



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

February 7, 2020

Mr. Daniel G. Stoddard  
Senior Vice President  
and Chief Nuclear Officer  
Virginia Electric & Power Co.  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 29060

SUBJECT: NORTH ANNA POWER STATION – INTEGRATED INSPECTION REPORT  
05000338/2019004 AND 05000339/2019004

Dear Mr. Stoddard:

On December 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at North Anna Power Station. On January 8, 2020, the NRC inspectors discussed the results of this inspection with Ms. Lisa Hilbert and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Louis J. McKown, II, Chief (Acting)  
Reactor Projects Branch 4  
Division of Reactor Projects

Docket Nos. 05000338 and 05000339  
License Nos. NPF-4 and NPF-7

Enclosure:  
As stated

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SUBJECT: NORTH ANNA POWER STATION – INTEGRATED INSPECTION REPORT  
05000338/2019004 AND 05000339/2019004 Dated February 7, 2020

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**ADAMS ACCESSION NUMBER: ML20038A126**

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OFFICE	RII/DRP	RII/DRP	DRII/DRP	RII/DRP	
NAME	M. Tobin	G. Eatmon	M. Toth	L. McKown	
DATE	1/24/2020	1/27/2020	1/27/2020	2/07/2020	

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

Docket Numbers: 05000338 and 05000339

License Numbers: NPF-4 and NPF-7

Report Numbers: 05000338/2019004 and 05000339/2019004

Enterprise Identifier: I-2019-004-0030

Licensee: Virginia Electric & Power Co.

Facility: North Anna Power Station

Location: Mineral, VA

Inspection Dates: October 01, 2019 to December 31, 2019

Inspectors: P. Capehart, Senior Operations Engineer  
G. Eatmon, Resident Inspector  
M. Tobin, Senior Resident Inspector

Approved By: Louis J. McKown, II, Chief (Acting)  
Reactor Projects Branch 4  
Division of Reactor Projects

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at North Anna Power Station, 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.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## **PLANT STATUS**

Unit 1 began the inspection period at approximately 10 percent power for a power escalation following a planned refueling outage. On October 4th, 2019, Unit 1 achieved rated thermal power and remained at or near rated thermal power for the remainder of the inspection period.

Unit 2 operated at or near rated thermal power for the entire inspection period.

## **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 performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." 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**

### 71111.04Q - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (2 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1, Outside Recirc Spray and Casing Cooling, Train A and B on December 3, 2019
- (2) Unit 2, Outside Recirc Spray and Casing Cooling, Train A and B on December 13, 2019

### 71111.04S - Equipment Alignment

#### Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the Unit 1 auxiliary feedwater system on November 26, 2019.

### 71111.05Q - Fire Protection

#### Quarterly Inspection (IP Section 03.01) (5 Samples)

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

- (1) Unit 1 cable vault and tunnel on October 18, 2019

- (2) Unit 1 safety related battery rooms on October 18, 2019
- (3) Unit 2 safety related battery rooms on October 18, 2019
- (4) Unit 2 safeguards building on October 31, 2019
- (5) Unit 1 and Unit 2 aux building basement during hot-work and removed fire barriers on December 12, 2019

#### 71111.06 - Flood Protection Measures

##### Inspection Activities - Internal Flooding (IP Section 02.02a.) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Unit 1 and Unit 2, charging pump cube A, B, and C on November 12, 2019

##### Inspection Activities - Underground Cables (IP Section 02.02c.) (1 Sample)

The inspectors evaluated cable submergence protection in:

- (1) Manholes 4MH03 and 4MH04 on November 29, 2019

#### 71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

##### Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The licensee completed the annual requalification operating examinations required to be administered to all licensed operators in accordance with Title 10 of the *Code of Federal Regulations* 55.59(a)(2), "Requalification Requirements," of the NRC's "Operator's Licenses." During the week of January 3 2020, the inspector performed an in-office review of the overall pass/fail results of the individual operating examinations, the crew simulator operating examinations, and the biennial written examinations in accordance with Inspection Procedure (IP) 71111.11, "Licensed Operator Requalification Program." These results were compared to the thresholds established in Section 3.02, "Requalification Examination Results," of IP 71111.11.

#### 71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

##### Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the Control Room during a main feedwater swap complicated by a failed flow switch on October 29, 2019.

##### Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated a rapid down power and low power feedwater operation training evolution on October 22, 2019 in the simulator.

#### 71111.12 - Maintenance Effectiveness

##### Routine Maintenance Effectiveness Inspection (IP Section 02.01) (3 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Unit 2 bearing cooling pumps on October 31, 2019
- (2) Unit 1 and Unit 2 Appendix R lighting on December 10, 2019
- (3) Unit 1 and Unit 2 Plant Computer System and Secure Plant Data Systems on December 16, 2019

#### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

##### Risk Assessment and Management Sample (IP Section 03.01) (3 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) Elevated risk due to Reserve Station Service Transformer 'B' being removed from service with degraded cabling to the Station Service Transformer 'B' on October 17, 2019
- (2) Unit 1 and Unit 2 elevated risk due to the service water header check valve to the Unit 2 charging pump 'C' being unavailable on November 5, 2019
- (3) Unit 1 in elevated risk due to the turbine driven auxiliary feedwater pump being unavailable on November 29, 2019

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 02.02) (5 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Safety related cable conduit with potential transient combustibles inside on October 17, 2019 (CR1133208)
- (2) 1NNSANH002 damaged cable shield and outer jacket on November 4, 2019 (CR1135004)
- (3) Main feedwater recirculation flow switch automatic action disabled due to failed flow switch on November 14, 2019 (CR1134482)
- (4) Unit 1 and Unit 2 diesel driven fire pump engine failure during annual testing on December 18, 2019 (CR1124204)
- (5) Unit 1 and Unit 2 potential vulnerability identified with control room envelope testing methodology on December 19, 2019 (CA7771875)

#### 71111.18 - Plant Modifications

##### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Unit 1 and Unit 2 permanent storage of scaffolding racks in containment on 216' elevation on December 19, 2019

#### 71111.19 - Post-Maintenance Testing

##### Post-Maintenance Test Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) Unit 1 emergency diesel generator following replacement of the governor on October 15, 2019
- (2) Unit 1 Rod drop time testing prior to reactor startup, on October 16, 2019
- (3) Unit 1 intermediate range, N-35, failed during unit shutdown for planned refueling on October 22, 2019
- (4) Unit 1 and Unit 2 control room HVAC supply air operated damper diaphragm replacement and spring load testing on December 9, 2019
- (5) Unit 2 steam generator blow down trip valve, 2-BD-TV-200A, failed to open during testing on November 14, 2019
- (6) Unit 2 service water valve, 2-SW-MOV-204A, failed stroke time testing on November 15, 2019

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Surveillance Tests (other) (IP Section 03.01) (2 Samples)

- (1) Unit 2 'H' emergency diesel generator fast start on October 7, 2019
- (2) Unit 1 charging pump, 1-CH-P-1B, periodic test on November 12, 2019

### **OTHER ACTIVITIES – BASELINE**

#### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

##### MS06: Emergency AC Power Systems (IP Section 02.05) (2 Samples)

- (1) Unit 1 (October 2018–September 2019)
- (2) Unit 2 (October 2018–September 2019)

##### MS09: Residual Heat Removal Systems (IP Section 02.08) (2 Samples)

- (1) Unit 1 (October 2018-September 2019)
- (2) Unit 2 (October 2018-September 2019)

#### 71152 - Problem Identification and Resolution

##### Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in supply chain management and adverse material condition of components issued from the warehouse for installation in the plant that might be indicative of a more significant safety issue.



### Annual Follow-up of Selected Issues (IP Section 02.03) (2 Samples)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Unit 1 and Unit 2 common cause failure of auxiliary feedwater pump discharge due to tornado missile reevaluation
- (2) Unit 1 and Unit 2 containment hatch closure requirements

### **INSPECTION RESULTS**

Observation: Unit 1 and Unit 2 Common Cause Failure of Auxiliary Feedwater Pump Discharge due to Tornado Missile	71152
<p>The inspectors conducted a detailed review of the licensee's evaluation of Regulatory Issue Summary (RIS) 2015-06, "Tornado Missile Protection" with respect to a design basis tornado missile that could impact all three trains of auxiliary feedwater pump discharge pipe and results in a previously unidentified common cause failure scenario. The issue is documented for Unit 1 in CR1124894, with prompt operability determination CA7621480, and for Unit 2 in CR1124899, with prompt operability determination CA7621494. The 12-inch diameter design basis missile enters the auxiliary feedwater pump house through the vestibule, maintains the line-of-sight trajectory and orientation through the existing barriers, and strikes all three trains of auxiliary feedwater pump discharge pipe. The licensee's UFSAR identifies that the auxiliary feedwater pumphouse is protected from tornado missiles. The acceptable design parameters for a tornado resistant structure are:</p> <ul style="list-style-type: none"><li>• A 2-foot-thick heavily reinforced concrete with rebar (from the licensee's UFSAR)</li><li>• A 2-inch-thick steel plate (from Calculation CE-1856, Design Supplemental Missile Barrier for Aux. Feedwater Pump House, dated July 14, 2006)</li></ul> <p>For Unit 1, the licensee's operability determination identifies the tornado missile would pass through 24 inches of non-reinforced concrete from the nearby structure and 1.2 inches of the metal equipment and support structures in the auxiliary feedwater pumphouse. For Unit 2, the licensee's operability determination also relies on the metal equipment and support structures totaling over 2.5 inches of metal within the auxiliary feedwater pumphouse</p> <p>Following Enforcement Guidance Memorandum 15-002, "Enforcement Discretion for Tornado-Generated Missile Protection Noncompliance," the licensee reviewed RIS 2015-06, concluded that a technical specification controlled structure does not comply with the current licensing basis, performed an engineering evaluation to determine the structure is operable but non-conforming, and is addressing the non-complying condition through their corrective action program.</p>	
Observation: Containment Equipment Hatch Closure Requirements	71152
<p>The inspectors conducted a detailed review of an NRC-identified issue in CR 1130343, initiated on September 8, 2019, regarding the uncertainty involved in how many personnel would be available to assist during a postulated required containment hatch closure.</p> <p>During this inspection, the resident inspectors discovered that one of the emergency operating procedures that could require a hatch closure, 1-AP-11, "Loss of RHR," Revision 34, required operators to announce a containment evacuation prior to directing the hatch closure team on station to close the hatch, which by procedure is required to be closed within</p>	

the time to boil or within 45 minutes, whichever is lower. However, the residents discovered that when performing hatch closure drills, non-assigned personnel would assist the team in closing the hatch. Since an evacuation was ordered prior to a hatch closure order, the licensee and the resident inspectors agreed that the closure team should not rely on outside assistance. The licensee directed the hatch closure team to expect to do any future drill or actual required closure without assistance. The licensee enhanced their process to ensure that future drills would be more accurate to real scenarios. Additionally, based on the site's self-imposed standards and alternate source term documentation, there are no requirements related to how quickly the hatch must be secured, so there are no performance deficiencies associated with this inspection.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On January 8, 2020, the inspectors presented the integrated inspection results to Ms. Lisa Hilbert and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04Q	Corrective Action Documents Resulting from Inspection	CR1137882	Security Barrier Sheet Metal Touching Insulation for 2-RS-TK-1 Unit 2 Casing Cooling Tank	12/13/2019
	Drawings	11715-FM-074A	Flow/Valve Operating Numbers Diagram Feedwater System	48
	Procedures	1-AR-J-B6	RS PP 2A or 2B Vibration	0
		1-AR-J-B6	RS PP 2A LO or OL Trip	0
		1-AR-J-G5	RS PP 1B Lockout or Auto Trip or Test	0
		1-AR-J-G6	RS PP 2B LO or OL Trip	0
		1-OP-7.5A	Valve Checkoff - Outside Recirculation Spray System	10
		1-PT-71.12	AFW System Valve Position Verification	07
		2-OP-7.5A	Valve Checkoff - Outside Recirculation Spray System	10
71111.05Q	Calculations	NA-2011-0021	Evaluation of Permanently Stored Combustible Material	06
	Corrective Action Documents Resulting from Inspection	CR1133208		
		CR1134147	NRC identified issue: housekeeping issues in both units QS and SFGDs pumphouses lower levels	
		CR1134150	NRC identified issue: Foreign material in cable trays above 2-RS-P-2A pump cube area	
		CR1137788	NRC questions about hot work in 1-CH-P-1B cubicle	12/12/2019
	Fire Plans	1-FS-AB-1	Auxiliary Building (All Elevations) Fire Fighting Strategy Safe Shutdown Equipment	6
		2-FS-SG-1	Safeguards Area Safe Shutdown Equipment Unit 2	5
	Procedures	0-FS-CT-1	Cable Tray Spreading and Battery Room 2-1, 1-1, 2-3, 1-3	4
		0-PT-106.1C	Fire Protection - Simplex Fire Detectors - Outside Containment - Channel Operational Test	11
		1-FS-ESG-BR-1	Battery Rooms 1-2 and 1-4	003
		2-FS-ESG-BR-1	Emergency Switchgear Battery Room 2-2- and 2-4	1
		CM-AA-FPA-100	Fire Protection/Appendix R (Fire Safe Shutdown) Program	13
	Work Orders	59203270696	Fire Protection - Simplex Fire Detectors - Outside Containment - Channel Operational Test	8/8/2019
71111.06	Corrective Action	CA3054959	Document Previous Functionality of Charging Pumps	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
	Corrective Action Documents Resulting from Inspection	CR1134073	01-FPM-DET-458-DETECT is hanging by its wires	
		CR1136811		
		CR1137661	Why is backflow preventer 1-DB-BFP-2 not included in 0-GOP-3.9	12/10/2019
	Drawings	11715-FB-9A/B/C	Arrangement: Auxiliary Building, Floor Drainage, Sheet 1/2/3	
	Engineering Evaluations	ET-N-10-0014	Engineering Technical Evaluation: Development of Flooding TRM	9/6/2013
	Miscellaneous		Safety Evaluation Report for North Anna Power Station, Units 1 and 2	02/1979
			Fire Protection System Review for North Anna Power Station, Units 1 & 2, Supplement 2	1/3/1978
			Virginia Electric and Power Company North Anna Power Station Unit 1 and 2 Response to Generic Letter 88-20 and Supplement 1 Individual Plant Examination (IPE) for Severe Accident Vulnerabilities	12/14/1992
		02-92-4036-028	North Anna Power Station Commitment Data Form, IPE Required Procedure Modificaiton	5/2/1994
	Procedures	0-GOP-3.9	Weekly Check of Charging Pumps	4
		0-MCM-1302-01	Mechanical Corrective Maintenance, Moving Heavy Loads and Concrete Floor/Wall Plugs in the Auxiliary Buidling	28
71111.11Q	Corrective Action Documents	CR1135251	NRC requested information on Ops Initial Narrative Log Entry	11/6/2019
	Miscellaneous		Simulator Exercise Guide, course #SEG-12H	
	Procedures	OP-AA-100	Conduct of Operations	39
71111.12	Corrective Action Documents	CA7441460	Perform MRule Functional Failure evaluation 02-ELT-B0SB5-Battery found inoperable	11/19/2018
		CA7475755	Perform MRule Functional Failure evaluation Transformer found not working	12/26/2018
		CA7476603	Perform MRule Functional Failure evaluation 1-ELT-B-HP6 not working	12/27/2018
		CA7476926	Perform MRule Functional Failure evaluation Emergency	12/27/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			light found inoperable	
		CA7476928	Perform MRule Functional Failure evaluation 01-ELT-B-AB13 found inoperable	12/29/2018
		CA7476929	Perform MRule Functional Failure evaluation 01-ELT-B-AB14 found inoperable	12/29/2018
		CA7515388	Perform MRule Functional Failure evaluation 2-ELT-ELT-MS12A not working	2/18/2019
		CA7565438		
		CA7569001	Perform MRule Functional Failure evaluation 02-ELT-B-AB20 not working	4/11/2019
		CA7569002	Perform MRule Function Failure evaluation 01-ELT-B-AB13	4/11/2019
		CA7569003	Perform MRule Functional Failure evaluation 01-ELT-B-AB14 Not Working	4/11/2019
		CA7569007	Perform MRule Functional Failure evaluation 01-ELT-B-HP3	4/11/2019
		CA7578289	Perform MRule Function Failure evaluation for Appendix R lantern found non-function during rounds	4/20/2019
		CA7586469	Perform MRule Functional Failure evaluation Unit 2 Main Steam Emergency Lighting Fixture Light Head	4/28/2019
		CA7605957	Perform MRule Functional Failure evaluation for 01-ELT-B-EG7-Battery failed 8 hour discharge test	5/15/2019
		CA7644196	Perform MRule Functional Failure evaluation on 01-ELT-B-TB5 lamps not lit	07/16/2019
		CA7644207	Perform MRule Functional Failure evaluation 01-ELT-B-AB23 lamps not lit	7/16/2019
		CA7644936	Perform MRule Functional Failure evaluation 01-ELT-B-TB6 lights do not remain lit throughout 8hr discharge	7/17/2019
		CA7671970	01-ELT-B-MS4-Battery	8/27/2019
		CA7685370		
		CA7700741	02-ELT-B-AB7-Battery	10/1/2019
		CA7700742	02-ELT-B-AB22-Battery	10/1/2019
		CA7701647	01-ELT-ELT-CR4A-Light	09/30/2019
		CA7701651	01-ELT-B-SW7-Battery	10/02/2019
		CA7701655	02-ELT-B-SB7-Battery	10/2/2019
		CR1120021		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CR1120153		
		CR1124240		
		CR1126295		
		CR1127232		
		CR1132184	EPM/ELT - Appendix R (M1) Unit 1 & 2	9/30/2019
		CR1132401		
		CR1133828		
	Corrective Action Documents Resulting from Inspection	CR1138186	VPAP-2606, "Safety Parameter Display System (SPDS)" admin procedure found to contain deficiencies	
	Miscellaneous		MRule Tracking Group Basis Document for ELT02	0
			MRule Tracking Group Basis Document ELT03	0
			MRule (a)(1) Action Plan & (a)(1) Evaluation for 01-ELT-B-MS4-Battery	10/02/2019
			MRule System Basis Document for Emergency Lighting	0
	Procedures	0-EMP-2808-01	Appendix R Emergency Light Inspection and Testing of Fire Areas 2 (Control Room), 3-1 (U1 Cable Vault and Tunnel), 3-2 (U2 Cable Vault and Tunnel), 50 (Service Bldg Stairwell), 5-1 (Unit 1 Normal Switchgear Room) and 5-2 (Unit 2 Normal Switchgear Room)	14
		0-EMP-2808-03	Appendix R Emergency Light Inspection and Testing of Fire Area 8 (Unit 1 and Unit 2 Turbine Bldg)	10
		0-EPM-2808-05	Appendix R Emergency Light Inspection and Testing of Fire Area 11 (Unit 1 and 2 Aux Bldg. and Fuel Bldg.)	16
		0-EPM-2808-09	Inspection and Testing of Appendix R Emergency Light Chargers	27
		2-AP-42.1	Loss of Unit 2 Plant Computer System (PCS)	35
		VPAP-2606	Safety Parameter Display System (SPDS)	2
		VPAP-2802	Notifications and Reports	47
71111.13	Corrective Action Documents	CR1134379		
		CR1134480		
	Corrective Action Documents	CR1134443		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Resulting from Inspection			
	Drawings	Figure 13.3-NA	Service Water System Diagram	04/19/07
	Work Orders	WO59203300516		
71111.15	Calculations	ET-CEP-09-0010	Evaluation of Compensatory Measures for Aluminum Conduit Penetration Issues	2
		ET-CEP-10-0006	Evaluation of Aluminum Conduit Seal Penetration Fire Tests	01
		ET-N-10-0031	Evaluation of Aluminum Conduit Fire Penetrations	1
	Corrective Action Documents	CA7616237		
		CR1124204		
		CR1132231		
		CR1132259		
		CR1132332		
		CR1134482		
		CR1135934	Potential Vulnerability Identified with Control Room Envelope Testing Methodology	11/14/2019
		CR373123		
		CR395741		
	Corrective Action Documents Resulting from Inspection	1133208		
		CR1134657	NRC identified: question concerning TS 3.7.10 during damper testing	10/30/2019
	Operability Evaluations	CA7771875	Prompt Operability Determination for potential vulnerability in the control room envelope testing methodology for supply and exhaust dampers (1-HV-AOD-160-1/2 and 1-HV-AOD-161-1/2)	11/21/2019
	Procedures	0=PT-101.2	Warehouse 5 Fire Protection Pumps Annual Test	20
		1-OP-2.1 Attachment 6	Control of Feed Water Recircs During Power Ascension	106
		ER-NA-CRH-100	Main Control Room/Emergency Switchgear Room (MCR/ESGR) Envelope Habitability Program	2
		OP-AA-100 Attachment 6	Status and Configuration Control	38
		OP-AA-100	Alternate Plant Configuration Sheet	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	Attachment 9		
		OP-AA-102	Operability Determinations	15
		WO59102676139		
		WO59203300579		
71111.18	Drawings	1500013-1-S-102	Scaffold Storage Box for Safway Scaffold Part SHR7	0
		1500013-1-S-105	Scaffold Storage Box for Safway Scaffold Part SVP 3,7 & 10	1
	Engineering Changes	NA-15-00013	Scaffold Storage Rack for Unit 1 Containment 216' elevation	3/2/2016
		NA-15-00014	Scaffold Storage Rack for Unit 2 Containment 216' Elevation	8/27/2015
	Miscellaneous	NAPS-UCR-2015-013	SAR Change Request to indicate scaffold storage racks installed on the 216' elevation	3/8/2016
	Procedures	CM-AA-SHK-101	Seismic Housekeeping	6
71111.19	Corrective Action Documents	CR1131405		
		CR1134735	2-BD-TV-200A failed to open during slave relay testing	10/31/2019
		CR1135883	2-SW-MOV-204A unsat stroke time	11/14/2019
	Corrective Action Documents Resulting from Inspection	CR1134657	NRC identified: TS 3.7.10 not entered during U1 RFO when testing MCR dampers	10/30/2019
		CR1135978	NRC inspection question regarding 0-MPM-0452-19	11/15/2019
	Miscellaneous	2-DRP-02	Engineering Design Reference, Air Operated Valve Setpoints	15
	Procedures	0-ECM-0708-04	Removal, Bench Testing, and Installation of Woodward Digital Reference Unit (DRU) in Emergency Diesel Generator Electronic Governor Control System	1
		0-ECM-0708-05	Woodward Digital Reference Unit (DRU) and 2301A Field Adjustments	9
		0-MPM-0452-19	Control Room HVAC Supply AODs (1-HV-AOD-161-1 and 2) Diaphragm Replacement and Spring Load Testing	2
		MA-AA-103	Conduct of Troubleshooting	16
	Work Orders	59101767326	02-BD-TV-200A Air Supply Regulator Replacement *Reactivity Management Related*	11/1/2019
		59102666453	01-HV-AOD-161-1-DAMPOP, Replacement of damper motor diaphragm and spring load test	9/17/2019
		59203139484	01-NI-CHA-N-35-INTCPM, Contingency Compensating Voltage Adjustment	9/8/2019



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		59203277047	01-HV-AOD-161-2-Dampop, replace diaphragm in damper motor and spring load test	9/17/2019
		59203298233		
		59203301194	02-SW-MOV-204A-VALOP, Valvop/Limit switch inspection/repair	11/14/2019
		WO59102658574		
		WO59102658583		
		WO59102721737		
71111.22	Procedures	1-LOG-12	Emergency Diesel Generator Log (Operating)	28
		1-PT-14.2	Operations Periodic Test, Charging Pump 1-CH-P-1B	57
		2-PT-82.2A	2H Diesel Generator Test (Simulated Loss of Off-Site Power)	78
	Work Orders	59203291999	Charging Pump 1-CH-P-1B	11/12/2019
71151	Miscellaneous		NRC Mitigating Systems Performance Index (MSPI) Basis Document, North Anna Power Station Units 1 and 2	7
71152	Corrective Action Documents	CR1118006	2-FH-CRN-5 Gripper Air Solenoid Valve Failure	3/12/2019
		CR1124894	WO needed to install tornado missile barrier at U1 MD AFW pump house	6/11/2019
		CR1124899	WO needed to install tornado missile barrier at U2 MD AFW pump house	6/11/2019
		CR1131405	1H EDG mechanical governor delayed response in operation of the speed/load control switch	9/20/2019
		CR1134627	New thermal overloads from stock failed	10/30/2019
		CR1134711	New fan impellers from stock have no balancing documentation	10/31/2019
		CR1136192	New relief valve for 00-SA-RV-140-Valve failed seat integrity test	11/18/2019
	Corrective Action Documents Resulting from Inspection	CR1130343	NRC Question: Containment Equipment Hatch Closure Team	
	Operability Evaluations	CA7621480	Unit 1 auxiliary feedwater pump house tornado missile vulnerability	0
		CA7621494	Unit 2 auxiliary feedwater pump house tornado missile	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			vulnerability	
	Procedures	0-MCM-1204-07	Emergency Installation of the Equipment Hatch	1
		1-AP-11	Loss of RHR	34
		1-OP-18.1	Operation of the Containment Personnel Air Lock	27
		1-OP-18.3	Operation of the Unit 1 Containment Personnel Air Lock While in Mode 5, Mode 6, or Defueled	02
		GMP-GM-103	Establishing and Maintaining Containment Closure Team During Unit Outage	07
		MS-AA-TRD-1001	Supply Chain Management Material Quality Trending	1
		MS-AA-WHS-132	Control of Shelf Life Material	2
		MS-AA-WHS-133	In-Storage Maintenance of Items	4
		OP-AA-102	Operability Determination	15