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10 CFR 50.73

GNRO-2021/00006

February 18, 2021

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

SUBJECT: Grand Gulf Nuclear Station, Unit 1 Supplemental Licensee Event Report 2019-006-01, Failure to meet Technical Specification 5.5.7 for B Train Standby Gas Charcoal Filter Media Efficiency.

Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
Renewed License No. NPF-29

Attached is Supplemental Licensee Event Report 2019-006-01, Failure to meet Technical Specification 5.5.7 for B Train Standby Gas Charcoal Filter Media Efficiency. This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), for any Operation or Condition Prohibited by Technical Specifications and a condition that could have prevented the fulfillment of a safety function, pursuant to 10 CFR 50.73(a)(2)(v)(C).

This letter contains no new Regulatory Commitments. Should you have any questions concerning the content of this letter, please contact Jeff Hardy, Manager Regulatory Assurance at 269-764-2011.

Sincerely,

A handwritten signature in black ink that reads "Robert Franssen".

Robert Franssen
RF/fas

Attachments: Licensee Event Report 2019-006-01

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

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

Attachment
Licensee Event Report 2019-006-01

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-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.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: ira_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.



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/>)

1. Facility Name Grand Gulf Nuclear Station, Unit 1	2. Docket Number 05000416	3. Page 1 OF 3
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4. Title
Failure to meet Technical Specifications 5.5.7 for Division II Standby Gas Charcoal Filter Media Efficiency

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
09	20	2019	2019	- 006 -	01	02	18	2021	N/A	05000 N/A
									Facility Name	Docket Number
									N/A	05000 N/A

9. Operating Mode 1	10. Power Level 100
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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)	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 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 checked="" type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(i)	10 CFR Part 21	<input checked="" 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)	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 Jeff Hardy, Manager Regulatory Assurance	Telephone Number (Include Area Code) (269)-764-2011
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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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

14. Supplemental Report Expected

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

15. Expected Submission Date

Month	Day	Year
N/A	N/A	N/A

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

On September 20, 2019, Division II Standby Gas Treatment System (SBGT) was declared inoperable when test results from the Division II SBGT charcoal filter did not meet the acceptance criteria in Technical Specification (TS) 5.5.7, Ventilation Filter Testing Program (VFTP). The charcoal media was considered deficient starting from the September 4, 2019 date of sample. This exceeded the seven (7) day LCO action completion time. During this time Division I SBGT was declared inoperable for surveillance testing for approximately 11 minutes during the inoperability of the Division II SBGT because of the failed charcoal efficiency test.

This report is made pursuant to 10 CFR 50.73(a)(2)(i)(B) for any operation or condition which was prohibited by the plant's Technical Specification and condition that could have prevented the fulfillment of a safety function, pursuant to 10 CFR 50.73(a)(2)(v)(C).

The Direct Cause is failure of the charcoal filter media. Causal Factor was that Operations control of LCO procedures does not include guidance for tracking system status while awaiting sample results.

The immediate action taken was replacing the charcoal filter media and performing subsequent testing.

There were no consequences to the general safety of the public, nuclear safety, industrial safety and radiological safety for this event.



**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 Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.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: ira_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		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Grand Gulf Nuclear Station, Unit 1	05000-416	2019	- 006	- 01

NARRATIVE

Plant Conditions:

Grand Gulf Nuclear Station (GGNS) Unit 1 was operating at approximately 100 percent power in MODE 1. There were no Structures, Systems, or Components that were inoperable that contributed to this event.

Event Description:

On September 20, 2019, test results were received indicating that a sample from the Division II charcoal filter of the Standby Gas Treatment System (SBGT)[WF] had an efficiency of 98.90 percent which did not meet the Acceptance Criteria (greater than or equal to 99.5 percent) listed in Technical Specification (TS) 5.5.7, Ventilation Filter Testing Program (VFTP). As a result, SBGT was declared INOPERABLE, and TS Limiting Condition for Operation (LCO) 3.6.4.3 Standby Gas Treatment System, Condition A was entered on September 20, at 5:14 pm CDT, which placed the station in a seven (7) day action statement to restore SBGT subsystem to an Operable status. On September 22, 2019 at 10:05 pm, the charcoal bank was replaced. All testing, leak tests and Dioctyl-phthalate (DOP) test were completed verifying that all Acceptance Criteria were met, and TS 3.6.4.3 Condition A was exited on September 23, 1:41 am.

The failed sample was obtained from the SBGT charcoal filter on September 4, 2019 at 2:38 am CDT and it was not replaced until September 22, 2019 at 10:05 pm. This exceeded the seven (7) day Completion Time for the SGTS listed in TS LCO 3.6.4.3 Condition A which placed the station in a condition prohibited by Technical Specifications.

During this time SBGT Division I was declared inoperable for approximately 11 minutes during planned surveillance testing on September 19, 2019. The period that SBGT Division I was inoperable overlapped the inoperability of the SBGT Division II because of the failed charcoal efficiency test. This is reportable as a condition that could have prevented the fulfillment of a safety function, pursuant to 10 CFR 50.73(a)(2)(v)(C).

Reportability:

This event is reportable under 10 CFR 50.73(a)(2)(i)(B), Any operation or condition which was prohibited by the plant's Technical Specification.

This event is also being reported under 10 CFR 50.73(a)(2)(v)(C), as an event or condition that could have prevented fulfillment of a safety function of structures or systems that are needed to control the release of radioactive material.

Direct Cause:

The Direct Cause is failure of the charcoal filter media.

Causal Factors:

The failure was not detected beforehand because of inadequate monitoring and inadequate identification of adverse trends. Critical system parameters were not identified in the Performance Monitoring Plan (PMP).

Operations control of LCO procedures does not include guidance for tracking system status while awaiting sample results.



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Immediate Corrective Actions:

The charcoal filter was replaced and tested to verify the acceptance criteria was met.

Corrective Actions:

System engineering established trending of charcoal sample and performance in the System Notebook. Included trending in the System PMP. Performance Monitoring Plan was revised to address both Divisions I and II.

Revised the SBGT Work Order (WO) procedures for Division I and II. The revised procedures to provide for the generation of a CR when the charcoal sample results exceed the Alert limit.

Revised the Control of Limiting Conditions for Operation procedure (02-S-01-17) to strengthen LCO tracking. Added Section 6.21 - Material Sampling of Technical Specification Required Systems, for avoiding a loss of safety function while TS related materials are being sampled and tested off site.

Safety Assessment:

There were no actual consequences for this event. There was no radiological release from the Secondary Containment as a result of this event. There were no other actual consequences to safety of the general public, nuclear safety, industrial safety and radiological safety.

SBGT Division I quarterly surveillance test was planned, scheduled and performed using an approved procedure. This procedure directed the declaration of inoperability and included appropriate procedural steps for immediate restoration of SBGT Division I in the event of a condition requiring system initiation and actuation. The surveillance was performed to demonstrate operability of the system as required by TS. The SBGT Division I was operable before the 11-minute test and operable after the 11-minute test, with no abnormalities noted during the test. Previous successful tests and subsequent successful tests support that SBGT Division I did not show any indication of degradation.

Although a kill switch was used during the testing of the standby gas treatment SBGT system valve test, the established procedural controls ensure the system would be able to meet its safety function if required. Therefore, in accordance with NEI 99-02, Regulatory Assessment Performance Indicator Guideline, this event is not being counted as a loss of safety function for performance indicator purposes.

Previous Similar Events:

None.