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

May 10, 2019

Mr. Eric Larson
Site Vice President
Entergy Operations, Inc.
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION – NRC INTEGRATED INSPECTION REPORT 05000416/2019001

Dear Mr. Larson:

On March 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Grand Gulf Nuclear Station and discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This finding involved a violation of NRC requirements.

If you contest the violation or significance of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC resident inspector at Grand Gulf Nuclear Station.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC resident inspector at Grand Gulf Nuclear Station.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Jason W. Kozal, Chief
Reactor Projects Branch C

Docket No. 50-416
License No. NPF-29

Enclosure:
Inspection Report 05000416/2019001

U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	05000416
License Number:	NPF-29
Report Number:	05000416/2019001
Enterprise Identifier:	I-2019-001-0008
Licensee:	Entergy Operations, Inc.
Facility:	Grand Gulf Nuclear Station
Location:	Port Gibson, MS
Inspection Dates:	January 01, 2019, to March 31, 2019
Inspectors:	I. Anchondo, Reactor Inspector N. Day, Resident Inspector P. Elkmann, Senior Emergency Preparedness Inspector S. Hedger, Emergency Preparedness Inspector N. Okonkwo, Reactor Inspector G. Pick, Senior Reactor Inspector T. Steadham, Senior Resident Inspector
Approved By:	Jason W. Kozal Chief, Reactor Project Branch C Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a quarterly inspection at Grand Gulf Nuclear Station in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information. A violation and additional items being considered in the NRC's assessment are summarized in the tables below.

List of Findings and Violations

Failure to Scope Standby Service Water Piping into the Inspection Program			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2019001-01 Closed	[H.1] - Resources	71111.19
A self-revealed, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when a pinhole leak developed in a portion of the standby service water piping. The licensee failed to ensure that general erosion in the service water piping immediately downstream of the Division 1 emergency diesel generator heat exchanger outlet valve was identified, trended, and managed as required by licensee Procedure EN-DC-184, "NRC Generic Letter 89-13 Service Water Program," Revision 5. The licensee failed to appropriately scope this pipe into their Generic Letter 89-13 program and, therefore, failed to perform the monitoring as required by Procedure EN-DC-184. As a result, unrecognized cavitation-induced erosion caused gradual pipe wall thinning until the piping developed a pinhole leak, which rendered the Division 1 standby service water system inoperable.			

Additional Tracking Items

Type	Issue number	Title	Inspection Procedure	Status
LER	05000416/2016-008-01	Entry into Mode of Applicability with the Alternate Decay Heat Removal System Inoperable	71153	Closed
LER	05000416/2017-004-01	Outside-of-Tech-Spec-Allowable-Value Automatic Depressurization System Initiation Timer Relay due to Inadequate Procedure	71153	Closed
LER	05000416/2018-004-00	Potential Loss of Safety Function due to Concurrent Inoperability of Two Diesel Generators	71153	Closed

PLANT STATUS

Unit 1 began this inspection period at full power. On January 26, 2019, operators reduced power to approximately 65 percent for a control rod sequence exchange. On January 27, 2019, the unit returned to full power. On January 30, 2019, operators reduced power to approximately 70 percent for maximum extended load line limit analysis testing. On February 4, 2019, the unit returned to full power. On February 23, 2019, an automatic reactor scram occurred due to a main generator protective relay lockout. After corrective actions were completed, the reactor was started on February 25, 2019. On March 3, 2019, the reactor reached full power. On March 22, 2019, reactor power was decreased to approximately 65 percent for power suppression testing. On March 26, 2019, the reactor reached full power and remained at or near full power for the remainder of the inspection period.

INSPECTION SCOPES

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) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515, Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification and Resolution." 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.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

External Flooding Sample (IP Section 03.04) (1 Sample)

The inspectors evaluated readiness to cope with external flooding for the control building roof drains and waterproofing barriers in advance of heavy rains.

Summer Readiness Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated summer readiness of offsite and alternate alternating current power systems.

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 02.01) (5 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

(1) Low pressure core spray following maintenance on January 30, 2019;

(2) Electrical bus 1DD2 and 1DE2 due to impact of turbine building rain water intrusion on February 6, 2019;

(3) Emergency diesel building ventilation on February 21, 2019;

(4) End of cycle recirculation pump trip (EOC-RPT) logic following scram and EOC-RPT actuation on February 28, 2019; and

(5) Auxiliary building blowout panels on February 28, 2019.

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (6 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

(1) Division 2 control room, heating, ventilation, and air conditioning room on January 29, 2019;

(2) Auxiliary building 93 foot elevation on January 30, 2019;

(3) Technical support center on February 13, 2019;

(4) Standby service water pump house B on March 6, 2019;

(5) Lower cable spreading room on March 8, 2019; and

(6) Residual heat removal A pump room on March 26, 2019.

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 02.02a.) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the low pressure core spray room on January 30, 2019.

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (2 Samples)

(1) The inspectors observed and evaluated licensed operator performance in the control room during control rod manipulations for maximum extended load line limit analysis (plus) testing on January 30, 2019.

(2) The inspectors observed and evaluated licensed operator performance in the Control Room during power suppression testing on March 21, 2019.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

The inspectors observed and evaluated operator performance during a simulated loss-of-coolant accident and anticipated transient without scram on March 7, 2019.

71111.12 - Maintenance Effectiveness

Quality Control (IP Section 02.02) (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance activity:

Licensee procurement and control of vendor testing and repair activities of automatic depressurization system/safety relief valves on March 14, 2019.

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (1 Sample)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

Plant service water on January 9, 2019.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

(1) Protected system lineup during Division 1 emergency diesel generator corrective maintenance on January 8, 2019;

(2) Protected system lineup during residual heat removal A maintenance outage on January 22, 2019;

(3) Protected system lineup during low pressure core spray maintenance outage on January 30, 2019;

(4) Protected system lineup during Division 2 emergency diesel generator maintenance outage on February 4, 2019;

(5) Protected system lineup during control room air conditioning B maintenance outage on March 13, 2019; and

(6) Protected system lineup during high energy line break barrier removal in support of reactor water cleanup pump B replacement on March 19, 2019.

71111.15 - Operability Determinations and Functionality Assessments

Sample Selection (IP Section 02.01) (4 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

(1) Technical specification 3.8.1 common cause evaluation action statement for Division 2 emergency diesel generator on January 10, 2019;

(2) Division 2 and 3 emergency core cooling systems due to annunciator test failure on January 15, 2019;

(3) Control room air conditioning A due to Condition Reports 2019-0503, 2019-0516, and 2019-0555 on January 25, 2019; and

(4) Operability of the upper containment airlock due to failed barrel testing on March 13, 2019.

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modification:

Emergency diesel generator building ventilation covers on February 11, 2019.

71111.19 - Post Maintenance Testing

Post Maintenance Test Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the following post maintenance tests:

(1) Repair standby service water pipe leak, Work Order 515589, on January 30, 2019;

(2) Division 2 emergency diesel generator following maintenance outage on February 10, 2019;

(3) Reactor water cleanup pump B replacement, Work Order 517024, on March 18, 2019;

(4) Replacement of rod control instrumentation system power supply on March 20, 2019; and

(5) Repair of auxiliary building equipment drain sump transfer to radioactive waste isolation valve on March 13, 2019.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

FLEX Testing (IP Section 03.02) (1 Sample)

Flex building 2 annual performance testing, Work Order 52751194, on March 27, 2019.

In Service Testing (IST) (IP Section 03.01) (1 Sample)

3.6.1.6.1 low-low set testing on Refueling Outage 21 safety relief valves on March 7, 2019.

Surveillance Testing (IP Section 03.01) (7 Samples)

(1) Reactor core isolation cooling check valve position verification via radiography on January 31, 2019;

(2) Emergency diesel generator room fan performance testing on February 21, 2019;

(3) High pressure core spray pump room cooler performance testing on March 4, 2019;

(4) Automatic depressurization system relay functional test, Work Order 52856530, on March 25, 2019;

(5) Remote shutdown panel surveillance functional checks, Work Order 52761384, on March 25, 2019;

(6) Reactor core isolation cooling room high temperature isolation functional test, Work Order 52859366, on March 26, 2019; and

(7) Main steam line tunnel high temperature isolation functional test, Work Order 52859367, on March 26, 2019.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

On March 14, 2019, the inspectors evaluated the following submitted Emergency Action Level and Emergency Plan change.

- Emergency Plan Revision 712

This evaluation did not constitute NRC approval of the change.

71114.08 - Exercise Evaluation Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

On February 14, 2019, the inspectors reviewed and evaluated the proposed scenario for the biennial emergency plan exercise. This review did not constitute approval of the scenario.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

The inspectors reviewed data for the Alert and Notification Performance indicator for the period October 2018 through December 2018.

BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (1 Sample)

July 1, 2018, through December 31, 2018.

BI02: RCS Leak Rate Sample (IP Section 02.11) (1 Sample)

July 1, 2018, through December 31, 2018.

Drill/Exercise Performance (IP Section 02.12) (1 Sample)

The inspectors reviewed data for the Drill/Exercise Performance indicator for the period October 2018 through December 2018.

ERO Drill Participation (IP Section 02.13) (1 Sample)

The inspectors reviewed data for the ERO Drill Participation Performance indicator for the period October 2018 through December 2018.

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (1 Sample)

January 1, 2018, through December 31, 2018.

71153 – Follow-up of Events and Notices of Enforcement Discretion

Event Follow-up (IP Section 03.01) (1 Sample)

The inspectors evaluated the licensee's response to a reactor scram as a result of a main generator protective relay lockout on February 23, 2019.

Event Report (IP Section 03.02) (3 Samples)

The inspectors evaluated the following licensee event reports (LERs) which can be accessed at https://lersearch.inl.gov/LERSearchCriteria.aspx:

(1) LER 05000416/2016-008-01, Entry into Mode of Applicability with the Alternate Decay Heat Removal System Inoperable, (ADAMS Accession: ML17228A233):

The inspectors determined that the circumstances surrounding this LER were previously evaluated by the NRC, as described in NRC Inspection Report 05000416/2016008, dated October 27, 2017. In this report, the NRC identified three violations of NRC requirements associated with this event. The inspectors reviewed the licensee's cause evaluation and corrective actions. No additional violations of NRC requirements were identified.

(2) LER 05000416/2017-004-01, Outside-of-Tech-Spec-Allowable-Value Automatic Depressurization System Initiation Timer Relay due to Inadequate Procedure, (ADAMS Accession: ML17360A154):

The inspectors concluded that no violation of NRC requirements occurred.

(3) LER 05000416/2018-004-00, Potential Loss of Safety Function due to Concurrent Inoperability of Two Diesel Generators, (ADAMS Accession: ML18107A152):

The inspectors concluded that no violation of NRC requirements occurred.

INSPECTION RESULTS

Failure to Scope Standby Service Water Piping into the Inspection Program			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2019001-01 Closed	[H.1] - Resources	71111.19

A self-revealed, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when a pinhole leak developed in a portion of the standby service water piping. The licensee failed to ensure that general erosion in the service water piping immediately downstream of the Division 1 emergency diesel generator heat exchanger outlet valve was identified, trended, and managed as required by licensee Procedure EN-DC-184, "NRC Generic Letter 89-13 Service Water Program," Revision 5.

The licensee failed to appropriately scope this pipe into their Generic Letter 89-13 program and, therefore, failed to perform the monitoring as required by Procedure EN-DC-184. As a result, unrecognized cavitation-induced erosion caused gradual pipe wall thinning until the piping developed a pinhole leak which rendered the Division 1 standby service water system inoperable.

Description: On January 6, 2019, operators received a standby service water (SSW) head tank make up annunciator in the main control room, which was indicative of a SSW leak. Upon investigating, operators identified an approximately half gallon per minute leak in the SSW piping downstream of the Division 1 emergency diesel generator (EDG) heat exchanger outlet valve 1P41F023A. The licensee entered the issue in their corrective action program as Condition Report CR-GGN-2019-00096.

After performing ultrasonic testing of the affected area, the licensee determined that they were not able to apply American Society of Mechanical Engineers (ASME) Code Case N-513 to evaluate structural integrity of the piping and declared both the Division 1 SSW system and the Division 1 EDG inoperable. The licensee removed and replaced the affected potion of piping under Work Order 00515589.

The licensee hired a consultant to perform a structural analysis on the failed section of piping. The consultant determined that the failure was due to long-term cavitation-induced erosion from high fluid velocities immediately downstream of valve 1P41F023A. Valve P41F023A was a butterfly valve that was throttled to achieve desired system flow rates for total system flow balance and operated in such a manner since original plant startup. This operating history caused the valve to remain in nearly the same position for long periods of time, thus inducing the cavitation erosion inside the pipe. The consultant also determined that corrosion likely exacerbated the wall thinning while the system was in a standby condition.

The licensee performed an equipment failure evaluation and determined that the failed section of pipe should have been included in their Generic Letter (GL) 89-13 monitoring program because the pipe was immediately downstream of a throttled butterfly valve and because of industry operating experience of failures in similar sections of pipe. The licensee was unable to specifically identify exactly why the pipe was originally excluded from the program but determined that ineffective oversight of the program contributed to its continued exclusion. Because the pipe was never properly scoped into the GL 89-13 program, the licensee was not periodically inspecting the pipe and therefore failed to identify the erosion until the pinhole leak developed.

The inspectors reviewed licensee Procedure EN-DC-184, "NRC Generic Letter 89-13 Service Water Program," Revision 5, which established the service water monitoring expectations and guidelines. Step 5.0[3](b) of Procedure EN-DC-184 stated, in part, that "service water activities must ensure that degradation due to…erosion...is identified, trended, and managed in a controlled fashion." Furthermore, Attachments 2 and 3 of Procedure EN-DC-184 provided program element details and selection criteria for inclusion into the monitoring program for service water piping adjacent to throttled valves.

On April 29, 1994, Procedure MS-46, "Program Plan for Monitoring Internal Erosion and/or Corrosion in Moderate Energy Piping Components," was revised to include SSW components but did not include the section of pipe that ultimately developed a pinhole leak. The licensee later developed Procedure EN-DC-184 and issued it on September 21, 2009, but continued to exclude this section of pipe from the overall GL 89-13 program.

In 2012, Condition Report CR-GGN-2012-12636 identified that although Procedure MS-46 was active, it was not being effectively implemented. Corrective actions included updating the MS-46 database of pipe wall thickness measurements and erosion trends; however, these efforts did not identify the lack of clear program oversight and ownership which likely contributed to the lack of effective implementation.

In 2017, the licensee hired a consultant to perform an erosion susceptibility evaluation of the plant. The initial report was provided to the licensee in November 2017, and Revision 1 was provided in May 2018. However, the licensee neither formally accepted nor acted upon the report until station management became aware that the report existed after the pinhole leak developed.

The inspectors determined that the failure to properly scope all service water program activities into the GL 89-13 program was because licensee management failed to ensure that personnel, procedures, and other resources were available and adequate to support the erosion monitoring portion of their GL 89-13 program. For this aspect of the licensee's GL 89-13 program, there was neither clearly defined roles and responsibilities nor a clear program owner.

Corrective Action(s): Licensee corrective actions included replacing the section of piping and restoring the system to service, performing an equipment failure evaluation, performing a structural analysis of the failed piping, developing an extent of condition inspection plan for similar throttled valves in the SSW system, adding piping downstream of throttled valves into the scope of the EN-DC-184 program, and developing clear roles and responsibilities for the oversight of the erosion monitoring program.

Corrective Action Reference(s): The licensee entered the issue into their corrective action program as Condition Report CR-GGN-2019-00096.

Performance Assessment:

Performance Deficiency: The failure to scope the SSW piping downstream of the Division 1 EDG heat exchanger outlet valve into an erosion monitoring plan as required per Procedure EN-DC-184 is a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and adversely affected the objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the performance deficiency contributed to the inoperability of the Division 1 standby service water system.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609 Appendix A, "Significance Determination of Reactor Inspection Findings for At - Power Situations." Since the finding did not affect the design or qualification and did not represent a loss of system function, the inspectors determined that the finding was of very low safety significance (Green). Specifically, the Division 2 SSW system was not affected, and the Division 1 SSW system was still able to provide adequate cooling to the Division 1 emergency diesel generator.

Cross-cutting Aspect: The finding had a cross-cutting aspect in the area of human performance associated with resources because licensee management failed to ensure that personnel, procedures, and other resources were available and adequate to support the service water piping erosion monitoring portion of their GL 89-13 program. Although the cause of the initial scoping failure dates back to approximately 1994, the inspectors concluded that it is indicative of current licensee performance because of the failure to provide adequate oversight of the 2017 erosion susceptibility evaluation [H.1].

Enforcement:

Violation: As required by 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," activities affecting quality shall be prescribed by documented procedures and shall be accomplished in accordance with these procedures. Licensee Procedure EN-DC-184, "NRC Generic Letter 89-13 Service Water Program," Revision 5, a quality related procedure, was used to establish and implement the safety-related service water monitoring program. Step 5.0[3](b) of Procedure EN-DC-184 stated, in part, that "service water program activities must ensure that degradation due to…general corrosion [and] erosion...is identified, trended, and managed in a controlled fashion."

Contrary to the above, from September 21, 2009, through January 6, 2019, the licensee's service water program activities failed to ensure that degradation due to general corrosion and erosion was identified, trended, and managed in a controlled fashion in accordance with Procedure EN-DC-184. Specifically, the licensee failed to monitor the safety-related service water pipe downstream of valve 1P41F023A for general corrosion and erosion.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On April 22, 2019, the inspectors presented the quarterly resident inspector inspection results to Mr. E. Larson, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

71111.04 - Equipment Alignment

Miscellaneous Document Number	Title	Date
MPGE-85/091	Letter from General Electric to Grand Gulf Re: EOC-RPT	May 21, 1985
	RPT Coastdown – Level 1 Criterion Failure	April 26, 1985
	Post Trip Analysis GGNS Scram No. 154	February 23, 2019

71111.12 – Maintenance Effectiveness

Miscellaneous Document Number	Title	Date
NWS-T-33	NWS Safety Valve Test procedure for Entergy – GGNS Dikkers MSSRVs	January 14, 2014
15-249	NWS Solenoid/Actuator Operability Test Traveler	January 15, 2016
15-263	NWS Solenoid/Actuator Operability Test Traveler	January 26, 2016
15-259	NWS Solenoid/Actuator Operability Test Traveler	January 26, 2016
15-260	NWS Solenoid/Actuator Operability Test Traveler	January 20, 2016
15-261	NWS Solenoid/Actuator Operability Test Traveler	January 22, 2016
13-251	NWS Solenoid/Actuator Operability Test Traveler	November 6, 2013
13-248	NWS Solenoid/Actuator Operability Test Traveler	October 30, 2013
13-252	NWS Solenoid/Actuator Operability Test Traveler	December 20, 2013
13-250	NWS Solenoid/Actuator Operability Test Traveler	October 23, 2013
11-321	NWS Solenoid/Actuator Operability Test Traveler	January 19, 2012
16-269	NWS Solenoid/Actuator Operability Test Traveler	March 8, 2018
16-269	NWS Solenoid/Actuator Operability As-Found Test Traveler	June 24, 2016
PRGGN-2016-	Procedure 06-ME-1B21-R-0008 Revision	October 31,

Miscellaneous Document Number	Title	Date
00813		2017

Procedures Number	Title	Revision
06-ME-1B21-R-0008	Main Steam Safety/Relief Valve Operability Test	108

71111.15 - Operability Determinations and Functionality Assessments

Condition Reports (CR-GGN-)		
2019-0503	2019-0516	2019-5555

71111.19 - Post Maintenance Testing

Condition Reports (CR-GGN-)	
2019-00096	2012-12636

Work Orders		
515589	517024	50293533

Procedures Number	Title	Revision / Date
EN-DC-184	NRC Generic Letter 89-13 Service Water Program	0
EN-DC-184	NRC Generic Letter 89-13 Service Water Program	5
MS-46	Program Plan for Monitoring Internal Erosion and/or Corrosion in Moderate Energy Piping Components	April 29, 1984

Miscellaneous Document Number	Title	Date
	True North Erosion Susceptibility Evaluation	0
	True North Erosion Susceptibility Evaluation, Revision	1
	True North Erosion Susceptibility Evaluation, Revision	2
GG-515589	ASME Repair/Replacement Plan	January 8, 2019
BOP-VT-19-001	VT-2 Leakage Report	January 8, 2019
BOP-UT-19-001	Ultrasonic Testing Examination Report	January 7, 2019
BOP-MT-19-001	Magnetic Particle Examination Report	January 8, 2019
	Welder Qualification and Continuity Report	October 11, 2018
FMWA 50145	Filler material Withdrawal Authorization	January 7, 2019
FMWA 50163	Filler material Withdrawal Authorization	January 7, 2019
03571100	Material Issue Ticket	January 7, 2019
	Weld Datasheet / Traveler for Weld ID W901 and W902	January 8, 2019
10524358	Purchase Order for Replacement Material	0
	Energy & process Corporation Material Certification / Certified Material Test Report for Heat Code CRD	November 9, 2017

71111.22 - Surveillance Testing

Work Orders				
52751194	52856530	52761384	52859366	52859367

71153 – Follow-up of Events and Notices of Enforcement Discretion

Condition Reports (CR-GGN-)
2016-7281

GRAND GULF NUCLEAR STATION – NRC INTEGRATED INSPECTION
REPORT 05000416/2019001 – May 10, 2019

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ADAMS ACCESSION NUMBER: ML19130A223

☒ SUNSI Review By JKozal	ADAMS: ☒ Yes ☐ No	☐ Non-Publicly Available ☒ Publicly Available	☒ Non-Sensitive ☐ Sensitive	Keyword: NRC-002

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