



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
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KING OF PRUSSIA, PENNSYLVANIA 19406-1415

June 7, 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 – SECURITY
BASELINE INSPECTION REPORT 05000387/2023401 AND 05000388/2023401

Dear Brad Berryman:

On May 25, 2023, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Susquehanna Steam Electric Station, Units 1 and 2 and 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* (CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Daniel L. Schroeder, Chief
Security, Emergency Preparedness, and Incident
Response Branch
Division of Radiological Safety and Security

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

Enclosure:
As stated

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 BASELINE INSPECTION REPORT 05000387/2023401 AND 05000388/2023401
 JUNE 7, 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: 05000387/2023401 and 05000388/2023401

Enterprise Identifier: I-2023-401-0045

Licensee: Susquehanna Nuclear, LLC

Facility: Susquehanna Steam Electric Station, Units 1 and 2

Location: Berwick, PA

Inspection Dates: May 22, 2023 to May 25, 2023

Inspectors: D. Caron, Senior Physical Security Inspector
K. Hussar, Senior Physical Security Inspector
M. Ordoyne, Physical Security Inspector
G. Stock, Senior Resident Inspector

Approved By: Daniel L. Schroeder, Chief
Security, Emergency Preparedness, and Incident Response Branch
Division of Radiological Safety and Security

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a security baseline 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.

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) 2201, "Security Inspection Program for Commercial Nuclear Power Reactors." 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.

SAFEGUARDS

71130.02 - Access Control

The inspectors evaluated the access control program through completion of the following inspection elements:

Access Control (1 Sample)

- (1)
 - Tier I: All Requirements
 - Tier II: 10 Requirements (02.06 a, c, d 02.07 a 02.08 a, d, f, g, h, i)
 - Tier III: 1 Requirement (02.09)

71130.05 - Protective Strategy Evaluation

The inspectors evaluated the licensee's protective strategy through completion of the following procedure elements:

Protective Strategy Evaluation (2 Samples)

- (1)
 - Tier I: All Requirements
 - Tier II: 18 Requirements (02.05 a, 02.06 a, d, e, f, g, h, i, j, k, l, m, n, 02.07 a - e)
 - Tier III: 5 Requirements (02.08, 02.09 a, b, 02.10 a, and 02.11 a)
- (2) The Inspectors evaluated the Security Performance Evaluation Program.

71130.09 - Security Plan Changes

The inspectors evaluated the security plan changes through completion of the following procedure elements:

Security Plan Changes (1 Partial)

- (1) (Partial)

The opportunity to apply this procedure was not available in accordance with IMC 0306. This sample was not available because the licensee did not conduct the activity covered by this IP. Specifically, the licensee has not initiated a physical security plan change in accordance with 10 CFR 50.54(p)(2) since the last performance of this IP.

71130.14 - Review of Power Reactor Target Sets

The inspectors evaluated the Security Target Set Program. The following elements were evaluated:

Review of Power Reactor Target Sets (1 Sample)

- (1) 03.01, 03.02 (a-f), 03.03, 03.04 (a, b), 03.05

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

PP01: Protected Area Security Equipment Performance Index Sample (IP Section 02.17) (1 Sample)

- (1) April 1, 2022 through April 30, 2023

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On May 25, 2023, the inspectors presented the security baseline 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
71130.02	Corrective Action Documents	2022-18245		
		2022-18123		
		2022-17980		
		2022-17809		
		2022-17790		
		2022-17806		
		2022-17640		
		2023-06787		
		2023-06532		
		2023-05788		
		2023-05755		
		2023-03377		
		2023-03488		
		2023-08248		
2023-08281				
71130.02	Corrective Action Documents Resulting from Inspection	2023-09653		
		2023-09781		
71130.02	Procedures	NDAP-QA-0902	Safeguards Information Program and the Protection of Sensitive Unclassified Non-Safeguards Information	Revision 25
		NS-SSP-002	Control, Issuance and Assignment of Security Controlled Locks and Keys	Revision 21
		SI-SO-003	Duties and Responsibilities of the Access Control Officer	Revision 50
		SI-SO-006	Duties and Responsibilities of the South Gate House Search Officer	Revision 77
		SI-SO-008	Emergency Access and Egress	Revision 22
		SI-SO-034	Duties and Responsibilities of the Vehicle Search Officer	Revision 15
		SI-SO-035	Duties and Responsibilities of the Escort Officer	Revision 10
		SI-SO-036	Searches Conducted Outside the OCA	Revision 11
		SI-SO-037	Duties and Responsibilities of the Warehouse Search Officer	Revision 12
		SI-SO-038	Vital Area Access During Periods of Site-Specific Credible	Revision 2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
			Threat to Include Insider Threat		
71130.05	Calculations	CALC No. 1081763-C-014	PPL/Susquehanna Steam Electric Station Security Order Project - Final DBT Implementation	Revision 0	
		CALC No. EC-032-1013	Blast Analysis Summary for NRC Security Order Dated FEB 25, 2002	Revision 2	
		CALC No. EC-032-1020,	Blast/Ballistic Resistance Security Enclosure Design	Revision 1	
		CALC No. EC-032-1022	Vehicle Barrier Design 2004	Revision 2	
		CALC No. EC-032-1023	Secondary Explosion Effects and Cratering	Revision 0	
		CALC No. EC-032-1039	Compilation of Information and Data Associated with New Security Towers EDFP3A, EDFP4A, AND EDFP5A Designed and Installed under EC1755822	Revision 0	
	Corrective Action Documents	2022-17014 2023-02429 2023-02271 2023-03459 2023-01119 2023-01875 2022-017262 2022-17442			
		Corrective Action Documents Resulting from Inspection	2023-09785 2023-09784		
	Miscellaneous	Lesson Plan 08	Conduct Security Patrols	10/26/2021	
		Lesson Plan 16	Task 16 - Determine Amount of Force required to Prevent an Unauthorized Act	04/01/2021	
		Lesson Plan 32E	Adversary Controller Training	Revision 1	
		Lesson Plan MAF-2	Urban Movement and Close Quarter Battle	Revision 0	
		Lesson Plan MAF-7	Adversary Physical Fitness Qualification/Re-Qualification Testing	Revision 0	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Security Controller Training	SSES R19 03-22-22	03/22/2022
	Procedures	NDAP-QA-0910	Safety/Security Interface Program	Revision 9
		NS-ST-003	Challenging, Searches Incidental to Arrest, Authority to Arrest and Use Force, and the Seizure, Collection and Preservation of Evidence	Revision 12
		OP-142-001	Circulating Water System and Cooling Tower Operation	Revision 85
		SI-SO-020	Response to Indication of Potential Tampering, Vandalism, or Malicious Mischief	Revision 10
		SI-SSM-002	Security Drills/Exercises and Evaluations	Revision 33
		SI-SSM-015	Nuclear Security's Defensive Strategy for the Protection of Susquehanna Nuclear, LLC SSES	Revision 34
		SI-ST-004	Nuclear Security On-The-Job Training Program for Alarm Station Operator; Security Officer Levels I and II and Response Team Leader	Revision 21
	Self-Assessments		2022 Security/Cyber Security Audit	05/26/2022
			2021 Access Authorization, Fitness for Duty (FFD), Personnel Access Data System (PADS), and Fatigue Rule Management Rules Programs Audit	
71130.14	Corrective Action Documents	DI-2020-08315 DI-2021-08956 DI-2022-17710		
	Corrective Action Documents Resulting from Inspection	CR-2023-09659		