



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

December 8, 2020

EA-20-112

Mr. Robert Franssen, Site Vice President
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION - NRC INSPECTION
REPORT 05000416/2020002 AND RESPONSE TO DISPUTED
NON-CITED VIOLATION

Dear Mr. Franssen:

On August 6, 2020, the U.S. Nuclear Regulatory Commission (NRC) issued Inspection Report 05000416/2020002 and four non-cited violations (NCVs) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20219A414). On September 10, 2020, you provided a response to the inspection report and denied NCV 05000416/2020002-03, "Failure to Report a Safety System Functional Failure for the Standby Gas Treatment System," (ADAMS Accession No. ML20254A157). On September 22, 2020, the NRC acknowledged receipt of your response (ADAMS Accession No. ML20266G221) and informed you that we would evaluate your response and provide you the results of our evaluation.

We conducted a detailed review of your response and the applicable regulatory requirements in accordance with Part I, Section 2.3.7, of the NRC Enforcement Manual. The NRC staff who performed the review were not involved with the original inspection effort. After consideration of the basis for your contention, the NRC has concluded that the inspection report correctly characterizes the performance deficiency. As such, the NRC is upholding the NCV. The NRC's evaluation of your response to the NCV is contained in the enclosure to this letter.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Rules of Practice and Procedure," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or in the NRC's ADAMS, accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning this matter, please contact Mr. Jason Kozal of my staff at 817-200-1144.

Sincerely,

Michael C. Hay

Digitally signed by Michael C.
Hay
Date: 2020.12.08 10:23:30
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Michael C. Hay, Deputy Director
Division of Reactor Projects

Docket No. 05000416

License No. NPF-29

Enclosure:

NRC Evaluation of Licensee Response to
Non-Cited Violation

cc w/ encl: Distribution via LISTSERV®

GRAND GULF NUCLEAR STATION – NRC INSPECTION REPORT 05000416/2020002 AND
RESPONSE TO DISPUTED NON-CITED VIOLATION – DECEMBER 8, 2020

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ADAMS ACCESSION NUMBER: ML20345A154

■ SUNSI Review:

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ADAMS:

■ Yes ☐ No

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Keyword:

NRC-003

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NRC EVALUATION OF LICENSEE RESPONSE TO

NON-CITED VIOLATION 05000416/2020002-03

Restatement of Non-Cited Violation (NCV) 05000416/2020002-03

Title 10 CFR 50.73(a)(1), requires, in part, that a licensee shall submit a licensee event report (LER) for any event of the type described in this paragraph within 60 days after the discovery of the event. Specifically, 10 CFR 50.73(a)(2)(v) requires that the licensee shall report any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to: (1) shut down the reactor and maintain it in a safe shutdown condition; (2) remove residual heat; (3) control the release of radioactive material; or (4) mitigate the consequences of an accident.

Contrary to the above, on November 18, 2019, the licensee failed to submit a LER for an event of the type described in 10 CFR 50.73(a) within 60 days after the discovery of the event. Specifically, when the licensee declared the “A” train of the standby gas treatment system (SGTS) inoperable for a surveillance test with the “B” train of SGTS concurrently inoperable due to a failed charcoal test, a condition existed that could have prevented the fulfillment of a safety function of a system that is needed, in part, to control the release of radioactive material.

Summary of Licensee Response

In its September 10, 2020, letter (ADAMS Accession No. ML20254A157), Entergy Operations, Inc. (Entergy or licensee) denied that a violation of NRC requirements occurred and provided its position that Grand Gulf Nuclear Station (Grand Gulf) was in compliance with the regulatory requirements for reporting events that could have prevented the fulfillment of a safety function.

Entergy asserted that the “A” train of SGTS would have been capable of performing its required function during the performance of the surveillance test. The “A” train of SGTS was declared inoperable solely for the performance of a surveillance test in accordance with an approved procedure and the plant’s technical specifications (TSs) and no condition was discovered during the surveillance test that would have resulted in the system being declared inoperable. As a result, and in accordance with NUREG-1022, no report was required. Entergy asserted that NCV 05000416/2020002-03 should be withdrawn.

NRC Evaluation

The NRC reviewed the licensee’s September 10, 2020, letter, applicable site procedures including the surveillance procedure used for the SGTS, the NRC’s requirements found in 10 CFR 50.73, and applicable industry guidance including NUREG-1022, “Event Report Guidelines 10 CFR 50.72 and 50.73,” Revision 3.

In its denial letter, the licensee documented the following positions to support the conclusion that a violation of NRC requirements did not occur:

- The declaration of the “A” train of the SGTS as inoperable was solely for the performance of an approved surveillance procedure and did not eliminate its ability to perform its intended function, if required.

Enclosure

- Surveillance Procedure 06-OP-1T48-Q-0002, Revision 111, required installation of kill switches and lifting of wires during the performance of the surveillance which may render the pressure control for SGTS inoperative. However, the declaration of inoperability for this test did not render the safety function from being able to be performed.
- The “A” train of SGTS was declared inoperable solely for the performance of a surveillance test in accordance with an approved procedure and the plant’s TSs and no condition was discovered during the surveillance test that would have resulted in the system being declared inoperable. As a result, and in accordance with NUREG-1022, no report was required since the second criterion for reportability was not met; that is, the inoperability was not due to one or more personnel errors, including procedure violations; equipment failures; inadequate maintenance; or design, analysis, fabrication, equipment qualification, construction, or procedural deficiencies.
- NUREG-1022 states that reports are not required when systems are declared inoperable as part of a planned evolution for maintenance or surveillance testing when done in accordance with an approved procedure and the plant’s TS (unless a condition is discovered that would have resulted in the system being declared inoperable).

In reviewing Entergy’s positions described above, the NRC staff noted that the licensee almost exclusively focused on the SGTS train “A.” The licensee asserts that the SGTS train “A” was declared inoperable solely due to a planned and scheduled surveillance using an approved procedure. However, for a two-train system such as the SGTS at Grand Gulf, both trains must be simultaneously inoperable to meet the reportability threshold in 10 CFR 50.73(a)(2)(v). Because of this, the individual circumstances involving the inoperability of both trains must be examined to determine if there is a reportable condition. There are two ways to view the situation at Grand Gulf, the train A perspective and the train B perspective. Common to either perspective are the following facts:

- The SGTS train B was discovered inoperable on September 23, 2019, due to a failed charcoal efficiency test. The SGTS train B was determined to have been inoperable for a period of 19 days (September 4 through September 23, 2019).
- The SGTS train A was declared inoperable for approximately 11 minutes during planned surveillance testing on September 19, 2019. The period that SGTS train A was inoperable overlapped the inoperability of the SGTS train B because of the failed charcoal efficiency test.

Train A Perspective

Entergy’s response letter appeared to only view reportability from this perspective. In accordance with NUREG-1022, for a condition to be reported under 10 CFR 50.73(a)(2)(V), the structure, system, or component (SSC) must meet all three of the following criteria:

- 1) there is a determination that the SSC is inoperable in a required mode or other specified condition in the TS Applicability, and
- 2) the inoperability is due to one or more personnel errors, including procedure violations; equipment failures; inadequate maintenance; or design, analysis, fabrication, equipment qualification, construction, or procedural deficiencies, and

- 3) no redundant equipment in the same system was operable.

When considering the train A perspective, only 2 of 3 criteria for reportability would be met. Specifically, Criterion 1 and 3 above would be met since operators declared SGTS train "A" inoperable on September 19, 2019, from 11:45 p.m. to 11:56 p.m. (11 minutes) to perform a required surveillance. During this period, the plant was in Mode 1 and the SGTS was required by the plant's technical specification to be operable. Subsequent review of a charcoal filter test revealed that the redundant SGTS train "B" was inoperable during the same time that the SGTS train "A" was inoperable for a planned surveillance test.

Criterion 2 would not be met under this perspective because SGTS train "A" was declared inoperable solely for the performance of a surveillance test in accordance with an approved procedure and the plant's technical specifications and no condition was discovered during the surveillance test that would have resulted in the system being declared inoperable. Consequently, if only the train A perspective is considered, the condition is not reportable.

However, the train A perspective is only part of the review that needs to occur since the SGTS system is comprised of two trains.

Train B Perspective

The licensee's response to NCV 05000416/2020002-03 did not consider the situation from this perspective. When the NUREG-1022 reportability criteria are applied to the train B perspective, the NRC staff determined the following:

- 1) there is a determination that the SSC is inoperable in a required mode or other specified condition in the TS Applicability,

Yes, SGTS train "B" was inoperable in a required mode because of a failed charcoal absorber efficiency surveillance test.
- 2) the inoperability is due to one or more personnel errors, including procedure violations; equipment failures; inadequate maintenance; or design, analysis, fabrication, equipment qualification, construction, or procedural deficiencies, and

Yes, SGTS train "B" was inoperable due to an equipment failure associated with that train's charcoal absorber.
- 3) no redundant equipment in the same system was operable.

Yes, during the period that SGTS train "B" was inoperable, the redundant SGTS train "A" was also inoperable for 11 minutes for surveillance testing of a damper. Consequently, there was an 11-minute period where both trains of SGTS were inoperable.

When viewing reportability from the train B perspective, all three criteria necessary for a report are met. Specifically, the SGTS train "B" was inoperable in a required mode because of a failed charcoal absorber efficiency surveillance test (e.g., an equipment failure) and for an 11-minute period on September 19, 2020, no redundant equipment in the same system was operable. In accordance with 10 CFR 50.73(a), a report was required within 60 days after the

discovery of the event because the simultaneous inoperability of both trains of the SGTS represented an event or condition that could have prevented fulfillment of a safety function.

NRC Conclusion

NRC Region IV staff independently reviewed the NRC violation for the failure of Grand Gulf to report, in accordance with 10 CFR 50.73(a)(2)(v), a condition where two trains of the standby gas treatment system were inoperable, as an event or condition that could have prevented fulfillment of a safety function and Entergy's letter that outlined the denial of the violation. The NRC concluded that for 11 minutes, on September 19, 2019, both trains of SGTS were inoperable and represented a reportable condition. Therefore, NCV 05000416/2020002-03 is upheld.