



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

August 11, 2020

Mr. Jim Barstow  
Vice President Nuclear Regulatory  
Affairs & Support Services  
Tennessee Valley Authority  
1101 Market Street, LP 4A-C  
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NUCLEAR PLANT, UNITS 1 AND 2 –U.S. NUCLEAR  
REGULATORY COMMISSION INTEGRATED INSPECTION REPORT  
05000390/2020002, 05000391/2020002, AND 07201048/2020001

Dear Mr. Barstow:

On June 30, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Watts Bar Nuclear Plant, Units 1 and 2. On July 28, 2020, the NRC inspectors discussed the results of this inspection with Mr. Anthony Williams and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the 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 Watts Bar Nuclear Plant, Units 1 and 2.

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 Watts Bar Nuclear Plant, Units 1 and 2.

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/

Thomas A. Stephen, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket Nos. 05000390, 05000391, and 07201048  
License Nos. NPF-90 and NPF-96

Enclosure:  
NRC Inspection Report 05000390/2020002,  
05000391/2020002 And 07201048/2020001

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REGULATORY COMMISSION INTEGRATED INSPECTION REPORT  
05000390/2020002, 05000391/2020002, AND 07201048/2020001  
dated August 11, 2020

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DATE	7/29/2020	7/29/2020	8/3/2020	7/29/2020	8/11/2020

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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

**INSPECTION REPORT**

Docket Numbers: 05000390, 05000391, and 07201048

License Numbers: NPF-90 and NPF-96

Report Numbers: 05000390/2020002, 05000391/2020002, and 07201048/2020001

Enterprise Identifier: I-2020-002-0062 and I-2020-001-0116

Licensee: Tennessee Valley Authority

Facility: Watts Bar Nuclear Plant, Units 1 and 2

Location: Spring City, TN 37381

Inspection Dates: April 01, 2020 to June 30, 2020

Inspectors: W. Deschaine, Senior Resident Inspector  
J. Hamman, Resident Inspector  
M. Magyar, Reactor Inspector  
N. Peterka, Resident Inspector

Approved By: Thomas A. Stephen, Chief  
Reactor Projects Branch 5  
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 Watts Bar Nuclear Plant, Units 1 and 2, 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

Degraded Fire Barrier Penetration			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000390,05000391/2020002-01 Open/Closed	[P.1] - Identification	71111.05
The inspectors identified a Green finding and associated Non-cited Violation (NCV) of the facility's operating license which requires that TVA shall implement and maintain in effect all provisions of the approved fire protection program as described in the Fire Protection Report for Watts Bar. Specifically, the licensee failed to maintain fire barrier seal 0-SLV-304-C2182B in the Cable Spreading Room in accordance with all required design parameters as specified by the Fire Protection Report at WBN for a functional fire barrier.			

### Additional Tracking Items

None.

## REPORT DETAILS

### PLANT STATUS

Unit 1 operated at or near rated thermal power (RTP) from the beginning of the inspection period until May 8, when it was shutdown for a planned refueling outage. The unit remained in the outage until it was restarted on June 3. Unit 1 continued power ascension until June 8, when the unit reached RTP, and remained there for the remainder of the inspection period.

Unit 2 began the inspection period at RTP. On May 9, operators received an alarm in the Main Control Room (MCR) that indicated an issue with the main generator seal oil system. The licensee performed a rapid down power per their procedure and secured the turbine/generator. Following repairs on the main generator seal oil system, the licensee discovered additional turbine repairs that were necessary and shutdown the unit on May 15. The unit remained in the forced outage until it was restarted on June 1 and was returned to 100 percent RTP on June 3, where it remained for the remainder of the 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 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.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident inspectors were directed to begin teleworking and to remotely access licensee information using available technology. During this time the resident inspectors performed periodic site visits each week and during that time conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

### REACTOR SAFETY

#### 71111.01 - Adverse Weather Protection

#### External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated whether flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding.

#### 71111.04 - Equipment Alignment

##### Partial Walkdown Sample (IP Section 03.01) (3 Samples)

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

- (1) 2A-A ERCW traveling water screen while 1A-A is out of service for planned maintenance on April 2, 2020.
- (2) Both trains of Unit 1's Residual Heat Removal (RHR) system during the U1R16 refueling outage on May 15, 2020.
- (3) Spent fuel pool cooling system during the U1R16 core empty period on May 19, 2020.

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

- (1) The inspectors evaluated system configurations during a complete walkdown of the Unit 2 chemical and volume control system on June 30, 2020.

#### 71111.05 - Fire Protection

##### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Unit 1 reactor building, lower/upper containment on May 19, 2020
- (2) Control building, elevations 741/729', Unit 1 and 2 cable spreading room on June 21, 2020
- (3) Control building, elevation 692', electric board room chiller, air handling unit, and secondary alarm station on June 21, 2020
- (4) Control building, elevation 708', Unit 1 and 2 auxiliary instrument rooms and computer room on June 21, 2020
- (5) Diesel generator building, elevation 742', Unit 1 and 2 emergency diesel generators on June 23, 2020

#### 71111.07A - Heat Sink Performance

##### Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

- (1) Component cooling system heat exchangers A & C-S

#### 71111.08P - Inservice Inspection Activities (PWR)

##### PWR Inservice Inspection Activities Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated pressurized water reactor non-destructive testing by reviewing the following examinations from March 9 – 29, 2020:
  1. Ultrasonic Testing (UT)

- a. WP-09, Pressurizer Longitudinal Shell Weld, ASME Class 1 (reviewed)
  - b. RSGAFW-4, Vessel Nozzle to Vessel Shell Weld, ASME Class 2 (reviewed)
  - c. Reactor Vessel Closure Head (RVCH) Penetration Auxiliary Head Adapter (AHA) A, Dissimilar Metal Weld (reviewed)
  - d. RVCH Control Rod Drive Mechanism (CRDM) Penetration 1 (reviewed)
  - e. RVCH CRDM Penetration 23 (reviewed)
  - f. RVCH CRDM Penetration 78 (reviewed)
2. Penetrant Testing (PT)
- a. 1-00313-703M3A, 2" Pipe to Elbow Weld, ASME Class 2 (reviewed)
  - b. 1-003B-T038-05A, 2" Pipe to Valve Weld, ASME Class 2 (reviewed)
  - c. 1-003B-T038-06A, 2" Pipe to Valve Weld, ASME Class 2 (reviewed)

The Inspectors evaluated the licensee's boric acid corrosion control program performance.

#### 71111.11Q - Licensed Operator Regualification 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 U1R16 shutdown activities on May 8th and 13th, 2020.

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

- (1) Inspectors observed a simulator training scenario which included a heater drain malfunction and pressurizer instrument line failure that resulted in a small break loss of coolant accident on April 7, 2020.

#### 71111.12 - Maintenance Effectiveness

##### Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Emergency diesel generators (System 82)
- (2) Auxiliary feedwater - Unit 1 turbine driven pump (System 3B-B)

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

##### Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Replacement of pressure & flow transmitters for the Safety Injection system per DCN 65848 on April 27-30, 2020.
- (2) Main Steam Safety Valve testing & 1A Containment Spray Pump Heat Exchanger



- Coil Replacement on May 8, 2020.
- (3) Unit 1 Blackout testing & Mode 5 activities during the week of May 11th, 2020.
  - (4) Unit 1 core empty activities during week of May 17th, 2020.
  - (5) Risk assessment for Mode 4 to 3 change with the ice condenser lower inlet doors and turbine driven auxiliary feedwater level control valves (1-LCV-3-173 and 1-LCV-3-174) inoperable on June 1, 2020.

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 03.01) (6 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 1 surveillance frequency extension for ice condenser ice weight and flow channel operability tests
- (2) Corrosion found on 125V vital battery cell 22 (CR 1602787)
- (3) Unit 1 turbine driven auxiliary feedwater pump speed indication differs by 50 RPM (CR 1606802)
- (4) Unit 1 lower containment cooler ERCW supply isolation valve (1-FCV-67-99) had a stroke time less than acceptance criteria found in 1-SI-67-908B (CR 1611221)
- (5) Unit 1 vibrations for the residual heat removal (RHR) pump 1B were documented in the alert range during the comprehensive pump test (CRs 1610221, 1615790)
- (6) Unit 1 Pressurizer liquid sample isolation valve 1-FCV-043-0011-B has degraded reed switch due to pinched conductor (CR 1612886)

#### 71111.18 - Plant Modifications

##### Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (3 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) DCN 65848 - Replacement project of obsolete General Electric Manual/Automatic Controllers with Foxboro I/A DCS System for Unit 1.
- (2) TMOD WBN-20-1371, Temporary Modification to Allow Unit 1 to Operate with 1 Reactor Vessel Closure Stud Out of Service for Cycle 17, Revision 0.
- (3) DEC 66663, Replace Unit 1 Emergency Gas Treatment System (EGTS) Modulating Dampers 1-PCO-65-80, 82, 88, & 89, Revision 1.

#### 71111.19 - Post-Maintenance Testing

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

The inspectors evaluated the following post maintenance test activities to verify system operability and functionality:

- (1) WO 120743425, 0-MI-0.16, Maintenance Guidelines for Belt Driven Equipment, following Inspection and Lubrication of the B Train Main Control Room Air Handling Unit on April 29, 2020
- (2) WO 121379741, 1-SI-3-920 Valve Position Indication Verification Auxiliary Feedwater System Turbine Driven Train following maintenance on June 4, 2020
- (3) 1-SI-63-915-B, Safety Injection System - Valve Position Indication Verification and

- Full-Stroke Exercising (Train B) (Valve Stroke for 1-FCV-63-172) after maintenance on May 21, 2020
- (4) 0-SI-67-908-B, Valve Full Stroke Exercising and Position Indication Verification during Cold Shutdown Essential Raw Cooling Water Train B (Valve Strokes for 1-FCV-67-112, 1-FCV-67-107, 1-FCV-67-104, 1-FCV-67-99) after maintenance on May 26, 2020
  - (5) WO 120277283, 1-SI-77-701, Containment Isolation Valve Local Leak Rate Test Waste Disposal System (X-81) after maintenance on May 26, 2020
  - (6) WO 119905584, Replace leaking 1D-B Lower Compartment Cooler coil in U1R16 and remove T-mod WBN-1-2018-067-001 on May 28, 2020

#### 71111.20 - Refueling and Other Outage Activities

##### Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated refueling outage U1R16 activities from May 7 to June 5, 2020.

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

##### Surveillance Tests (other) (IP Section 03.01) (4 Samples)

- (1) WO 120240793, 1-SI-74-905-A, Residual Heat Removal Pump 1A-A Comprehensive Test During Refueling Outages, on May 21, 2020
- (2) WO 120240898, 1-SI-63-907, Residual Heat Removal Hot Leg and Cold Leg Injection Check Valve Testing During Refueling, on May 13, 2020
- (3) WO 120241099, 0-SI-82-3, Loss of Offsite Power with Safety Injection - DG 1A-A, on May 11, 2020
- (4) WO 120304027, 1-SI-1-907, Testing and Setpoint adjustment of Main Steam Safety valves using Trevi test Equipment, on May 6, 2020

##### Inservice Testing (IP Section 03.01) (1 Sample)

- (1) WO 120240799, 1-SI-74-905-B, Residual Heat Removal Pump 1B-B Comprehensive Test During Refueling Outages, on May 21, 2020

##### RCS Leakage Detection Testing (IP Section 03.01) (1 Sample)

- (1) 1-SI-68-32, Reactor Coolant System Water Inventory Balance, on April 4, 2020

##### Containment Isolation Valve Testing (IP Section 03.01) (1 Sample)

- (1) WO 120303967, 1-SI-43-701-B, Containment Isolation Valve Local Leak Rate Test Sampling System (X-92B & X-100), on May 11, 2020

##### Ice Condenser Testing (IP Section 03.01) (1 Sample)

- (1) WO 121374619, 1-SI-61-5, 18 Month Ice Condenser Lower Inlet Doors Inspections, on June 2, 2020

#### FLEX Testing (IP Section 03.02) (1 Sample)

- (1) 0-PI-OPS-FLEX, Flex Pumps Operating Instructions for Maintenance Activities, on June 9, 2020

#### **OTHER ACTIVITIES – BASELINE**

##### 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 procedure use and adherence, temporary equipment control, configuration control that might be indicative of a more significant safety issue. None were identified during the past six months.

##### Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

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

- (1) The inspectors conducted safety culture interviews with individuals from operations, maintenance, radiation protection, engineering, and security during and prior to the most recent refueling outage on Unit 1. The inspectors concluded that employees interviewed were willing to raise nuclear safety concerns through at least one of the several means available without fear of retaliation.

##### 71153 - Followup of Events and Notices of Enforcement Discretion

##### Event Followup (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated the 1B 6.9KV shutdown board loss of power with emergency diesel generator actuation and licensee's response on May 20, 2020.

##### Personnel Performance (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated Unit 2 shutdown (forced outage) and licensee's performance on May 15, 2020.

#### **OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL**

##### 60855.1 - Operation of an Independent Spent Fuel Storage Installation at Operating Plants

##### Operation of an Independent Spent Fuel Storage Installation at Operating Plants (1 Sample)

- (1) The inspectors evaluated the licensee's activities related to long-term operation and monitoring of their independent spent fuel storage installation.

#### **INSPECTION RESULTS**

Degraded Fire Barrier Penetration			
Cornerstone	Significance	Cross-Cutting	Report

		Aspect	Section
Mitigating Systems	Green NCV 05000390,05000391/2020002-01 Open/Closed	[P.1] - Identification	71111.05
<p>The inspectors identified a Green finding and associated Non-cited Violation (NCV) of the facility's operating license which requires that TVA shall implement and maintain in effect all provisions of the approved fire protection program as described in the Fire Protection Report for Watts Bar. Specifically, the licensee failed to maintain fire barrier seal 0-SLV-304-C2182B in the Cable Spreading Room in accordance with all required design parameters as specified by the Fire Protection Report at WBN for a functional fire barrier.</p>			
<p><u>Description:</u> While conducting a fire walkdown on June 21, 2020, of the Cable Spreading Room the inspectors identified that fire barrier seal 0-SLV-304-C2182B was nonfunctional. WBN drawings 45A883-35 and 45A883-36 both require for this seal/penetration to be functional that 1" ceramic fiber board are used on both sides of the penetration to cover areas that do not have cables or cable trays passing through. Contrary to this requirement the inspectors found one side of the penetration to be missing the 1" ceramic fiber board. Two days later the licensee was conducting a follow-up inspection of the same area and discovery an additional fire barrier seal 0-SLV-304-C1756A which was nonfunctional for the same reason as described above.</p>			
<p>Corrective Actions: The inspector notified the licensee and they declared the fire barrier non-functional, entered this into their Fire Protection Impairment Program (FPIP) as # C20-0381, and entered the condition into their CAP. A fire watch was not required per Part II, section 14.8 of the Fire Protection Plan because suppression and fire detection were functional on both sides of the penetration. However, Part II, section 14.8.2 of the Fire Protection Plan does require the licensee to restore the non-functional fire barrier to functional statues within 30 days. For the non-functional fire barrier that the licensee discovered, FPIP C20-0383 was initiated and the condition was entered into their CAP. The licensee has created work orders to correct each of the issues and is currently planning the work.</p>			
<p>Corrective Action References: CRs 1618074, 1618544</p>			
<p><u>Performance Assessment:</u></p>			
<p>Performance Deficiency: The licensee's failure to ensure that all fire barrier penetrations protecting safety-related areas are functional at all times as required by Part II, Section 14.8 of the Fire Protection Plan, was a performance deficiency.</p>			
<p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors 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. The functional integrity of the fire barrier penetration ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. The fire barrier did not meet all its required parameters for a functional barrier for a design basis fire.</p>			
<p>Significance: The inspectors assessed the significance of the finding using Appendix F, "Fire Protection and Post - Fire Safe Shutdown SDP." The finding was assigned to category 1.4.4 "Fire Confinement" with a High Degradation because 10% or more design depth of barrier material was never installed over 6 square inch area. The inspectors concluded, that the finding was of very low safety significance (Green) due to a fully functional automatic suppression systems on either side of the fire barrier (Step 1.4.4 - Question 1.4.4-B).</p>			

Cross-Cutting Aspect: P.1 - Identification: The organization implements a corrective action program with a low threshold for identifying issues. Individuals identify issues completely, accurately, and in a timely manner in accordance with the program. The inspectors identified a cross-cutting aspect in the Identification component of the Problem Identification and Resolution area, because the licensee failed to recognize that the barrier was incomplete and enter the non-functional fire barrier into their CAP [P.1]

Enforcement:

Violation: Facility operating licenses NPF-90 and NPF-96, conditions 2.F and 2.C.(8), respectively, state that TVA shall implement and maintain in effect, all provisions of the approved fire protection program, as described in the Fire Protection Report for the facility, as approved in applicable NRC Safety Evaluation Reports. The Watts Bar Fire Protection Report Part II, Section 12.10.6, "Penetration Seals," requires, that when plant commodities (i.e., pipe, cable trays, conduits, etc.) must pass through required fire barriers, the openings are provided with seals that meet or exceed the fire protection requirements of the barrier. This section also states that drawing series 45A883 controls the penetration seal program at WBN, thus has requirements for functional penetrations. Drawings 45A883-35 and -36 require for fire barrier seal 0-SLV-304-C2182B to be functional, that 1" ceramic fiber board are used on both sides of the penetration to cover areas that do not have cables or cable trays passing through it.

Contrary to the above, prior to June 21, 2020, the licensee failed to implement and maintain in effect all provisions of the approved fire protection program as described in the Fire Protection Report for the facility, as approved in applicable NRC Safety Evaluation Reports. Specifically, the licensee failed to ensure that fire barrier seal 0-SLV-304-C2182B protecting a safety related area, was functional, as required by Part II, Section 12.10.6, "Penetration Seals," and drawings 45A883-35 and -36.

Enforcement Action: This violation is being treated as a non-cited violation, 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.

- On July 28, 2020, the inspectors presented the integrated inspection results to Mr. Anthony Williams and other members of the licensee staff.
- On May 29, 2020, the inspectors presented the ISI Exit Meeting inspection results to Anthony Williams, Site VP and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60855.1	Procedures	0-SI-79-2	Dry Cask Storage Log	Revision 8
		WBN-DCS-500.1 FW	ISFSI Abnormal Conditions Procedure	Revision 1
71111.01	Miscellaneous		Watts Bar Nuclear Plant, Updated Final Safety Analysis Report, Chapter 2	
		N3-84-4001	System Description for Flood Mode Boration Makeup System	07/22/2015
		WBN-DCD-40-29	Flood Protection Provisions Watts Bar Nuclear Plan Unit 1 / Unit 2	Revision 17
	Procedures	0-AOI-7.01	Maximum Probable Flood	Revision 10
		0-AOI-7.07	Shutdown of CCS and Changeover to ERCW	Revision 5
71111.04				
	Drawings	1-47W809-1	Flow Diagram CVCS	Revision 67
		1-47W810-1	Flow Diagram RHR System	Revision 20
	Miscellaneous	3-OT-SYS062A	CVCS Lesson Plan	Revision 18
		SDD-N3-62-4001	CVCS System Description	Revision 39
		SDD-N3-74-4001	RHR System Description	Revision 19
		WBN-SDD-N3-67-4002	Essential Raw Cooling Water System Description	Revision 35
		WBN-SDD-N3-78-4001	Spent Fuel Pool Cooling and Cleaning System Description	Revision 24
		Procedures	0-SOI-78-01	Spent Fuel Pool Cooling and Cleaning System
	0-SOI-78.01 ATT 1H		Spent Fuel Pool Cooling and Cleaning System Handswitch Checklist	Revision 15
	0-SOI-78.01 ATT 1P		Spent Fuel Pool Cooling and Cleaning System Power Checklist	Revision 10
	0-SOI-78.01 ATT 1V		Spent Fuel Pool Cooling and Cleaning System Valve Checklist	Revision 10
	1-SOI-74-01		Residual Heat Removal System	Revision 16
	1-SOI-74.01 ATT 1,2,3P		RHR System Power Checklist 1-74.01-1,2,3P	Revision 0
	1-SOI-74.01 ATT 1,2,3V		RHR System Valve Checklist 1-74.01-1,2,3V	Revision 0
	2-SOI-62.01		CVCS - Charging and Letdown	Revision 22
71111.04	Procedures	2-SOI-62.01 ATT	CVCS - Charging and Letdown System Power Checklist 2-	Revision 0

		1P	62.01-1P	
		2-SOI-62.01 ATT 1V	CVCS - Charging and Letdown Valve Checklist 2-62.01-1V	Revision 3
71111.05	Fire Plans	CON-0-692-01	Control Building 692.0 Elevation	Revision 2
		CON-0-708-01	Control Building 708.0 Elevation	Revision 3
		CON-0-729-01	Control Building 729.0 Elevation	Revision 2
		DGB-0-742-01	Pre-Fire Plan for Diesel Generator Bldg 742 Elv.	Revision 4
		RXN-1-702-01	Reactor Building Lower Containment 702.78 Elevations	Revision 1
		RXN-1-713-01	Reactor Building Lower Containment 724 & 744 Elevations	Revision 2
		RXN-1-757-01	Reactor Building Upper Containment 763, 782, & 801 Elevations	Revision 1
71111.07A	Work Orders	120240570 (1-TI-79.701)	Component Cooling System Heat Exchanger A Performance Test	Revision 3
71111.11Q	Miscellaneous	SEG#: 3-OT-SRT-LOR Cycle 2002 Sim 5	LOR Cycle 2002 Sim 5	Revision 0
71111.12	Miscellaneous		Emergency Diesel Generator - System 082 Maintenance Rule a (1) plan revision 2	6/22/2020
		CDE 1645	Failure of the DC fan motor in the TDAFW pump room	6/29/2019
71111.13	Procedures	NPG-SPP-07.2.11-2	WBN Defense in Depth Assessment	06/30/2014
71111.15	Engineering Evaluations	WBN-SFCP-006	Surveillance Test Risk-Informed Documented Evaluation (STRIDE)	Revision 0
	Miscellaneous		Watts Bar Technical Specifications, Amendment 133	April 8, 2020
	Procedures	0-TI-SFCP-STI-WBN	Surveillance Test Interval (STI) Table	Revision 0
		NPG-SPP-07.8.1	Surveillance Frequency Control Program	Revision 0
	Work Orders	121294962, 119064713, 119064783, 114472148, 117761497, 112673479		
71111.18	Engineering Changes	DCN 65848	Replacement project of obsolete General Electric Manual/Automatic Controllers with Foxboro I/A DCS System for Unit 1	Revision A
		DEC 66663	Replace Unit 1 Emergency Gas Treatment System (EGTS)	Revision 1

			Modulating Dampers 1-PCO-65-80, 82, -88, & 89	
		TMOD WBN-20-1371	Temporary Modification to Allow Unit 1 to Operate with 1 Reactor Vessel Closure Stud Out of Service for Cycle 17	Revision 0
	Procedures	1-SI-65-9-A	18 Month Emergency Gas Treatment System Pressure Test - Train A	Revision 1
71111.19	Procedures	0-SI-67-908-B	Valve Full Stroke Exercising and Position Indication Verification during Cold Shutdown Essential Raw Cooling Water Train B, Revision 22 (Valve Strokes for 1-FCV-67-112, 1-FCV-67-107, 1-FCV-67-104, 1-FCV-67-99)	
		1-SI-63-915-B	Safety Injection System - Valve Position Indication Verification and Full-Stroke Exercising (Train B) (Valve Stroke for 1-FCV-63-172)	
	Work Orders	119905584	Replace leaking 1D-B Lower Compartment Cooler coil in U1R16 and remove T-mod WBN-1-2018-067-001	05/28/2020
		120277283	1-SI-77-701, Containment Isolation Valve Local Leak Rate Test Waste Disposal System, (X-81)	Revision 16
		120743425	0-MI-0.16, Maintenance Guidelines for Belt Driven Equipment, following Inspection and Lubrication of the B Train Main Control Room Air Handling Unit	
		121379741	1-SI-3-920 Valve Position Indication Verification Auxiliary Feedwater System Turbine Driven Train	Revision 17
71111.22				
	Procedures	0-PI-OPS-FLEX	Flex Pumps Operating Instructions for Maintenance Activities	Revision 10
	Work Orders	120240793	1-SI-74-905-A, Residual Heat Removal Pump 1A-A Comprehensive Test During Refueling Outages	Revision 7
		120240799	1-SI-74-905-B, Residual Heat Removal Pump 1B-B Comprehensive Test During Refueling Outages	Revision 7
		120240898	1-SI-63-907, Residual Heat Removal Hot Leg and Cold Leg Injection Check Valve Testing During Refueling	Revision 33
71111.22	Work Orders	120241026	1-SI-61-7 18-month Ice Condenser Intermediate Deck Doors Operational Check	Revision 5



		120241028	1-SI-61-9 18-month Ice Condenser Floor Drains Visual Examination	Revision 12
		120241099	0-SI-82-3, Loss of Offsite Power with Safety Injection - DG 1A-A	Revision 74
		120303967	1-SI-43-701-B, Containment Isolation Valve Local Leak Rate Test Sampling System (X-92B & X-100)	Revision 14
		120304027	1-SI-1-907, Testing and Set-point adjustment of Main Steam Safety valves using Trevitest Equipment	Revision 25
		120693898	1-SI-68-32, Reactor Coolant System Water Inventory Balance	April 4, 2020
		121374619	1-SI-61-5, 18 Month Ice Condenser Lower Inlet Doors Inspections	Revision 15