

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

June 16, 2025

Edward Pigott Site Vice President Duke Energy Carolinas, LLC. McGuire Nuclear Station 12700 Hagers Ferry Road Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION. UNITS 1 & 2 – SECURITY BASELINE INSPECTION REPORT 05000369/2025401 AND 05000370/2025401

Dear Edward Pigott:

On June 5, 2025, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at McGuire Nuclear Station, Units 1 & 2 and discussed the results of this inspection with you 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,

Jurnette Worosilo Signed by Worosilo, Jannette on 06/16/25

Jannette G. Worosilo, Chief Nuclear Security Branch Division of Fuels, Radiological Safety, and Security

Docket Nos. 05000369 and 05000370 License Nos. NPF-9 and NPF-17

Enclosure: As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 & 2 – SECURITY BASELINE INSPECTION REPORT 05000369/2025401 AND 05000370/2025401 DATED JUNE 16, 2025

DISTRIBUTION:

J. Lara, RA J. Clark, NSIR SOSB Insp Rpt Distro R. Williams, DORS C. Safouri, SRI DORS F. Young, RI DORS J. Seat, DORS R2ACES R2NSB B. Bickett, RI M. Ziolkowski, RIII J. Rollins, RIV RIDSNRRDRO RIDSNRRDRO RIDSNrrPMMcGuire PUBLIC

ADAMS ACCESSION NUMBER: ML25163A098

Sunsi Review		⊠ Non-Sensitive □ Sensitive		☑ Publicly Available ☐ Non-Publicly Available	
OFFICE RII/DFRSS/NSB		RII/DFRSS/NSB	RII/DFRSS/NSB	RII/DFRSS/NSB	
NAME	J. Stovall	J. Justice	D. Egelstad	J. Worosilo	
DATE	6/13/2025	6/13/2025	6/16/2025	6/16/2025	

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Numbers:	05000369 and 05000370
License Numbers:	NPF-9 and NPF-17
Report Numbers:	05000369/2025401 and 05000370/2025401
Enterprise Identifier:	I-2025-401-0046
Licensee:	Duke Energy Carolinas, LLC.
Facility:	McGuire Nuclear Station, Units 1 & 2
Location:	Huntersville, NC
Inspection Dates:	January 13, 2025 to January 16, 2025 (Corporate Office) June 02, 2025 to June 05, 2025 (McGuire Nuclear Station)
Inspectors:	D. Egelstad, Physical Security Inspector J. Stovall, Physical Security Inspector J. Justice, Sr. Physical Security Inspector
Approved By:	Jannette G. Worosilo, Chief Nuclear Security Branch Division of Fuels, Radiological Safety, and Security

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a security baseline inspection at McGuire Nuclear Station, Units 1 & 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

71130.01 - Access Authorization

The inspectors evaluated the access authorization program. The following elements were evaluated:

Access Authorization (1 Sample)

- (1) Tier I: All Requirements
 - Tier II: All Requirements
 - Tier III: All Requirements

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: 2.06 (b, c), 2.07 (a), 2.08 (a, c, e, f, i)
 - Tier III: 02.09

71130.08 - Fitness-For-Duty Program

The inspectors evaluated the fitness for duty program by completing the following inspection elements:

Fitness-For-Duty Program (1 Sample)

- (1) Tier I: All Requirements
 - Tier II: 02.05 (a-l), 02.06 (a-g), 02.07, 02.08, 02.09 (a, b, c, d)
 - Tier III: 02.10, 02.11 (a), 02.12(a), 02.14 (a, b, c)

71130.09 - Security Plan Changes

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

(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.

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) June 2024 - May 2025

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On January 16, 2025, the inspectors provided a debrief covering the results of the inspection at the Kings Mountain access authorization and fitness for duty facility to Teddy Reed and other members of the licensee staff.
- On June 5, 2025, the inspectors presented the security baseline inspection results to Edward Pigott and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71130.01	Corrective Action Documents	02540300 02540899		
	Miscellaneous		Various Access Authorization Personnel Records	
			Various Self-Screener Audits	
	Procedures	AD-SY-ALL-0301	Nuclear Worker Unescorted Access Authorization Program	Revision 12
		AD-SY-ALL-0301	Nuclear Worker Unescorted Access Authorization Program	Revision 11
		AD-SY-ALL-0310	Access Authorization Processing	Revision 11
		AD-SY-ALL-0320	Personnel Access Data System (PADS)	Revision 5
		AD-SY-ALL-0340	Access Authorization Training and Qualification Program	Revision 3
		AD-SY-ALL-0350	Reviewing Officials Guidance for Access Authorization	Revision 4
		AD-SY-ALL-0370	Access Processing of Foreign Nationals	Revision 4
	Self-Assessments	02411430-05	2022 PADS Self-Assessment	05/19/2022
		02432397-05	Psychological Testing	07/05/2022
		2024-FLEET-		06/10/2024
		PAA-01		
71130.02	Corrective Action	02518017		
	Documents	02523701		
		02524073		
		02524460		
		02527069		
		02527961		
		02541951		
		02545614		
		02488540		
		02550824		
		02550833		
		02552038		
		02552253		
		02551951		
	Procedures	AD-SY-ALL-0320	Personnel Access Data System (PADS)	Revision 5
		AD-SY-ALL-0215	Security Search and Entry Processing	Revision 16

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71130.02	Procedures	AD-SY-ALL-0210	Site Access Controls	Revision 12
		AD-SY-ALL-0240	Security Key and Lock Controls	Revision 3
		AD-SY-ALL-0301	Nuclear Worker Unescorted Access Authorization Program	Revision 12
		AD-SY-ALL-0370	Access Processing for Foreign Nationals	Revision 4
		AD-SY-ALL-1000	Conduct of Security	Revision 13
		CSD-SY-MNS-	MNS Security Post Order Handbook	Revision 4
		0201-01		
		CSD-SY-MNS-	MNS Security Lock and Key Controls	Revision 0
		0240-01		
71130.08	Corrective Action	02532174		
	Documents	02521189		
		02439065		
		02416953		
		02410381		
		02415751		
	Miscellaneous		Generic Fitness For Duty and Behavior Observation Lesson Plan	Revision 4
			2023 NRC FFD Program Performance Data Report	
		NRC Event	EN57600 - FFD	03/12/2025
		Notification		
	Procedures	AD-SY-ALL-0110	Protection of Information Related to Nuclear Security	Revision 10
		AD-SY-ALL-0401	Fitness For Duty Program	Revision 7
		AD-SY-ALL-0405	Fitness For Duty Violations	Revision 6
		AD-SY-ALL-0410	Fitness For Duty Drug and Alcohol Collections	Revision 7
		AD-SY-ALL-0415	Fitness For Duty Blind Performance Testing Procedure	Revision 5
		AD-SY-ALL-0420	Fitness For Duty Unscheduled Call Out	Revision 2
		AD-SY-ALL-0440	Fitness For Duty Training and Qualification Program	Revision 3
		AD-SY-ALL-0451	Behavior Observation Program	Revision 6
		AD-SY-ALL-0460	Managing Fatigue and Work Hour Limits	Revision 8
		AD-SY-ALL-1000	Conduct of Security	Revision 13
		PY-SY-ALL-0004	Duke Energy Nuclear Generation Fitness For Duty Policy	Revision 3
71130.09	Procedures	AD-SY-ALL-0101	Security Plan Revision Process	Revision 4

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71151	Miscellaneous		Monthly PI Data	June 2024 - May 2025
			Duke Energy - McGuire Nuclear Station Security Journal Entries	8/21/24 and 12/2/2024