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10CFR50.73

GNRO-2018/00025

May 25, 2018

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Licensee Event Report 2018-006-00, Secondary Containment Roof Hatch Left Open Due To Inadequate Corrective Actions
Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
License No. NPF-29

Dear Sir or Madam:

Attached is Licensee Event Report 2018-006-00. This report is being submitted in accordance with 10CFR50.73(a)(2)(v)(C) as a condition that could have prevented fulfillment of a safety function.

This letter contains no new commitments. If you have any questions or require additional information, please contact Douglas Neve at 601-437-2103.

Sincerely,

E.A.L.

Eric A. Larson
Site Vice President
Grand Gulf Nuclear Station
EAL/ram

Attachment: Licensee Event Report 2018-006-00

cc: see next page

U.S. Nuclear Regulatory Commission
ATTN: Ms. Lisa M. Regner
Mail Stop OWFN 8 B1
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Grand Gulf Nuclear Station
Port Gibson, MS 39150

U. S. Nuclear Regulatory Commission
ATTN: Mr. Kriss Kennedy, NRR/DORL (w/2)
Regional Administrator, Region IV
1600 East Lamar Boulevard
Arlington, TX 76011-4511

Attachment

Licensee Event Report (LER) 2018-006-00

NRC FORM 366 (02-2018) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 03/31/2020

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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See Page 2 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/)

1. Facility Name	2. Docket Number	3. Page
Grand Gulf Nuclear Station Unit 1	05000-416	1 OF 4

4. Title

Secondary Containment Roof Hatch Left Open Due To Inadequate Corrective Actions

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved	
Month	Day	Year	Year	Sequential Number	Rev No.	Month	Day	Year	Facility Name	Docket Number
									N/A	05000N/A
04	05	2018	2018	006	00	05	25	2018	Facility Name	Docket Number
									N/A	05000N/A

9. Operating Mode	11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: *(Check all that apply)*			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
10. Power Level	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☒ 50.73(a)(2)(v)(C)	☐ 73.77(a)(1)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(ii)
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(iii)
		☐ 50.73(a)(2)(i)(C)	☐ Other (Specify in Abstract below or in NRC Form 366A	

12. Licensee Contact for this LER

Licensee Contact	Telephone Number (Include Area Code)
Douglas A. Neve, Manager Regulatory Assurance	601-437-2103

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

Cause	System	Component	Manufacturer	Reportable To ICES	Cause	System	Component	Manufacturer	Reportable To ICES
A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/Z

14. Supplemental Report Expected	15. Expected Submission Date	Month	Day	Year
☐ Yes (If yes, complete 15. Expected Submission Date) ☒ No		N/A	N/A	N/A

Abstract (Limit to 1400 spaces, i.e., approximately 14 single-spaced typewritten lines)

On April 5, 2018, while at 100 percent reactor thermal power, members of the Grand Gulf Nuclear Station Unit 1 staff were assigned to perform a routine inspection of the secondary containment roof surfaces and roof drain scuppers and screens. The purpose of this inspection was to verify the materials were in good working order and to identify any condition requiring maintenance/repair. To perform this activity the station personnel accessed the roof through a normally closed access hatch. The hatch was left open during the inspection activity. The failure to close the hatch resulted a breach of the secondary containment boundary and an event/condition that could have prevent the fulfillment of a safety function.

The cause for roof hatch being left open has been determined to be inadequate corrective actions developed and implemented in response to a similar event (Licensee Event Report 2016-003). Specifically, the causes were inadequate work instructions and incomplete/ineffective communications between the assigned workers and control room personnel. Corrective actions for this error include closure of the hatch, establishment of interim guidance, and enhancement of the existing model work order to provide the appropriate guidance on controlling the roof hatch.

There were no actual nuclear safety consequences or radiological consequences during the event.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Grand Gulf Nuclear Station	05000-416	2018	- 006	- 00

NARRATIVE

PLANT CONDITIONS PRIOR TO THE EVENT
100 percent reactor thermal power with no structures, components, or safety systems inoperable at the start of the event.

DESCRIPTION
On April 5, 2018, while at 100 percent reactor thermal power, members of the Grand Gulf Nuclear Station, Unit 1, staff were assigned to perform a routine inspection of the secondary containment [NG] roof surfaces and roof drain scuppers and screens. The purpose of this inspection was to verify the materials were in good working order and to identify any condition requiring maintenance/repair.

After obtaining permission to start work the personnel (Engineering and Maintenance Services supplemental personnel) proceeded to the roof access hatch [DR], proceeded through the hatch, and performed the required inspection activities. The inspection required less than 30 minutes to complete all of the required tasks.

The hatch is normally closed and latched, and can only be opened from inside the building. This required that personnel leave the hatch open during the time period they were on the roof performing the inspection or that station personnel be positioned below the hatch to reopen it upon being contacted. The error was the failure to close the hatch during periods when personnel were not accessing or egressing the roof.

Leaving the hatch open for purposes other than normal access or egress results in a breach of the Secondary Containment boundary and is an event or condition that could potentially result in the loss of safety function for the Secondary Containment boundary. Following the completion of the inspection the acceptability of leaving the hatch in the open position was questioned. Based on this challenge an evaluation was performed and the event was determined to be reportable as an event or condition that could have prevent the fulfillment of a safety function.

REPORTABILITY
This event was reported to the NRC via the emergency notification system (ENS) at 1823 hours Eastern Daylight Time on April 5, 2018, in accordance with 10 CFR 50.72(b)(3)(v)(C) and 50.72(b)(3)(v)(D). Reference ENS notification 53317 for the details.

A Licensee Event Report is required pursuant to Title 10 Code of Federal Regulations (10 CFR) 50.73(a)(2)(v)(C) for an event or condition that had the potential to prevent the fulfillment of the safety function to control the release of radioactive material or mitigate the consequence of an accident. Specifically, the hatch was left open during periods of non-access/egress. This event is reported only under 50.73(a)(2)(v)(C) as it did not impact the ability to mitigate the consequence of an accident.

CAUSE
The causes of this event were determined to be:

- The Corrective Action Plan for the previous similar event (LER-2016-003), associated with the enclosure building roof hatch, did not provide adequate administrative controls needed to ensure secondary containment integrity and therefore depended heavily on verbal communication to perform the required actions.

- The verbal communication between operations and the work crew (Maintenance Services supplemental personnel) was not effective in establishing an understanding of required actions.

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NARRATIVE

- The work instructions did not contain content that translated the identified need for appropriate controls to maintain Secondary Containment integrity into specific actions to be performed by the work crew.

CORRECTIVE ACTION
The following actions were completed or planned:

Completed:

- Immediate: The enclosure building roof hatch was closed and secured.
- Interim: Issued standing order for a licensed operator in communication with the control room to be stationed at the enclosure building roof hatch for all tasks that require the hatch to be opened to ensure the hatch is open only during normal entry and exit, and then promptly closed.

Planned action included in the corrective action program which may be changed in accordance with the corrective action program:

- Create a briefing paper based on this event and distribute to all licensed operators.
- Review the model work order to clarify work order instructions. The clarifications will provide controls that will ensure the hatch is only open during access / egress.

SAFETY SIGNIFICANCE
The result of the failure to close the secondary containment roof hatch was that the secondary containment was breached during quarterly roof inspections without the knowledge of the shift manager which resulted in the failure to enter the Limiting Condition for Operation for Technical Specification 3.6.4.1, Secondary Containment. There were no actual consequences to general safety of the public, nuclear safety, industrial safety and radiological safety for this event.

The potential consequences to the members of the public from the failure to close the secondary containment roof hatch would be the increased risk of dose to the general public during postulated accidents. No abnormal event or release occurred during the time of the event, therefore, no radiological consequence occurred.

Based on statements from the individual(s) performing the tasks, the time period the hatch was open was less than 30 minutes. Further, Entergy had an individual stationed at the door with constant communication with a control room operator in the control room. This individual understood his function was to close the hatch if directed to by the control room. Entergy has performed an evaluation of the event and determined it had positive control of the hatch and the ability to close the hatch if an event were to occur.

Based on the above and in accordance with the guidance provided in NEI 99-02, Revision 7, Regulatory Assessment Performance Indicator Guideline, Section 2.2, Mitigating Systems Cornerstone, Sub-Section, Safety System Functional Failures, Page 30, Lines 27 through 30; this condition will not be counted as a safety system functional failure against Performance Indicator MSO5, Safety System Functional Failures.

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/)

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NARRATIVE

PREVIOUS SIMILAR OCCURRENCES
LER 2016-003-00, Loss of Secondary Containment Safety Function During Routine Roof Inspection

Entergy has reviewed the corrective actions implemented following the 2016 event and determined they were not specific enough to prevent the occurrence of the event documented in this licensee event report.