
0-OSP-TCA-001, “Time Critical Action Validation and Verification,” Rev. 14
0-OSP-TCA-001, “Operations Surveillance Procedure,” Rev. 14
0-VSP-M4, “Flood Cont Pnl Trbl,” Rev. 6
1-E-0, “Reactor Trip or Safety Injection,” Rev. 72
1-ES-0.1, “Reactor Trip Response,” Rev. 53
1-ES-1.1, “SI Termination,” Rev. 51
1-FCA-7.00, “Limiting Cable Tray Room Number 2 Fire,” Rev. 0
1-FR-H.1, “Response to Loss of Secondary Heat Sink,” Rev. 38
2-FCA-7.00, “Limiting Cable Tray Room Number 2 Fire,” Rev. 0

Plant Modifications

DC 80-042, Service Water RTRP #3, Mechanical Equipment Room, Rev. 0
DC 93-013-3, Thermo-Lag Fire Barrier Replacement, SPS 1 & 2, 7/29/93
DC 06-035 Low Pressure CO2 Fire Protection System Modification, Surry Units 1 & 2, 10/23/06
DC 06-035 Low Pressure CO2 Fire Protection System Modification, Surry Units 1 & 2, Field Change Notice #2, 4/17/08
DNV-DC 87-004 [SPS1], “Feedwater Heater Level Control/Surry/Unit 2, date 11/23/1987

DNV-DC 87-005 [SPS2], “Feedwater Heater Level Control/Surry/Unit 2, date 5/17/1988
SPS-0-SCRN-2015-0001-0, “Harris Tri-band Trunked Radio System,” dated 7/15/2016
SU-DC-000-SU-12-01065, “”Service Water Pump Conduit Wrapping,” dated 6/21/2012
SU-15-01057, “LED Option for Emergency Lighting,” Rev. 000
93-012-3, “Mechanical Equipment Room No. 3 Watertight Door,” dated 11/8/1993

Workorders and Surveillance records

WO 38103740864, “4th Quarter Appendix R ELT Inspection and Repair,” dated 1/4/2018
0-LPT-FP-012, Rev 2, Fire Barriers (Including Penetration Seals), 2/10/09
2-OSP-ZZ-002, “Appendix R Isolation/Transfer Switch Functional Surveillance,” Rev. 12
38103393991, 547 Day Frequency PT, Fire Doors and Dampers, 1/13/15
38103578284, 547 Day Frequency PT, Fire Doors and Dampers, 10/14/16
38072249301, 1825 Day Frequency PT, Fire Barriers (Including Penetration Seals), 2/10/10
38079989601, 1825 Day Frequency PT, Fire Barriers (Including Penetration Seals), 2/27/13
38102489893, 1825 Day Frequency PT, Fire Barriers (Including Penetration Seals), 4/17/14
38102741892, 1825 Day Frequency PT, Fire Barriers (Including Penetration Seals), 2/12/15
38102970001, 1825 Day Frequency PT, Fire Barriers (Including Penetration Seals), 2/9/16
38103739001, 182 Day Frequency PT, Weight Test Emergency Service Water Fuel Oil Tank Room High Pressure CO2 System, 5/30/17
38103570743, 365 Day Frequency PT, Fire Pump Flow Rate Test, 12/31/15
38103679516, 365 Day Frequency PT, Fire Pump Flow Rate Test, 12/29/16
38103833034, 28 Day Frequency PT, Diesel Fire Pump 1-FP-P-2, 12/8/17
38103773833, 182 Day Frequency PT, Fire Protection Fire Main, FI-OC-22A, 11/25/17
38103583127, 547 Day Frequency PT, Emergency Service Water Fuel Oil Tank Room Operability Test, 8/8/16
37103719716, 547 Day Frequency, Inspection of Fire Retardant Coatings, 11/28/17
38103574459, PM Replace the Batteries in the Fire Alarm Control Panel (FACP) 1A, 4/11/16
38103574465, PM Replace the Batteries in the Fire Alarm Control Panel (FACP) 1B, 4/11/16
38103630338, 547 Day Frequency PT, Fire Hose Station Inspection, 3/16/17

Miscellaneous Documents

Carboline Research and Development Laboratory Test Report-Thermal Transmission of Pyrocrete 241 at Varying Thicknesses, November 12, 1985
Fire Drill Reports (All Shifts) 3rd and 4th Quarter 2017
Fire Drill Scenario Report for Section D and Ops E for 3/1/18
Instructions for Safety Installation Operation
Loss Prevention Fire Strategy 0-FS-FP-211, Emergency Service Water Pump House Low Level Elevation 18 Feet, Rev. 3
Loss Prevention Fire Strategy 0-FS-FP-115, Mechanical Equipment Room (MER) #3, Elevation 9 Feet 6 Inches, Rev. 4
Loss Prevention Fire Strategy 1-FS-FP-168, Turbine Building Basement Unit 1 9 Feet 6 Inches Revised 5/20/05
Loss Prevention Fire Strategy 2-FS-FP-127, Unit 2 Cable Spreading Room Elevation 45 Feet 3 Inches, Rev 5

NANTel Generic Plant Access Training Content Document, November 19, 2017
National Fire Protection Association (NFPA) Code No. 12, Carbon Dioxide Extinguishing Systems
Nuclear Oversight Audit 15-04, Fire Protection Program
Nuclear Oversight Audit 17-04, Fire Protection Program and SPS Refueling
NUREG-1552, "Fire Barrier Penetration Seals in Nuclear Power Plants," dated July 1996
Operations Control Center Fire Brigade Manning Requirements for Section D and Ops E (Training and Medical Records) for 3/1/18
PGFire-FST-Fire-0107, Basic Fire Training, Rev. 1
Program Health Report, Surry PF (Appendix R), Q4/2016
System Health Report, Surry FP (Fire Protection), Q3/2017
Work Control Center List of Fire Protection Impairments for 2/28/18
Work Control Center List of Hourly and Shiftly Fire Watches for 2/28/18
38-E141-00002, "F-100 by Lightguard Installation Operating Instructions," Rev. 3
38-E141-00001, "Exide Lightguard B-200 Emergency Light Unit," Rev. 9

Condition Reports Reviewed during inspection

CR339313
CR390931
CR560196
CR1045568
S-1999-3199

Condition Reports Written Due to this Inspection

CR1088885, "Grounding Cable in Unit 2 MSVH not connected to any equipment," Rev. 0
CR1090927, "EP-0013 Apparent Error in NFPA Code Year," Rev. 0
CR1090956, "Open Conduit in MER 3," Rev. 0
CR1091032, "Fire Hose Racks have nozzles that are not for use in electric fires," Rev. 0
CR1091114, "Typographical Error Found in ET-CEP-06-0018," Rev. 0
CR1091604, "Lack of Lighting for 1-SW-263 Breaker," Rev 0
CR1091957, "Fire Penetration in MER 3 Contains Combustible Material," Rev. 0
CR1091963, "MER 3 CH SW Pipe Lacks Barrier Downstream of Check valves," Rev. 0
CR1092181, "Fire Penetrations Not Listed in PAMS," Rev. 0
CR1092206, "Hose station inspection procedure 0-LPT-FP-004/005 does not inspect nozzle type," Rev. 0
CR1092279, "NRC Minor Violation on Lack of Validation for 0-FCA-7.00," Rev. 0

Drawings

11448-FB-047A, Sheet 1 of 1, Flow Diagram-Fire Protection Water Supply, Rev. 34
11448-FB-047B, Sheet 1 of 1, Flow Diagram-Fire Protection Water Supply, Rev. 3
11448-FB-047B, Sht. 1 "Flow/Valve Operating Numbers Diagram Fire Protection System," Rev. 30
11448-FB-047B, Sht. 2 "Flow/Valve Operating Numbers Diagram Fire Protection System," Rev. 25
11448-FB-047C, Sht. 2, "Flow/Valve Operating Numbers Diagram Fire Protection System," Rev.

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11448-FB-047J, Sheet 1 of 1, Flow Diagram-Deluge Valve Details, Rev. 3
11448-FB-2A, Sheet 1 of 1, Surry Power Station-Fire Protection Arrangement, Rev. 22
11448-FB-3A, Sheet 1 of 1, Surry Power Station-Yard, Water and Fire Protection Lines, Rev. 27
11448-FB-3B, Sheet 1 of 1, Surry Power Station-Yard, Water and Fire Protection Lines, Rev. 37
11448-FB-25P, Ventilation and Air Conditioning, Service Building Surry Power Station Unit 1, Rev. 11
11448-FM-068A, Sht. 3, “Flow/Valve Operating Numbers Diagram Feedwater System,” Rev. 66
11448-FM-071B, Sht. 1, “Flow/Valve Operating Numbers Diagram Circulating & Service Water System,” Rev. 61
11448-FM-071D, Sht. 1, “Flow/Valve Operating Numbers Diagram Circulating & Service Water System,” Rev. 6
11448-FE-90AA, “Appendix R Block Diagram, Auxiliary Feedwater System, Surry Power Station Unit 1,” Rev. 3
11448-FE-90AA, “Appendix R Block Diagram, Auxiliary Feedwater System, Surry Power Station Unit 2,” Rev. 2
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11448-FE-90DA, Sht. 1, “Appendix R Block Diagram, Instrumentation,” Rev. 3
11548-FE-1C, “4160 One-Line Surry Power Station – Unit 2,” Rev. 14
11548-FE-1K, “480V One-Line Surry Power Station – Unit 2,” Rev. 38
11548-FE-51R, “Wiring Diagram Internal & External Fire Protection Panel,” Rev. 4
11548-FE-90AA, “Appendix R Block Diagram, Auxiliary Feedwater System,” Rev. 2
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