UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE RD, STE 102
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

August 1, 2023

Brad Berryman
Senior Vice President and Chief Nuclear Officer
Susquehanna Nuclear, LLC
769 Salem Blvd., NUCSB3
Berwick, PA 18603

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000387/2023002 AND 05000388/2023002

Dear Brad Berryman:

On June 30, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Susquehanna Steam Electric Station, Units 1 and 2. On July 27, 2023, the NRC inspectors discussed the results of this inspection with Edward Casulli, Site Vice President, 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,

Sarah H. Elkhiamy

Digitally signed by Sarah H. Elkhiamy
Date: 2023.08.01 15:05:08 -04'00'

Sarah H. Elkhiamy, Chief
Projects Branch 4
Division of Operating Reactor Safety

Docket Nos. 05000387 and 05000388
License Nos. NPF-14 and NPF-22

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000387/2023002 AND 05000388/2023002 DATED AUGUST 1, 2023

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Numbers:	05000387 and 05000388
License Numbers:	NPF-14 and NPF-22
Report Numbers:	05000387/2023002 and 05000388/2023002
Enterprise Identifier:	I-2023-002-0042
Licensee:	Susquehanna Nuclear, LLC
Facility:	Susquehanna Steam Electric Station, Units 1 and 2
Location:	769 Salem Blvd., Berwick, PA
Inspection Dates:	April 1, 2023, to June 30, 2023
Inspectors:	C. Highley, Senior Resident Inspector E. Brady, Resident Inspector J. Brand, Reactor Inspector L. Dumont, Senior Reactor Inspector N. Floyd, Senior Reactor Inspector N. Warnek, Senior Project Engineer
Approved By:	Sarah H. Elkhiamy, Chief Projects Branch 4 Division of Operating Reactor Safety

Enclosure

SUMMARY

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

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

Additional Tracking Items

None.

PLANT STATUS

Unit 1 began the inspection period at or near rated thermal power. On June 9, 2023, the unit was down powered to 74 percent for a rod pattern adjustment. The unit was returned to rated thermal power on June 10, 2023, and remained at or near rated thermal power for the remainder of the inspection period.

Unit 2 began the inspection period shut down for the U221RIO refueling outage. On April 23, 2023, the unit was started up and achieved rated thermal power on April 27, 2023. On May 4, 2023, the unit was down powered to 77 percent for a rod pattern adjustment. The unit was returned to rated thermal power on May 8, 2023. On May 23, 2023, the unit was down powered to 62 percent for maintenance. The unit was returned to rated thermal power on May 24, 2023, and remained at or near rated thermal power 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 2515, “Light-Water Reactor Inspection Program - Operations Phase.” The inspectors performed activities described in Inspection Manual Chapter 2515, Appendix D, “Plant Status,” conducted routine reviews using IP 71152, “Problem Identification and Resolution,” observed risk-significant activities, and completed on-site portions of IPs. 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

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of summer high heat and seasonal thunderstorms for the switchyard on June 28, 2023.

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 03.01) (2 Samples)

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

(1) Unit Common, 'C' diesel jacket water system on May 11, 2023
(2) Unit 1, division I core spray on June 14, 2023

Complete Walkdown (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated system configurations during a complete walkdown of the Unit 2 core spray system on April 17, 2023.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection (IP Section 03.01) (8 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 2, turbine building, 729-foot elevation, fire zone (FZ) 2-35B and 2-35C, on April 3, 2023
(2) Unit 2, drywell, FZ 2-4F, on April 5, 2023
(3) Unit 2, main steam pipeway (wingslab), FZ 2-4G, 2-5B, 2-5C, and 2-5A-S, on April 17, 2023
(4) Unit 1, reactor building, 779-foot elevation, FZ 1-6A, 1-6B, 1-6C, and 1-6D, on April 25, 2023
(5) Unit 2, reactor building, 645-foot elevation, FZ 2-1A, 2-1B, 2-1C, 2-1D, 2-1E, 2-1F, and 2-1G, on April 26, 2023
(6) Unit 1, turbine building, FZ 1-32C, 1-32F, and 1-32I, on May 17, 2023
(7) Unit 1, division I upper cable spreading room, FZ 0-27C, on June 13, 2023
(8) Unit Common, emergency diesel generator bay 'A', FZ 0-41A, on June 20, 2023

Fire Brigade Drill Performance (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the on-site fire brigade training and performance during an announced lube oil fire drill in the Unit 2 centrifuge and conditioner room, FZ 2-31E, on May 11, 2023.

71111.08G - Inservice Inspection Activities (Boiling-Water Reactor)

Boiling-Water Reactor Inservice Inspection Activities - Nondestructive Examination and Welding Activities (IP Section 03.01) (1 Sample)

The inspectors evaluated boiling-water reactor nondestructive testing by reviewing the following examinations from March 27 to April 6, 2023:

(1) The inspectors verified that the reactor coolant system boundary, reactor vessel internals, risk-significant piping system boundaries, and containment boundary were appropriately monitored for degradation and that repairs and replacements were appropriately fabricated, examined, and accepted by reviewing the following activities:

03.01 - Nondestructive Examination and Welding Activities

- Manual phased array ultrasonic testing of the N5A core spray nozzle to safe-end dissimilar metal weld, N5A NOZ-SE (NDE Report UT-23-052) – This

examination was performed in accordance with BWRVIP-75-A, “Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedules.”

- Manual ultrasonic testing of the reactor bottom head drain line 90-degree elbow, DBA-221-1-9610-E (NDE Report FAC-U2-23-098) – This examination was performed in accordance with EPRI NSAC-202L-R4, “Recommendations for an Effective Flow Accelerated Corrosion Program.”
- Visual examinations of the in-vessel visual inspections, including a sample of the jet pumps, core spray and feedwater piping and spargers, and top guides (Work Order 2469180).
- Welding activities associated with the replacement of a portion of the reactor pressure vessel bottom head drain line including the 2-inch to 4-inch expander under Work Order 2418635 – The post-welding nondestructive examination included encoded phased array ultrasonic testing of the 2-inch field weld, SPDDBA221-1-FW-9 (NDE Report BOP-VE-23-001) and radiography testing as well as pre-service conventional ultrasonic testing of the balance of field and shop welds, total of six (NDE Reports BOP-RT-22-001; BOP-RT-23-014/ -015/ -016/ -018/ -021; and UT-23-025/ -027/ -028/ -029).
- Welding activities associated with temporary repairs during the previous operational cycle (Work Orders 2563040 and 2607119) and then the permanent replacement (Work Order 2620004) of the bonnet on the reactor bottom head drain valve 244F103 in the reactor water clean-up system – The post-welding NDE included magnetic particle testing (NDE Report BOP-MT-22-068) and liquid penetrant testing (NDE Reports BOP-PT-22-198 and BOP-PT-23-009) of the seal weld on the bonnet packing leak-off port plug.

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 Unit 2 start up on April 22, 2023. The inspectors observed reactor startup and rods withdrawn to criticality.

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

(1) The inspectors observed and evaluated Unit 2 10-year American Society of Mechanical Engineers hydro just-in-time training on April 12, 2023.

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 remain capable of performing their intended function:

(1) Unit 2, containment hydrogen oxygen (H_2O_2) analyzer classification as maintenance rule (a)(1) category on June 8, 2023

(2) Unit Common, 'E' emergency diesel generator breaker to emergency core cooling system bus 4KV motor disconnect switch failure on June 29, 2023

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management (IP Section 03.01) (3 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) Unit Common, yellow risk due to spray pond work on May 23, 2023
(2) Unit 1, increased risk due to stackable work due to '1A' service water pump out of service on June 7, 2023
(3) Unit 2, risk-informed completion time review replacement of battery cell 42 in battery 2D660 on June 29, 2023

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (11 Samples)

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

(1) Unit 1, 'D' main steam line RIS-D12-1K603D mode switch in incorrect position, CR-2023-01581, on January 25, 2023
(2) Unit 2, bottom head drain pipe hanger tolerance, CR-2023-06202, on April 7, 2023
(3) Unit 1, high-pressure coolant injection steam inlet valve failure to close, CR-2023-06391 on April 9, 2023
(4) Unit Common, 'C' emergency diesel generator jacket water leak from cylinder 6R during 24-hour run, CR-2023-08448, on May 5, 2023
(5) Unit 2, 'B' reactor feed pump speed and total feed flow oscillations, CR-2023-08439, on May 10, 2023
(6) Unit 2, missed compensatory chemistry sample, CR-2023-09522, on May 20, 2023
(7) Unit 2, 'B' reactor recirculation pump high vibrations, CR-2023-07618 and AR-2023-08134, on June 6, 2023
(8) Unit 1, emergency service water piping below minimum wall thickness, CR-2023-10548, on June 12, 2023
(9) Unit 2, unexpected results identified during performance of SO-224-117 LOCA/LOOP test, CR-2023-04597, on June 29, 2023
(10) Unit Common, trip of 'D' emergency diesel generator during post-maintenance testing for synch selector switch replacement, CR-2023-05314, on June 29, 2023
(11) Unit Common, auto start of the 'B' emergency diesel generator due to contact of relay when reinstalling the cover, CR 2023-04706, on June 29, 2023

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

(1) Unit 2, permanent modification of cumulus project tie on June 29, 2023
(2) Unit 2, temporary modification of total flow input to heat balance relay's fuse removal on June 29, 2023

71111.20 - Refueling and Other Outage Activities

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

(1) The inspectors evaluated Unit 2 refueling outage (U221RIO) activities from April 1 to 24, 2023.

71111.24 - Testing and Maintenance of Equipment Important to Risk

The inspectors evaluated the following testing and maintenance activities to verify system operability and/or functionality:

Post-Maintenance Testing (IP Section 03.01) (4 Samples)

(1) Unit Common, 'D' emergency diesel generation operability run on May 1, 2023 (CR-2023-07991)
(2) Unit 2, cell replacement on battery 288/2D660 25VDC, PCWO 2648653-1, on June 21, 2023 (CR-2023-09775)
(3) Unit Common, 'D' emergency diesel generator system outage window, PCWO 2386177-0 and WO (RTPM) 2528864, on June 29, 2023 (CR-2023-02390)
(4) Unit 2, high-pressure coolant injection 10-year overhaul, PCWO 2198194 and PCWO 627833, on June 29, 2023

Surveillance Testing (IP Section 03.01) (12 Samples)

(1) Unit 2, residual heat removal service water (SO-216-A03) on April 2, 2023
(2) Unit Common, 'C' emergency diesel generator 24-hour load run on May 4, 2023
(3) Unit 1, turbine valve cycling on May 4, 2023
(4) Unit 2, SCRAM time testing (SR-255-004) on May 9, 2023
(5) Unit 2, standby liquid control system samples (SC-253-101) on May 18, 2023
(6) Unit 1, main turbine electrohydraulic control pump monthly operability test (OT-193-003) on May 30, 2023
(7) Unit 1, high-pressure coolant injection flow surveillance on June 5, 2023
(8) Unit 1, reactor coolant specific activity test surveillance on June 7, 2023
(9) Unit 2, reactor coolant specific activity test surveillance on June 9, 2023
(10) Unit 2, division II diesel generator loss-of-coolant accident loss of off-site power test (SO-224-217), Revision 9, on June 29, 2023 (CR-2023-04597)
(11) Unit 2, core spray flow verification division I (SO-251-A02) on June 29, 2023
(12) Unit 2, 10-year American Society of Mechanical Engineers hydro leak test on June 29, 2023

Inservice Testing (IP Section 03.01) (1 Sample)

(1) Unit Common, 'D' emergency diesel generator operability run (SO-024-001D) on April 7, 2023

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

(1) Unit 2, main steam isolation valves local leak rate test during refueling outage on April 10, 2023

Reactor Coolant System Leakage Detection Testing (IP Section 03.01) (2 Samples)

(1) Unit 1, reactor coolant leakage detection test surveillance on June 8, 2023
(2) Unit 2, reactor coolant leakage detection test surveillance on June 22, 2023

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

The inspectors evaluated:

(1) Emergency preparedness drill on June 27, 2023

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

(1) Emergency preparedness practice drill on June 13, 2023

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours (IP Section 02.01) (2 Samples)

(1) Unit 1, January 1, 2022 through December 31, 2022
(2) Unit 2, January 1, 2022 through December 31, 2022

IE03: Unplanned Power Changes per 7000 Critical Hours (IP Section 02.02) (2 Samples)

(1) Unit 1, January 1, 2022 through December 31, 2022
(2) Unit 2, January 1, 2022 through December 31, 2022

IE04: Unplanned Scrams with Complications (IP Section 02.03) (2 Samples)

(1) Unit 1, January 1, 2022 through December 31, 2022
(2) Unit 2, January 1, 2022 through December 31, 2022

BI01: Reactor Coolant System Specific Activity (IP Section 02.10) (2 Samples)

(1) Unit 1, January 1, 2022 through December 31, 2022
(2) Unit 2, January 1, 2022 through December 31, 2022

BI02: Reactor Coolant System Leak Rate (IP Section 02.11) (2 Samples)

(1) Unit 1, January 1, 2022 through December 31, 2022
(2) Unit 2, January 1, 2022 through December 31, 2022

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 03.03) (2 Samples)

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

(1) Temperature control valve equipment reliability and corrective actions
(2) Unit 2 Marathon control blade found damaged during performance of the U1RIO22 control blade shuffle

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Follow-up (IP Section 03.05) (1 Sample)

(1) The inspectors evaluated the retraction of an event notification made in accordance with Title 10 of the *Code of Federal Regulations* 50.72 for the high-pressure coolant injection lube oil cooler emergency service water valve failure to cycle electrically on June 9, 2023.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

71003 - Post-Approval Site Inspection for License Renewal

Post-Approval Site Inspection for License Renewal (1 Sample)

(1) The inspectors conducted a Phase 1 license renewal inspection at Unit 2 from March 27 to April 6, 2023. The following aging management programs and associated commitments were evaluated by the inspectors:

- Flow Accelerated Corrosion Program, Commitment 11
  - Ultrasonic testing thickness examination and flow accelerated corrosion evaluation of reactor water clean-up elbow DBA-201-1-3065-E (Work Order 1507652) and bottom head drain line elbow DBA-221-1-9610-E (Work Order 2478311)
- Buried Piping and Tanks Inspection Program, Commitment 26
  - Excavation and replacement of emergency service water lines HRC-201-1 and HRC-206-1 located at the reactor building penetration (Work Order 2474030) including visual examination of the coating condition for the excavated piping
- System Walkdown Program, Commitment 28

    - Periodic walkdown and visual examinations of accessible portions of the service water system (Work Order 2R-LRX1102) and reactor building closed cooling water system (Work Order 2R-LRX1402) inside the drywell, reactor, and turbine buildings
- Environmental Qualification Program, Commitment 44
    - Replacement of the 480-volt transformer inside electrical breaker 2b236064 for the feed to standby liquid control injection valve (Work Order 2388129)
- Main High-Pressure Turbine Casings Program, Commitment 57
    - Ultrasonic testing thickness examinations of focused areas of the turbine outer casing (Work Order 2099154)
    - Visual examinations of the interior of the turbine outer casing (Work Order 2099154)

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

Impact of Financial Conditions on Continued Safe Performance

In that the licensee, Susquehanna Nuclear, LLC, and the licensee's parent company, Talen Energy Supply, was under bankruptcy protection/reorganization during the inspection period, NRC Region I conducted reviews of processes at Susquehanna. Using the flexibilities in the baseline inspection program, the inspectors evaluated several aspects of the licensee's operations to assess whether any identified plant performance issues could be related to the station's financial condition. The factors reviewed included: (1) impact on regulatory required plant staffing, (2) corrective maintenance backlog, (3) changes to the planned maintenance schedule, (4) corrective action program implementation, and (5) reduction in outage scope, including risk-significant modifications. In particular, the inspectors verified that licensee personnel continued to identify problems at an appropriate threshold and enter these problems into the corrective action program for resolution. The inspectors also verified that the licensee continued to develop and implement corrective actions commensurate with the safety significance of the problems identified.

The review of processes at Susquehanna included continuous reviews by the resident inspectors, as well as the specialist-led baseline inspections completed during the inspection period: 71111.08G – Inservice Inspection Activities (Boiling-Water Reactor), 71152A – Performance Indicator and Resolution Annual Follow-up of Temperature Control Valves, 71152A – Performance Indicator and Resolution Annual Follow-up of Marathon Control Blade Replacement, and 71003 – Post-Approval Site Inspection for License Renewal Phase 1.

The inspectors are concluding any further inspections concerning the bankruptcy since Talen Energy Supply has emerged and reorganized.

INSPECTION RESULTS

Observation: Review Temperature Control Valve Equipment Reliability and Corrective Actions	71152A
The inspectors reviewed the licensee’s corrective actions associated with temperature control valve (TCV) equipment reliability for systems including the emergency diesel generator, emergency service water, control structure heating, ventilation, and air conditioning, and	

associated maintenance practices.

The inspectors reviewed action request CR-1389601 which documented the licensee's evaluation of the applicability of Title 10 of the *Code of Federal Regulations* Part 21, Report 2009-22-02, "AMOT Thermostatic Valve Failure." The inspectors also reviewed IERP-92016, Revision 1, which documented the licensee's evaluation of NRC Information Notice IN 91-85, Revision 1, "Potential Failures of Thermostatic Control Valves for Diesel Generator Jacket Cooling Water." Finally, the inspectors reviewed a sample of corrective action documents associated with safety and non-safety related systems including: CR-2019-14370, CR-2020-00936, CR-2020-05829, CR-2020-06936, CR-2021-03638, CR-2021-07074, CR-2021-15222, CR-2021-17173, CR-2022-11095, CR-2022-11896, CR-2022-17305, and CR-2023-04344.

The inspectors reviewed corrective action program documents to assess whether the issues were accurately documented, evaluated, and corrective actions were timely and adequate. The inspectors also reviewed engineering assessments of identified issues, extent of condition, and recommended actions to validate the assumptions and conclusions were reasonable. The inspectors interviewed the TCV and valve component engineer and Engineering Fix It Now personnel and supervisor to assess TCV reliability and maintenance practices. Additionally, applicable corrective action process procedures LS-120, "Issues Identification and Screening Process," LS-125, "Corrective Action Program," and LS-125-009, "Trending Manual," were reviewed to determine whether these standards were implemented in addressing TCV reliability issues.

No issues or findings were identified.

Observation: Marathon Control Blade Found Damaged During Performance of the U1RIO22 Control Blade Shuffle	71152A

During the Unit 1 2022 refueling outage, the licensee discovered four damaged Marathon C+ control drive blades with cracking on the outer sheathing on the blade wing. This condition was of concern due to the potential for the boron carbide neutron absorber to leak from the blade, thereby reducing the nuclear reactivity worth of the affected control rods. The vendor, GE Hitachi, recommended that the lifetime limit for Marathon C+ control rods be reduced from 67 percent to 58 percent quarter segment equivalent 10B depletion, to prevent local 10B depletion from exceeding the established cracking threshold.

The inspectors reviewed the licensee's calculation, NFE-2-22-001, "Unit 2 Cycle Control Blade Change Specifications," dated September 2, 2022. In addition, the inspectors reviewed NF 216, Revision 13, which was the calculation that provided guidance for the preparation of a control blade change specification. NF 216 was revised to incorporate the revised percent B-10 depletion licensing limit of 58 percent established by the GE Hitachi communication. Also, the inspectors reviewed the Unit 2 shutdown margin calculation and verified that the shutdown margin had been evaluated and the revised 10B depletion licensing limit had no impact on shutdown margin calculations. In addition, the licensee had been monitoring plant water chemistry on Unit 2 daily for excess of boron and tritium concentration.

The inspectors assessed whether the licensee's corrective actions were appropriate and in accordance with their corrective action process. No violations or performance deficiencies were identified during the inspection.

EXIT MEETINGS AND DEBRIEFS

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

- On April 6, 2023, the inspectors presented the Unit 2 inservice inspection results to Edward Casulli, Site Vice President, and other members of the licensee staff.
- On April 6, 2023, the inspectors presented the Unit 2 license renewal Phase 1 inspection results to Edward Casulli, Site Vice President, and other members of the licensee staff.
- On May 11, 2023, the inspectors presented the Unit 2 Marathon control blade replacement inspection results to Mark Jones, Engineering General Manager, and other members of the licensee staff.
- On May 18, 2023, the inspectors presented the temperature control valve reliability inspection results to Jason Lada, Engineering Branch Manager, and other members of the licensee staff.
- On July 27, 2023, the inspectors presented the integrated inspection results to Edward Casulli, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71003	Corrective Action Documents		CR-2021-04211, CR-2023-03077, CR-2023-05291, CR-2023-05355, DI-2023-02877	
	Corrective Action Documents Resulting from Inspection		CR-2023-07122, CR-2023-07123, DI-2023-05559, DI-2023-07124	
	Procedures	MT-093-002	High-Pressure Turbine Front & Mid Standard Disassembly, Inspection, and Reassembly	Revision 9
		NDAP-QA-0483	Underground Piping and Tanks Program	Revision 9
		NDAP-QA-1102	Environmental Qualification (EQ) Program	Revision 10
		NDAP-QA-1106	Flow Accelerated Corrosion Program	Revision 9
		NSE-DTG-002	Station Engineering Desktop Guide #2 System Walkdowns and Documentation	Revision 9
		NSEP-QA-0432	Buried Piping and Tanks Inspection Program (AMP-26) License Renewal Program Basis Document	Revision 0
		NSEP-QA-0442	Flow Accelerated Corrosion (FAC) Program (AMP-11) License Renewal Program Basis Document	Revision 0
		NSEP-QA-0449	System Walkdown Program (AMP-28) License Renewal Program Basis Document	Revision 2
		NSEP-QA-0453	Preventative Maintenance Activities - Main Turbine Casings Program (AMP-57) License Renewal Program Basis Document	Revision 1
		NSEP-QA-0469	Environmental Qualification Program (AMP-44) License Renewal Program Basis Document	Revision 1
71111.05	Fire Plans	FP-0-DG-677-A	Diesel Building – El. 677	Revision 0
		FP-0-DG-710-A	Diesel Building – El. 710-9	Revision 0
		FP-1-CS-754-A	Control Structure – El. 754, Sheet A	Revision 0
		FP-2-TB-729-0	U2 Turbine Building – El. 729, Sheet 0	Revision 0
71111.08G	Corrective Action Documents		CR-2021-15195, CR-2022-14595	

71111.08G	Corrective Action Documents Resulting from Inspection		AR-2023-05033, CR-2023-06300	
	Engineering Changes	EC 2628093	244F103 Valve Bonnet Replacement	Revision 0
	Miscellaneous	ISI-LTP4-Plan	SSES Fourth Ten-Year Interval Inservice Inspection and Third Ten-Year Interval Containment Inservice Inspection Program Plan	Revision 6
		RCA-CR-2023-00985	Root Cause Analysis for CR-2023-00985 Unit 2 Drywell Leakage Identified 244F103 Valve Packing Leak-Off Port Seal Weld Leaking	Revision 0
		SSES N-716-1	Susquehanna Steam Electric Station Code Case N-716-1 Application	02/22/2019
		SSES-BHD-01	Demonstration of Encoded Phased Array UT in Lieu of RT Examination Performed on Bottom Head Drain Sample BHD-001	03/31/2022
71111.13	Procedures	NDAP-QA-0353	Risk-Informed Completion Time Program	Revision 1
		P-2-23-001	RICT Record	06/30/2023
71111.24	Procedures	SO-200-023A	ASME Class 1 Boundary System Leakage Test - 10 Year	Revision 0
71152A	Calculations	EC-Fuel-1930	Unit 2 Cycle 21 Cycle Step Out	Revision 1
		EC-FUEL-1952	Unit 2 Cycle 22 SC-20-06 and 22-03 SDM Evaluation	Revision 0
	Corrective Action Documents		CR-2020-00936, CR-2020-05829, CR-2020-06936, CR-2021-03638, CR-2021-07074, CR-2021-16564, CR-2021-17173, CR-2022-05685, CR-2022-11095	
	Miscellaneous		2019 BWR Water Chemistry Guidelines Interim Guidance	03/25/2019
		NF-216	Control Blade Change Specification Preparation	Revision 13