



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713**

July 20, 2021

Docket No. 07200077

License No. DPR-50

Mr. David P. Rhoades
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: THREE MILE ISLAND NUCLEAR GENERATING STATION – UNIT 1 - NRC
INDEPENDENT SPENT FUEL STORAGE SECURITY INSPECTION REPORT
NO. 07200077/2021401**

Dear Mr. Rhoades:

On July 7, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an Independent Spent Fuel Storage Installation (ISFSI) security inspection at the Three Mile Island Nuclear Generating Station in Middletown, Pennsylvania. The inspection covered the licensee's physical security plan, Revision 24, and NRC Order EA-20-103 dated August 27, 2020, "Additional Security Measures (ASMs)." The inspection was conducted using NRC Inspection Procedure 81311, "Physical Security Requirements for Independent Spent Fuel Storage Installations."

The enclosed inspection report documents the inspection results, which were discussed with Mr. Trevor Orth, Decommissioning Director, and other members of your staff, on July 7, 2021.

The inspection examined activities conducted under your license as they relate to security and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, no violations were identified.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter and enclosure will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's

D. Rhoades

2

Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

Fred L. Bower, III, Chief
Security, Emergency Preparedness, and Incident
Response Branch
Division of Radiological Safety and Security

Enclosure:
Inspection Report No. 07200077/2021401

cc w/encl: via LISTSERV@
D. Kenny, Manager, Nuclear Security
D. Allard, State Liaison Officer, PA

SUBJECT: THREE MILE ISLAND NUCLEAR GENERATING STATION UNIT 1 - NRC INDEPENDENT SPENT FUEL STORAGE SECURITY INSPECTION REPORT NO. 07200077/2021401 DATED July 20, 2021.

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 ADAMS ACCESSION NUMBER: **ML21194A076** (Cover letter w/enclosure) **(Publicly Available)**

Cover Letter w/Enclosure <input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available		
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U.S. NUCLEAR REGULATORY COMMISSION
REGION I
INSPECTION REPORT

Docket No. 07200077

License No. DPR-50

Report No. 07200077/2021401

Licensee: Exelon Generation Company, LLC

Address: Middletown, PA 17057

Location Inspected: Three Mile Island Generating Station Unit 1 Independent Spent Fuel Installation (ISFSI)

Inspection Dates: July 6 – July 7, 2021

Inspectors: Dana Caron, Senior Physical Security Inspector
Kenneth Hussar, Senior Physical Security Inspector

Approved by: Fred L. Bower, III, Chief
Security, Emergency Preparedness, and Incident Response
Branch
Division of Radiological Safety and Security

Enclosure

REPORT DETAILS

a. Inspection Scope

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) 2690, "Inspection Program for Storage of Spent Reactor Fuel and Reactor-Related Greater-Than-Class-C Waste at Independent Spent Fuel Storage Installations and for 10 CFR Part 71 Transportation Packagings." 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), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or portions 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 for the current configuration of the TMI ISFSI under Order EA-20-103, Additional Security Measures (ASM's) for an ISFSI protected area at Three Mile Island Generating Power Station Unit1, Section C, Co-located ISFSI. Exelon has submitted a License Amendment Request for alternative measures and for a Stand Alone ISFSI (ML21127A163). It is expected, because of the scale of changes to comply with Order EA-20-103, Section B, Stand Alone ISFSI, another inspection will be scheduled to inspect compliance when that change occurs.

On June 15, 2021, Exelon notified the NRC of their readiness to demonstrate implementation of Section C of NRC Order EA-20-103 (ML21167A013). From July 6 - 7, 2021, Region I conducted an onsite inspection in accordance with IP 81311 to assess Exelon's ability to implement this Order. The results of the inspection are detailed below.

The inspectors evaluated this area by reviewing the aspects of the site physical security plan specific to the ISFSI. This included implementing procedures, and records; conducting interviews with responsible security personnel and plant employees; and performing walk-downs of the ISFSI.

The inspectors: (1) reviewed the access authorization program for the ISFSI; (2) verified and assessed the licensee's testing and maintenance program to assure the functionality and reliability of security equipment; and (3) verified that a rapid, capable response to safeguards contingency events had been appropriately developed and effectively implemented.

Inspectors conducted the following specific inspection activities and evaluated the program to determine if: (a) the access authorization program provided reasonable assurance that individuals granted unescorted access to the ISFSI protected area (PA) were trustworthy and reliable and did not constitute an unreasonable risk to public health

and safety; (b) procedures were in place to ensure that vehicles accessing the ISFSI had proper authorization and were properly searched; (c) the intrusion detection system (IDS) had the ability to detect and assess unauthorized penetration of the ISFSI PA and adequate response capability existed; (d) alarms for the ISFSI IDS annunciated at an alarm station which was continually staffed; (e) the ISFSI PA was illuminated to facilitate adequate assessment of PA penetration or unauthorized activity; (f) a program was in place for testing and maintenance of the physical protection systems associated with the ISFSI; (g) the spent fuel storage would be within a PA and was protected by two barriers; (h) the vehicle barrier system satisfied the design vehicle bomb attack requirements; (i) communications had been established between onsite security forces and a designated response force or local law enforcement agency (LLEA); (j) a security organization with written procedures had been established; (k) members of the security organization were trained, equipped, qualified, and requalified to perform assigned duties; (l) the committed responders provided for an adequate armed response; (m) written response procedures were established and maintained; (n) training would include ISFSI activities; (o) safeguards events were being properly reported; (p) audits of the physical protection system were conducted; (q) the licensee established an emergency plan; (r) the response force or LLEA had unimpeded access to the ISFSI PA during contingency events; and (s) staffing, procedures, and resources were adequate to protect against radiological sabotage.

b. Findings

No violations were identified.

Exit Meeting Summary

On July 7, 2021, the inspectors presented the inspection results to Mr. Trevor Orth, Decommissioning Director, and other members of the licensee's staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

**ATTACHMENT
SUPPLEMENTAL INFORMATION
KEY POINTS OF CONTACT**

Licensee Personnel

D. Kenny, Manager, Nuclear Security

LIST OF ITEMS OPEN, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

None

Closed

None

INSPECTION PROCEDURES USED

IP 81311, Physical Security Requirements for Independent Spent Fuel Storage Installations

LIST OF DOCUMENTS REVIEWED

Procedures

SY-TM-101-501, Security Contingency Response Guidance, Revision 13

SY-TM-101-503, Physical Protection Measures for the Independent Spent Fuel Installation, Revision 0

Calculations

C-1101-114-012, Design Basis Threat Calculation, Revision 1

Report L4487.01-122-34, Dynamic Blast Installation Analysis, Revision 2

Condition Reports

AR 04398595

AR 04385911

AR 04365340

AR 04407252

Condition Reports Generated

AR 04433719