



10 CFR 73.71(a)(4)

January 21, 2022

Attn: Document Control Desk
Director, Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Oyster Creek Nuclear Generating Station
Renewed Facility License No. DPR-16
NRC Docket Nos. 50-219 and 72-15

Subject: 60-Day Written Report 2022-001-0, Compensatory Measures Not Implemented
per Site's Physical Security Plan Due to Multiplexer (MUX) Power Supply Failure

Dear Sir or Madam:

Pursuant to 10 CFR 73.71(a)(4), Holtec Decommissioning International, LLC (HDI) is submitting Licensee Event Report (LER) 2022-001-0, "Compensatory Measures Not Implemented per Site's Physical Security Plan Due to Multiplexer (MUX) Power Supply Failure". NRC Forms 366 and 366a were utilized as specified in NUREG 1022, Revision 3.

This letter contains no new commitments. If you have any questions or need further information, please contact me at (856) 797-0900, ext. 3578.

Sincerely,

Jean A. Fleming
HDI Vice President, Regulatory and Environmental Affairs
Holtec Decommissioning International, LLC

Attachment 1 - 60-Day Written Report 2022-001-0, Compensatory Measures Not Implemented
per Site's Physical Security Plan Due to Multiplexer (MUX) Power Supply Failure

cc:

USNRC Director, Office of Nuclear Material Safety and Safeguards
USNRC Director, Office of Nuclear Security and Incident Response
USNRC Regional Administrator, Region I
USNRC Project Manager, NMSS – Oyster Creek Nuclear Generating Station
USNRC Region I, Lead Inspector- Oyster Creek Nuclear Generating Station



Krishna P. Singh Technology Campus, 1 Holtec Blvd., Camden, NJ 08104

Telephone (856) 797-0900

Fax (856) 797-0909

ATTACHMENT 1

To

OCNGS Letter HDI-OC-22-002

60-Day Written Report 2022-001-0

**Compensatory Measures Not Implemented per Site's Physical Security Plan Due to
Multiplexer (MUX) Power Supply Failure**



LICENSEE EVENT REPORT (LER)

(See Page 3 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to InfoCollect.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk ail: olra_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name
Oyster Creek, Unit 1

2. Docket Number

05000

219

3. Page

1 OF 3

4. Title

Compensatory measures not implemented per site's Physical Security Plan due to Multiplexer (MUX) failure

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved	
Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	Docket Number
05	07	2021	2022	01	0	01	21	2022		05000
									Facility Name	Docket Number
										05000

9. Operating Mode

Permanently Defueled

10. Power Level

000

11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

<input type="checkbox"/> 10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 10 CFR Part 73
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input checked="" type="checkbox"/> 73.71(a)(4)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 10 CFR Part 21	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(1)(i)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 73.77(a)(2)(i)
<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.77(a)(2)(ii)
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	
<input type="checkbox"/> OTHER (Specify here, in abstract, or NRC 366A).				

12. Licensee Contact for this LER

Licensee Contact

Joseph Dwyer, Site Security Manager

Phone Number (Include area code)

(609) 971-2115

13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS
X	IA	MPX	ADV PWR	N					

14. Supplemental Report Expected

15. Expected Submission Date

Month	Day	Year

☒ No ☐ Yes (If yes, complete 15. Expected Submission Date)

16. Abstract (Limit to 1560 spaces, i.e., approximately 15 single-spaced typewritten lines)

On May 7, 2021, at 1638 a power supply inside of Multiplexer (MUX) associated with the security computer system located in the Central Alarm Station (CAS) failed. The failure of the MUX power supply interrupted the communication pathways between the Security Computer System, Select Line Board (SLB) and Card Reader Interface (CRI) equipment in the field. Security performed an extent of condition but were not knowledgeable of what security equipment the SLB affected. On May 8, 2021, at 0815 the alarm station operator discovered an issue with the Protected Area (PA) Intrusion Detection System (IDS) when an anticipated alarm was not generated. An extent of condition was performed, additional PA IDS zones were found to be inoperable. The cause of the PA IDS zones inoperability was connected to the MUX power supply failure and SLB alarms received more than 15 hours earlier on May 7, 2021. Compensatory measures for the inoperable IDS zones exceeded the time allowed by the site's Physical Security Plan (PSP). Furthermore, security missed the 1-hour notification to the NRC in accordance with Appendix G of Part 73 (I)(c) any failure, degradation, or the discovered vulnerability in a safeguard system that could allow unauthorized or undetected access to a protected area, material access area, controlled access area, vital area, or transport for which compensatory measures have not been employed. On January 5th, 2022, at 0911 hours, a 1-hour report was made to the NRC.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; e-mail: oira_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Oyster Creek, Unit 1	05000- 219	YEAR 2022	SEQUENTIAL NUMBER 01	REV NO. 0

NARRATIVE**BACKGROUND**

The Oyster Creek Nuclear Generating Station is located in Lacey Township, New Jersey. On May 7, 2021, the plant was configured in the permanently defueled mode, post-zirc fire window for decommissioning with Plant Risk at the Green level. The Spent Fuel Pool Gates were installed and spent fuel relocation activities were in progress.

EVENT DESCRIPTION

At 1638 on May 7, 2021, an acrid odor was identified in the security Central Alarm Station (CAS). While Security, Maintenance and Operations personnel were attempting to identify the source of the odor, security computer system alarms began actuating. The alarms received included a Multiplexer (MUX) Supervisory Line Board (SLB) communication alarms and 2 CRI (Card Reader Interface Alarms).

Security personnel immediately attempted to determine the cause for all alarms received. Some alarms had not been experienced prior to this event (i.e., MUX 8 and SLB). Security was unable to determine the source of SLB alarms after reviewing the security computer vendor manual. Security personnel made an incorrect assumption that the SLB communication alarms must have been associated with card reader alarms and a non-conservative extent of condition review was performed.

During the day shift on May 8th, 2021, the source of the actual SLB alarms became self-revealing when several IDS perimeter zones were found to be nonfunctional during a scheduled work evolution in an affected perimeter zone. It was later determined that the received SLB alarms affected several perimeter zones. The affected perimeter zones did not have the proper compensatory measures in place on May 7, 2021 per the PSP, therefore a 1-hour notification to the NRC was required per 10 CFR 73.71(b)(1).

Furthermore, security missed making the 1-hour notification to the NRC in accordance with Appendix G of Part 73 (I)(c) any failure, degradation, or the discovered vulnerability in a safeguard system that could allow unauthorized or undetected access to a protected area, material access area, controlled access area, vital area, or transport for which compensatory measures have not been employed.

CAUSE OF THE EVENT

Power supplies to the MUX had failed. Holtec Decommissioning International (HDI) personnel did not adequately identify and assess in a timely manner the equipment impacted by a failure of a MUX power supply for more than 15 hours and did not establish adequate compensatory measures within the time required by the site Physical Security Plan (PSP).

CORRECTIVE ACTIONS

An interim standing order is put in place on the action's security personnel are required to perform following upon the loss of a MUX. Root Cause (OYS-02250) was performed, and corrective actions are documented in the sites Corrective Action Program (CAP). Procedure DPP-OC-101-102, Compensating for Security System Failures was updated to contain directions for compensatory actions and recovery actions of a MUX loss on Oyster Creek's ISFSI security computer system.

REPORTABILITY

On January 5th, 2022, at 0911 hours, a 1-hour report was retroactively submitted to the NRC.



LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollections.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; e-mail: oira_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Oyster Creek, Unit 1	05000- 219	YEAR 2022	SEQUENTIAL NUMBER 01	REV NO. 0

NARRATIVE

REPORTABILITY CONTINUED

Pursuant to the provisions of 10 CFR 73.71(b)(1), licensees shall notify the NRC Operations Center within 1 hour of discovery of the safeguards events described in paragraph I of Appendix G to Part 73.10. Appendix G paragraph I identifies events to be reported to the NRC within one hour of discovery, followed by a written report in 60 days.

ADDITIONAL INFORMATION

Additional information required by security reports (Items required by section 3.2 of RG 5.62 "Reporting of Safeguards Events," provided below):

5. Type of security force onsite: Proprietary
6. Number and type of personnel involved: 4, Security
7. Method of discovery: Self revealing, work in area
8. Procedural errors involved: NA
11. Local, State, or Federal agencies contacted: None
12. Description of media interest or press release: None
13. Similar events: None
14. Knowledgeable Contact: Joseph Dwyer
15. Description of failed or malfunctioned equipment: MUX power supply, Advanced Power Supply Model #APS60PU
16. Apparent cause of each component or system failure. Unknown
17. Status of the equipment prior to the event: Operating
18. Secondary functions affected (for multiple-function components). IDS, card readers
19. Effect on plant safety: Uncompensated security zones
20. Unusual conditions that may have contributed to failure, e.g., environmental extremes: None