



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

November 10, 2021

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 – INTEGRATED INSPECTION
REPORT 05000416/2021003 AND INDEPENDENT SPENT FUEL STORAGE
INSTALLATION REPORT 07200050/2021001

Dear Mr. Franssen:

On September 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Grand Gulf Nuclear Station. On October 7, 2021, the NRC inspectors 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.

Five findings of very low safety significance (Green) are documented in this report. Four of these findings involved violations of NRC requirements. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

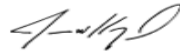
A licensee-identified violation which was determined to be Severity Level IV is also documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violations or the significance or severity of the violations 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 or with a finding not associated with a regulatory requirement 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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,



Signed by Kozal, Jason
on 11/10/21

Jason W. Kozal, Chief
Reactor Projects Branch C
Division of Reactor Projects

Docket No. 05000416 and 07200050
License No. NPF-29

Enclosure:
As stated

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GRAND GULF NUCLEAR STATION – INTEGRATED INSPECTION
 REPORT 05000416/2021003 AND INDEPENDENT SPENT FUEL STORAGE INSTALLATION
 REPORT 07200050/2021001 DATED – NOVEMBER 10, 2021

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 05000416 and 07200050

License Number: NPF-29

Report Number: 05000416/2021003 and 07200050/2021001

Enterprise Identifier: I-2021-003-0129 and I-2021-001-0005

Licensee: Entergy Operations, Inc.

Facility: Grand Gulf Nuclear Station

Location: Port Gibson, MS

Inspection Dates: July 1, 2021, to September 30, 2021

Inspectors: S. Alferink, Reliability and Risk Analyst
L. Brookhart, Senior Spent Fuel Storage Inspector
T. Farina, Senior Operations Engineer
J. Havertape, Reliability and Risk Analyst
N. Hernandez, Operations Engineer
S. Lichvar, Project Engineer
S. Makor, Reactor Inspector
N. Okonkwo, Reactor Inspector
C. Smith, Health Physicist
T. Steadham, Senior Resident Inspector
M. Thomas, Resident Inspector
D. You, Operations Engineer

Approved By: Jason W. Kozal, Chief
Reactor Projects Branch C
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated 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 licensee-identified non-cited violation is documented in report Section: 71111.11B.

List of Findings and Violations

Failure to Take Adequate Corrective Actions			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-01 Open/Closed	[H.12] - Avoid Complacency	71111.01
An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified when the licensee failed to take adequate corrective action for an identified condition adverse to quality. Specifically, the licensee failed to correct a condition adverse to quality related to inadequate preventive maintenance task instructions for inspecting sandbags.			

Failure to Make a Conservative Decision Regarding the Turbine Bypass Valves			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000416/2021003-02 Open/Closed	[H.14] - Conservative Bias	71111.15
An NRC-identified, Green finding was identified when the licensee failed to make a conservative decision in accordance with Procedure EN-OP-115, "Conduct of Operations," Revision 30. Specifically, the licensee failed to maintain nuclear safety at the forefront of the decision to discontinue the monthly surveillance testing of the turbine bypass valves. The licensee did not consider the negative impact this decision had on the turbine bypass valves' reliability.			

Failure to Follow the Operability Determination Process			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-03 Open/Closed	[H.12] - Avoid Complacency	71111.15
An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when the licensee failed to follow operability determination process procedures as prescribed in Station Procedure EN-OP-104, "Operability Determination Process," Revision 16, and Procedure EN-LI-108, "Event Notification and Report," Revision 19. Specifically, the licensee failed to follow the operability determination process when evaluating a degraded condition on the reactor core isolation cooling room cooler; when evaluating a degraded medium energy			

line break condition in the Division 1 diesel generator room; and when evaluating an external flood concern that could affect safety-related switchgear in the control building.

Failure to Identify Condition Adverse to Quality Associated with Jet Pump Flow Indications

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000416/2021003-04 Open/Closed	[P.2] - Evaluation	71111.15

An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified when the licensee failed to identify a condition adverse to quality associated with inaccurate jet pump flow instrumentation. Specifically, the licensee failed to identify that the main control room total core flow instrumentation was indicating high, which had the potential to impact technical specification surveillance requirements and power-to-flow map location determinations.

Failure to Perform Maintenance in Accordance with Work Instructions

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-05 Open/Closed	[H.9] - Training	71111.19

An NRC-identified, Green finding and associated non-cited violation of Technical Specification 5.4.1.a was identified when the licensee failed to perform maintenance in accordance with documented work instructions. Specifically, the licensee marked as "not applicable" pertinent steps in Work Order 52877238 to replace the watertight flood seals on door SZ10OCT5, which was contrary to both Procedure EN-HU-106, "Procedure and Work Instruction Use and Adherence," Revision 8, and the corrective actions to prevent recurrence to address the significant condition adverse to quality documented in Condition Report CR-GGN-2011-07687.

Additional Tracking Items

None.

PLANT STATUS

Grand Gulf Nuclear Station, Unit 1, began the inspection period at rated thermal power (RTP). On July 10, 2021, the unit reduced power to 93 percent RTP due to a loss of moisture separator reheater indication in the main control room. The unit was returned to RTP later that night following repair. On July 15, 2021, the unit reduced power to 45 percent RTP due to a loss of power to plant service water pumps. The unit was returned to RTP on July 17, 2021, following restoration of power to plant service water, and a subsequent control rod sequence exchange. On September 7, 2021, reactor feedwater pump A tripped due to a drain valve failure in the feedwater heating system, which caused an automatic power runback to approximately 57 percent RTP. The unit was returned to RTP on September 10, 2021, following system repairs. The unit remained at or near rated thermal 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 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.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending severe weather due to hurricane Ida on August 29, 2021.

External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated whether flood protection barriers, mitigation plans, procedures, and equipment were consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding on September 30, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (2 Samples)

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

- (1) Jet pump flow instrumentation on September 10, 2021
- (2) Emergency diesel generator fuel oil storage on September 22, 2021

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the flood protection system on August 6, 2021.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Firewater pump house on July 13, 2021
- (2) Standby service water pump and valve houses on July 30, 2021
- (3) Division 2 standby diesel generator room on July 22, 2021
- (4) Auxiliary building, 93-foot elevation, general area on July 21, 2021
- (5) Reactor core isolation cooling pump room on July 22, 2021
- (6) Division 1 emergency diesel generator hot work on August 20, 2021

71111.06 - Flood Protection Measures

Cable Degradation (IP Section 03.02) (1 Sample)

The inspectors evaluated cable submergence protection in:

- (1) Manhole MH-03 visual inspection and functional test of sump pump on August 20, 2021

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (2 Samples)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered on September 8, 2021.

71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

(1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered on September 8, 2021.

Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the licensee's annual requalification operating test.

Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the licensee is effectively evaluating their licensed operators for mastery of training objectives.

Requalification Examination Security

The inspectors evaluated the ability of the licensee to safeguard examination material, such that the examination is not compromised.

Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses.

Control Room Simulator

The inspectors evaluated the adequacy of the licensee's control room simulator in modeling the actual plant and for meeting the requirements contained in 10 CFR 55.46.

Problem Identification and Resolution

The inspectors evaluated the licensee's ability to identify and resolve problems associated with licensed operator performance.

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during tropical storm Ida on August 30, 2021.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (3 Samples)

- (1) The inspectors observed and evaluated a licensed operator requalification exam on September 1, 2021.
- (2) The inspectors observed and evaluated a licensed operator requalification exam, Scenario 1, on September 2, 2021.
- (3) The inspectors observed and evaluated a licensed operator requalification exam, Scenario 2, on September 2, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (2 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Condition Report CR-GGN-2020-09166, turbine bypass valve unavailability and maintenance rule (a)(2) status on August 27, 2021
- (2) Motor-operated valve magnesium rotor inspections on September 30, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Maintenance risk while performing maintenance on hydraulic power unit filter replacement on July 7, 2021
- (2) Maintenance risk with residual heat removal pump C out of service for maintenance on August 6, 2021
- (3) Emergent work control with primary containment airlock door inoperable on August 6, 2021
- (4) Yellow risk while the Division 1 emergency diesel generator was out of service for maintenance on August 20, 2021
- (5) Emergent work control in anticipation of hurricane Ida on August 29, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (7 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Engineering Change 87858, demonstration of continued structural integrity of Division 1 emergency diesel generator jacket water cooler on August 2, 2021
- (2) Condition Report CR-GGN-2021-05663, sandbags did not meet height requirements on August 2, 2021
- (3) Condition Report CR-GGN-2021-05820, minimum basin level standby service water flow required to the fuel pool cooling and cleanup heat exchanger on August 19, 2021
- (4) Condition Report CR-GGN-2020-09166, turbine bypass valves failed to meet stroke time requirements on September 29, 2021
- (5) Condition Report CR-GGN-2021-05802, jet pump summer calibration error requires administrative operating limit penalty on September 29, 2021
- (6) Condition Report CR-GGN-2021-04896, reactor core isolation cooling room cooler mount found with loose structural bolt on September 30, 2021
- (7) Condition Report CR-GGN-2021-05758, domestic water leak in the Division 1 diesel generator room on September 30, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Work Order 538760, replace oil in residual heat removal pump C on August 6, 2021
- (2) Work Order 527873, inspect and clean high pressure core spray diesel generator flow element 1P41N131 on August 9, 2021
- (3) Work Order 538763, Division 1 emergency diesel generator post-maintenance test following replacement of rocker arm subcover assemblies and jacket water heat exchanger end bells on August 31, 2021
- (4) Work Order 52972412, standby service water A cooling tower fan maintenance on September 1, 2021
- (5) Work Order 567580, high pressure core spray control power lost due to failed relay on September 15, 2021
- (6) Work Order 52877238, replace Neoprene door seal on door SZ10OCT5 on September 22, 2021

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (3 Samples)

- (1) Work Order 52756936, Culvert No. 1 five-year survey, on August 6, 2021
- (2) Work Order 52973140, low pressure core spray subsystem A monthly functional test on August 9, 2021

- (3) Work Order 52975457, Procedure 06-EL-1E12-Q-0002A, residual heat removal containment spray A time delay relay quarterly test on September 13, 2021

71114.06 - Drill Evaluation

Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (1 Sample)

- (1) Red team drill on September 21, 2021

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) Licensed operator simulator training evolution on September 27, 2021

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS06: Emergency AC Power Systems (IP Section 02.05) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

MS07: High Pressure Injection Systems (IP Section 02.06) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

MS08: Heat Removal Systems (IP Section 02.07) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Effectiveness of corrective actions related to the full implementation of the cyber security program inspection findings as described in NRC Cyber Security Inspection Report 05000416/2019410 (ADAMS Accession No. ML19179A106).

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Followup (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated the licensee's response to an unplanned down power following a reactor feed pump A trip on September 14, 2021.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

60855 - Operation of an ISFSI

The inspectors performed a review of the licensee's independent spent fuel storage installation (ISFSI) activities to verify compliance with requirements of the Certificate of Compliance 72-1014, License Amendment 9, Revision 1, and the HI-STORM Final Safety Analysis Report (FSAR), Revision 13. The inspectors reviewed selected procedures, corrective action reports, and records to verify ISFSI operations were compliant with the Certificate's technical specifications, requirements in the FSAR, and NRC regulations.

Operation of an ISFSI (1 Sample)

- (1) The inspectors evaluated the licensee's dry cask storage operations from September 13, 2021, through September 16, 2021, during an on-site inspection. The Grand Gulf Nuclear Station ISFSI is a 196-foot by 61-foot concrete pad designed to store 48 Holtec International HI-STORM 100 spent fuel storage casks (44 casks with four empty locations for shuffling purposes). At the time of the on-site inspection, the ISFSI pad contained 41 HI-STORM 100 storage casks loaded with spent fuel, and the licensee was in the process of loading and processing the 42nd canister in the reactor spent fuel building. By the end of the inspection period the licensee had filled the ISFSI pad with 44 casks.

During the on-site inspection, the inspectors evaluated and observed the following activities:

- Walk-down of the ISFSI haul path
- Heavy load lifts using the cask handling crane to remove the transfer cask with the loaded canister from the spent fuel pool to the canister processing area
- Welding and nondestructive testing of the lid-to-shell weld
- Processing of the spent nuclear fuel for storage, including bulk water removal, forced helium dehydration, and helium backfill operations
- Final sealing of the canister, including welding of the vent and port cover plates, nondestructive testing, and helium leak-testing

The inspectors reviewed and evaluated the following documentation during the inspection:

- Fuel selection evaluations for the canisters loaded since the last NRC ISFSI inspection
- Radiation surveys for dose at the owner-controlled boundary to verify compliance with the requirements of 10 CFR 72.104 for calendar years 2019 and 2020
- Selected ISFSI-related condition reports issued since the last NRC ISFSI inspection
- Quality assurance program implementation, including recent audits, surveillances, receipt inspection, and quality control activities related to ISFSI operations
- Compliance to technical specifications for operational surveillance activities and FSAR required annual maintenance activities

- Documentation of annual maintenance activities for the site's cask handling crane, vertical cask transporter, and special lifting devices
- Selected licensee design changes and program changes to the ISFSI performed under the site's 10 CFR 72.48 program
- Changes made by the licensee in the site's 10 CFR 72.212 Evaluation report from Revision 3 to Revision 5

INSPECTION RESULTS

Failure to Take Adequate Corrective Actions			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-01 Open/Closed	[H.12] - Avoid Complacency	71111.01
<p>An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified when the licensee failed to take adequate corrective action for an identified condition adverse to quality. Specifically, the licensee failed to correct a condition adverse to quality related to inadequate preventive maintenance task instructions for inspecting sandbags.</p>			
<p><u>Description:</u> While reviewing previous preventive maintenance (PM) instructions for inspecting sandbags, the inspectors noted that the work instructions did not provide sufficient guidance on how to properly accomplish the task. At the time, the inspectors reviewed the most recent sandbag inspection PM, which was completed under Work Order 52938410 on January 19, 2021. The inspectors noted that this PM was classified as safety-related because the licensee was relying on the ability to construct adequate sandbag berms to protect multiple redundant trains of safety-related equipment as a compensatory measure for degraded flood protection barriers. Therefore, the adequacy of the sandbags was an integral component to ensure the ability to protect safety-related equipment from the effects of external flooding as per the current licensing basis.</p>			
<p>Off-Normal Event Procedure 05-1-02-VI-2, "Hurricanes, Tornados, and Severe Weather," Revision 140 (e.g., "the ONEP"), contained drawings for each of the nine required sandbag berms. Each drawing contained details such as the minimum number of sandbags to construct the berm and the required characteristics of each sandbag. Each drawing contained the following requirement: "Bags shall be filled anywhere from 1/2 to 2/3 full, weighing approximately 35 to 40 pounds...the length of the bags shall be between 16-20 inches."</p>			
<p>The work instructions for the sandbag inspection PM were:</p> <ol style="list-style-type: none"> 1. Inspect sandbags and associated equipment. Replace sandbags if distorted. 2. Inspect material condition of tarps and tie downs. Replace if required. 3. Inspect sandbag dikes for cleanliness. Remove FME if required. 4. Document all actions per attached activity log sheet. 5. Document any discrepancies that cannot be repaired during inspection. 6. Record CR number. 			
<p>The inspectors noted that there were no acceptance criteria, as required by 10 CFR Part 50, Appendix B, Criterion V, on what constituted an acceptable sandbag or tarp inspection. The</p>			

inspectors noted that the workers documented the number of sandbags that they counted in each container. Upon interviewing the personnel who performed the work, the inspectors learned that to the best of the workers' knowledge, all they were required to do was to count the sandbags even though there was no clear instruction to count the sandbags in each container nor did the instructions include the required number in each container. Additionally, the sandbags were neither routinely weighed nor measured despite requirements for each parameter in the ONEP.

With the assistance of operations staff, the inspectors independently counted the number of sandbags in two of the four containers. The inspectors found approximately 10-15 sandbags with various deficiencies, such as holes or sandbags that were outside the parameters required by the ONEP.

The inspectors brought the concern with the inadequate work instructions to the licensee who initiated Condition Report (CR) CR-GGN-2021-04399 on June 4, 2021. The CR was subsequently closed on June 8, 2021, to PM feedback Action Request (AR) 21006236. The inspectors noted that this PM was next scheduled to be worked on July 20, 2021, under Work Order 52959020. On July 13, 2021, the inspectors reviewed the licensee's work planning system and learned that this work order was in a "ready to work" status, the work instructions had not been revised, and that AR 21006236 neither had a due date nor had it been assigned. After the inspectors questioned when the work instructions would be revised, the licensee revised the work instructions to satisfy AR 21006236 and, consequently, CR CR-GGN-2021-04399.

On July 20, 2021, the inspectors observed the work activities associated with Work Order 52959020. Upon reviewing the work instructions, the inspectors observed that the work instructions remained essentially unchanged, and there were still no acceptance criteria associated with:

- the number of sandbags required to be in each container,
- the required weight of each sandbag,
- the required length of each sandbag, and
- the required fill of each sandbag.

The licensee believed that including copies of the sandbag berm drawings from the ONEP as well as the text of the original engineering change that developed the sandbag strategy, Engineering Change EC-41518, was sufficient to provide adequate instructions on what and how to inspect the sandbags as well as the pertinent acceptance criteria. When the inspectors asked the personnel performing the work what the minimum number of sandbags were for container AC1225, the personnel mistakenly believed that only 80 were required. This was because the original number as per EC-41518 was, in fact, 80, but was later revised to 110. Moreover, the workers believed that they were still only required to count the number of sandbags and were unaware that they were also required to weigh and measure each sandbag.

After counting 15-20 sandbags, the inspectors noted that all the sandbags appeared to be less than half full and questioned the weight of some of the sandbags. The workers, unprepared to weigh the sandbags, then obtained a scale and weighed approximately 10 sandbags. The heaviest sandbag weighed was approximately 28 pounds, with the majority of them weighing about 23 pounds. After a series of impromptu decisions by the licensee in an attempt to inspect the sandbags, the inspectors challenged the licensee

several times on the adequacy of the work instructions and the lack of adequate information in order to properly complete the task. The licensee ultimately agreed, stopped the job, and restored the container. However, because of the lack of clear instructions in the work order, licensee actions to combine sandbags to meet the weight requirements left the licensee with 105 sandbags for a berm that required 110.

Based on the observed as-found condition of the sandbags, the inspectors questioned the ability of the licensee to build the berms in accordance with the requirements of the ONEP. On July 23, 2021, the licensee built a representative sandbag berm. Based on that berm, both the licensee and the inspectors measured the height of the berm and determined that at least half of the berm was approximately 11.5 inches tall. The licensee required the berms to be at least 18 inches tall. Based on these results, the inspectors concluded that the absence of clear acceptance criteria and inspection guidance in the PM directly led to the licensee's failure to identify the degraded sandbags and, therefore, that the sandbag berms could not be built as intended. The inspectors concluded that the licensee's corrective actions, as a result of Condition Report CR-GGN-2021-04399, were ineffective in ensuring that Work Order 52959020 contained adequate work instructions because the same work instructions had been demonstrated to be inadequate to identify the deficient sandbags prior to the inspectors' involvement.

Based on the as-found condition of the sandbags and direct field walkdowns, the inspectors concluded that the sandbag berms that would have been built would have been sufficient to provide adequate protection to safety-related equipment. Specifically, although the licensee intended the berms to be 18 inches tall, the license basis flood protection was 9 inches for the control building, which would have been met, and 12 inches for the diesel generator and standby service water buildings. Although the sandbag berms for the diesel generator and standby service water buildings would not have exceeded 12 inches across their entire lengths, the amount of water that would have leaked past the berms would have been insufficient to challenge safety-related equipment in the respective buildings.

Corrective Actions: Licensee corrective actions included procuring new sandbags that met the minimum requirements of the ONEP, revising the work instructions to provide acceptance criteria and sandbag requirements, and ensuring that all existing sandbags met the minimum requirements in the ONEP. The licensee reperfomed the PM under Work Order 52959020 on September 3, 2021.

Corrective Action Reference: Condition Report CR-GGN-2021-05572

Performance Assessment:

Performance Deficiency: The failure to correct a condition adverse to quality was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to have adequate work instructions contributed to the licensee's failure to identify deficient flood protection sandbags that were not capable of being used to construct sandbag berms of the intended dimensions.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined that the finding was of very low safety significance (Green) because the sandbag berms that would have been built with the as-found condition of the sandbags would have been sufficient to provide adequate protection to all safety-related equipment. Therefore, the inspectors concluded that this performance deficiency did not involve either the loss or degradation of equipment specifically designed to mitigate a flooding initiating event for greater than 14 days.

Cross-Cutting Aspect: H.12 - Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals implement appropriate error reduction tools. The licensee did not adequately recognize and plan for the possibility of mistakes when they revised the PM work instructions to address the issue described in Condition Report CR-GGN-2021-40399.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion XVI requires, in part, that conditions adverse to quality shall be promptly identified and corrected.

Contrary to the above, on July 20, 2021, the licensee failed to correct a condition adverse to quality. Specifically, work order instructions for Work Order 52959020 were noncompliant with the requirements of 10 CFR Part 50, Appendix B, Criterion V, when Work Order 52929020 was attempted to be completed. This noncompliance was identified on June 4, 2021, and corrective actions taken by the licensee to restore compliance on or about July 13, 2021, failed to correct the inadequate work instructions.

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

Failure to Make a Conservative Decision Regarding the Turbine Bypass Valves

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green FIN 05000416/2021003-02 Open/Closed	[H.14] - Conservative Bias	71111.15

An NRC-identified, Green finding was identified when the licensee failed to make a conservative decision in accordance with Procedure EN-OP-115, "Conduct of Operations," Revision 30. Specifically, the licensee failed to maintain nuclear safety at the forefront of the decision to discontinue the monthly surveillance testing of the turbine bypass valves. The licensee did not consider the negative impact this decision had on the turbine bypass valves' reliability.

Description: Following a forced outage in August 2020, where the licensee modified the turbine bypass system valve actuators, the turbine bypass system failed time-response testing. In essence, the bypass valves responded slower than design requirements. As a result, the licensee declared the turbine bypass valves inoperable; however, the licensee continued the monthly surveillance test of exercising the bypass valves until November 2020.

In November 2020, the licensee decided to discontinue the monthly surveillance testing of the turbine bypass system because technical specifications allowed surveillance requirements to

not be met for inoperable components. Despite this, the licensee continued to consider the turbine bypass system as available in their plant risk assessment.

The turbine bypass system design at Grand Gulf Nuclear Station is to ensure, in part, that main steam can be bypassed, at a certain capacity, around the turbine to the main condenser under both fast and slow pressurization events. Upon a turbine trip, the main steam line will pressurize due to the rapid closure of the turbine stop and control valves. This pressure transient is mitigated by the turbine bypass system by relieving that pressure directly to the condenser. Additionally, during slow pressurization events, such as a loss of feedwater heating or a control rod error event, the turbine bypass valves open to relieve excess pressure in the main steam line. As part of the Grand Gulf Nuclear Station extended power uprate in the early 2010's, the licensee added turbine bypass system technical specification requirements to its license to assure protection against those events which credit operation of the turbine bypass system (e.g., slow pressurization events). The monthly surveillance requirement for the turbine bypass valves helps to provide assurance the valves will remain capable of completing their design function.

Procedure EN-OP-115, "Conduct of Operations," Section 5.2, "Conservative Decision Making," step 2, requires the station to "ensure nuclear and industrial safety is maintained at the forefront of all decisions."

In the case of Grand Gulf Nuclear Station deciding to discontinue the monthly surveillance testing of the turbine bypass valves, and contrary to Procedure EN-OP-115, the licensee did not consider the full extent of the design basis and the impact this decision would have on the reliability of the bypass valves. Instead, the licensee made the decision because, in part, technical specifications allowed for it. The nonconservative decision resulted in an increased likelihood that a reactor scram event could be complicated due to the potential negative impact on reliability of the bypass valves.

Corrective Actions: The licensee entered this concern into their corrective action program as Condition Report CR-GGN-2021-06403. The licensee also restarted the monthly surveillance testing of the turbine bypass valves.

Corrective Action Reference: Condition Report CR-GGN-2021-06403

Performance Assessment:

Performance Deficiency: The failure to conservatively make decisions as required by Procedure EN-OP-115, "Conduct of Operations," was 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 Initiating Events cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the decision to discontinue the monthly surveillance negatively impacted the reliability of the turbine bypass valves and thus the likelihood of the plant experiencing a complicated response to a reactor scram event.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Utilizing Exhibit 1 of Appendix A, the inspectors screened the finding as

having very low safety significance (Green), in part because the finding did not cause a trip nor a loss of mitigation equipment.

Cross-Cutting Aspect: H.14 - Conservative Bias: Individuals use decision making-practices that emphasize prudent choices over those that are simply allowable. A proposed action is determined to be safe in order to proceed, rather than unsafe in order to stop. The licensee failed to make a conservative decision in accordance with the Procedure EN-OP-115 process because the licensee lacked a conservative bias. The licensee's decision making did not emphasize prudent choices, which in this case would have been to continue performing the surveillance despite a manageable, nonconforming condition.

Enforcement: The inspectors did not identify a violation of regulatory requirements associated with this finding.

Failure to Follow the Operability Determination Process

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-03 Open/Closed	[H.12] - Avoid Complacency	71111.15

An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when the licensee failed to follow operability determination process procedures as prescribed in Station Procedure EN-OP-104, "Operability Determination Process," Revision 16, and Procedure EN-LI-108, "Event Notification and Report," Revision 19. Specifically, the licensee failed to follow the operability determination process when evaluating a degraded condition on the reactor core isolation cooling room cooler; when evaluating a degraded medium energy line break condition in the Division 1 diesel generator room; and when evaluating an external flood concern that could affect safety-related switchgear in the control building.

Description: The first example was associated with a degraded condition on the reactor core isolation cooling (RCIC) room cooler. On June 23, 2021, during a post maintenance test, the licensee identified elevated vibrations on the RCIC room cooler that, when further investigated, were found to be a result of a loose structural mounting bolt. The licensee initially screened the condition as operable because the elevated vibrations were not indicative of any imminent failure mechanism. Following review of this operability evaluation, the inspectors identified that the licensee failed to address the cause of the elevated vibrations, which was the loose structural bolt, and how a loose structural bolt could impact seismic qualification of the room cooler, thus affecting RCIC operability. After discussing this concern with the licensee, the licensee agreed seismic qualification should have been addressed, particularly for past operability, because the degraded condition had already been corrected (i.e., the loose bolt was subsequently tightened to specification, and resulting room cooler vibrations returned to expected levels). The licensee conducted a past operability evaluation, and the inspectors noted that it vaguely touched on how RCIC could perform its safety function if the room cooler was nonfunctional. As a result, the inspectors probed into the past operability evaluation more and discovered that the justification for past operability was incomplete. The licensee did not fully evaluate the mission time of the RCIC system. The inspectors noted these additional discrepancies to the licensee, and the licensee agreed that the past operability evaluation was insufficient and that they would re-do the evaluation to completely and accurately evaluate the degraded condition with regard to the current licensing basis (CLB). This example demonstrated the licensee's failure to follow their

operability determination process with respect to identifying the CLB of the affected component and assessing all aspects of the degraded condition against the CLB.

The second example was associated with a degraded condition in the Division 1 diesel generator room regarding a leaking domestic water pipe. On July 25, 2021, the licensee identified calcium buildup on a domestic water pipe in the Division 1 diesel generator room. Further investigation into this condition revealed a pin-hole leak in the pipe. The licensee initially screened the condition as operable because the condition was associated only with the domestic water line which would have no impact on the diesel generator performing its safety function. The inspectors identified from the Updated Final Safety Analysis Report (UFSAR) that all lines in the diesel generator rooms were not required to be evaluated for medium energy line break (MELB) because all pipes were shown to have low enough stresses such that MELB would not be a concern. However, the inspectors identified that this leaking domestic water pipe was a nonconforming condition. As a result, the inspectors questioned the licensee's operability evaluation from an internal flooding/spraying perspective, assuming the pipe would fail during an event due to the degraded, nonconforming condition. The licensee conducted another operability evaluation that initially only addressed flooding, and the inspectors determined that the flooding aspect was not adequately addressed. The licensee assumed the nonsafety-related sump pump in the Division 1 diesel generator room would function to mitigate the concern of internal flooding. However, the inspectors noted that the sump pump would not function assuming a loss of offsite power because it did not have a Class 1E power source. As a result, the licensee re-evaluated the degraded, nonconforming condition assuming no credit for the nonsafety-related sump pump and further evaluated the effects of spray on components. Upon review of this revised operability evaluation, the inspectors noted that the diesel combustion air intake filter was not clearly evaluated, and that additional clarification would be needed to determine whether this component would remain unaffected by spray. This example demonstrated the licensee's failure to follow their operability determination process to appropriately evaluate a nonconforming condition.

The third example was associated with the licensee's external flood mitigation approach. During review of the licensee's external flood mitigation procedures, the NRC identified that the licensee's trigger point for installing sandbags was inadequate. The inspectors identified that the installation of sandbags would not be initiated by procedure sufficiently ahead of a probable maximum precipitation event, which would ultimately result in consequential flooding of various buildings in the protected area. As a result, the licensee conducted an operability evaluation for all areas/components potentially affected by external consequential flooding. In the control building, the licensee evaluated control building components (i.e., control room ventilation, emergency switchgear, etc.) as operable partly because of reliance on floor drains that would otherwise direct flood waters to the 93-foot elevation sumps. Upon review, the inspectors identified that the crediting of the floor drains was an unvalidated assumption. Upon direct inspection, the inspectors identified a severely clogged drain that engineers credited in the operability evaluation. The inspectors questioned the condition of the drain lines because the drains were not included in any PM program. The inspectors identified that the assumption that the drain lines were clear was not documented as an assumption as required by Procedure EN-OP-104, "Operability Determination Process," Revision 16, Attachment 5, Step 4.0. Additionally, the licensee identified the need to test the drains to validate the assumptions. This drainage test met the definition of a compensatory measure by Procedure EN-OP-104 and thus was required to be discussed and evaluated by Attachment 5, Step 8.0. Further, Section 8.5, step 3 of Procedure EN-OP-104 required that "if future testing is planned, then ensure a corrective action is issued to review the results

versus the assumptions in the operability evaluation to determine if there is any impact on the operability determination or to determine if the operability evaluation requires updating.” Section 8.5, step 4 required that “if the operability is based on the use or availability of other equipment then validate that the equipment is capable of performing the function utilized in the evaluation...” The inspectors noted that the licensee did not issue a corrective action to review the results of the drainage test, nor did they validate that the floor drains were capable of performing their function to drain water from the safety-related areas in the control building.

Procedure EN-OP-104, Section 8.2, step 1, requires the licensee to confirm the existence of a degraded or nonconforming condition for technical specification structures, systems, and components (SSC). Step 1.c requires the licensee to review technical specification and CLB documents to determine SSC specified safety functions. Step 1.d requires the licensee to determine the impact of the degraded or nonconforming condition on the technical specification SSC or the specified safety function.

Station Procedure EN-LI-108, “Event Notification and Report,” Section 3.0, step 18, defines Past Operability Evaluation and states that the basic concepts supplied in Procedure EN-OP-104 are applicable to reaching a determination on past operability.

In each initial operability evaluation and past operability evaluation example described above, the licensee did not fully understand degraded, nonconforming conditions, did not fully understand the CLB of safety-related components, and did not fully determine the impact of the degraded or nonconforming condition on the SSC.

Corrective Actions: In each example, the licensee took corrective actions to re-evaluate NRC-identified concerns with the operability evaluations. For the domestic water leak inside the Division 1 diesel generator room, the licensee isolated the medium energy line such that flooding and spraying would no longer be a concern. For the RCIC room cooler loose bolt issue, the licensee took action to tighten the loose bolt and re-evaluate past operability as identified by the NRC. For the external flood concerns, the licensee cleaned the floor drains and established a plan for testing of the floor drains to validate operability assumptions.

Corrective Action References: Condition Reports CR-GGN-2021-04848, CR-GGN-2021-04896, CR-GGN-2021-05972, CR-GGN-2021-05700, CR-GGN-2021-05758, CR-GGN-2021-06420, CR-GGN-2021-06950, CR-GGN-2021-06232

Performance Assessment:

Performance Deficiency: The failure to follow the operability determination process as defined by Procedure EN-OP-104 and Procedure EN-LI-108 was a performance deficiency. Specifically, in each example, the licensee did not confirm the existence of a degraded or nonconforming condition (Procedure EN-OP-104, Step 8.2.1), the licensee did not review the current licensing basis documents adequately to determine the SSC specified safety function (Procedure EN-OP-104, Step 8.2.1.c), and the licensee did not determine the impact of the degraded or nonconforming condition on the technical specification SSC or the specified safety function (Procedure EN-OP-104, Step 8.2.1.d). In examples where the licensee conducted past operability evaluations, per Procedure EN-LI-108, the same basic concepts supplied in Procedure EN-OP-104 for reaching determinations on operability were applicable (Procedure EN-LI-108, Step 3.0.18) and were not followed by the licensee.

Screening: The inspectors determined the performance deficiency was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety

concern. Specifically, if the licensee continues to not follow their operability determination process, they could incorrectly believe a system is operable when it is not, which could lead to violations of technical specifications and potential losses of safety functions.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined that the finding was of very low safety significance (Green) because, in each example, the degraded condition did not represent a loss of a probabilistic risk assessment function in any Exhibit 2.A scenario. In each case, the operability evaluation, when conducted correctly, ultimately showed the mitigating system to be operable.

Cross-Cutting Aspect: H.12 - Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals implement appropriate error reduction tools. In each example, the inspectors identified that complacent behaviors were exhibited by the station.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. The licensee established Procedure EN-OP-104, "Operability Determination Process," Revision 16 and Procedure EN-LI-108, "Event Notification and Report," Revision 19 to meet this requirement.

Contrary to the above, from June 23, 2021 through August 13, 2021, the licensee failed to accomplish activities affecting quality in accordance with procedures. Specifically, the licensee failed to follow the operability determination process as prescribed in Procedure EN-OP-104 and Procedure EN-LI-108 to adequately evaluate degraded conditions associated with a RCIC room cooler loose bolt, a domestic water leak in the Division 1 diesel generator room, and an external flood mitigation issue. In each case, the failure to follow the operability determination procedures affected the quality of safety-related structures, systems, or components because the licensee failed to address degraded, nonconforming issues with the applicable structures, systems, or components.

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

Failure to Identify Condition Adverse to Quality Associated with Jet Pump Flow Indications			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000416/2021003-04 Open/Closed	[P.2] - Evaluation	71111.15
An NRC-identified, Green finding and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified when the licensee failed to identify a condition adverse to quality associated with inaccurate jet pump flow instrumentation. Specifically, the licensee failed to identify that the main control room total core flow instrumentation was indicating high, which had the potential to impact technical specification surveillance requirements and power-to-flow map location determinations.			

Description: On January 25, 2021, the licensee completed post refueling outage recirculation system flow instrumentation calibration, Procedure 17-S-02-5, "Post Refueling Recirculation System Flow Instrumentation Calibration," Revision 12, under Work Order 52893379. The purpose of this procedure was to verify correct calibration of installed recirculation system flow instrumentation including signals to the plant data system. After performance of the work order, reactor engineering personnel determined gain adjustment factors for the jet pump summers K611A and K611B were out of tolerance. Following further investigation, on July 29, 2021, the licensee documented in Condition Report CR-GGN-2021-05802 that multiple conversion calculations in the procedure were incorrect and the procedural guidance was unclear. The licensee determined that these issues resulted in the wrong data for jet pump flow being used to calibrate K611A and K611B. Additionally, the licensee determined that the core flow signal from the jet pump summers to the core monitoring software was 1.95 [Mlbm/hr] higher than actual core flow (a difference of approximately two percent of rated flow) and there was an adverse effect on thermal limits generated by the core monitoring software to satisfy technical specification Limiting Condition for Operation 3.2.2. In response to this issue, the licensee applied an administrative penalty of 0.97 to the applicable thermal limit under Standing Order 21-015, "Administrative Limit for MFLCPR," Revision 0.

The inspectors reviewed the operability determination in Condition Report CR-GGN-2021-05802. The inspectors noted Drawing M-10788, Revision 1, depicted that the signal from K611A and K611B supplied several core flow indications on main control room panel 680 and that the licensee's operability determination did not address the impact of control room indications being affected by the signal from the jet pump summers. After discussions with operations personnel, the inspectors determined that main control room panel 680 core flow indications were required for surveillance activities and power-to-flow plots for plant operating procedures. The inspectors raised a concern with the licensee that higher than actual flow indication on main control panel 680 could have an adverse effect on surveillance activities and operator response during abnormal operating occurrences, and that the issue represented a condition adverse to quality not yet dispositioned in the corrective action program. The inspectors also noted that the licensee's past operability evaluation did not cover a 3-year period in order to ensure compliance with the reporting requirements of 10 CFR 50.72 and 50.73. The licensee documented the inspectors' concerns in Condition Report CR-GGN-2021-06351.

Corrective Actions: The licensee created Standing Order 21-018, "Total Core Flow Indication," Revision 1. This standing order provided operators the ability to calculate total core flow using reactor recirculation drive flow indications that are not impacted by the calibration of the jet pump instrumentation. Also, a procedure revision for Procedure 17-S-02-5 was in progress to correct conversion calculations and unclear guidance prior to the re-performance of Procedure 17-S-02-5 to re-calibrate K611A and K611B scheduled for December 2021.

Corrective Action References: Condition Reports CR-GGN-2021-05802 and CR-GGN-2021-06351

Performance Assessment:

Performance Deficiency: The failure to identify a condition adverse to quality in accordance with the licensee's corrective action program, as specified by Procedure EN-LI-102, "Corrective Action Program," was a performance deficiency. Specifically, the licensee failed to identify that main control room panel 680 total core flow instrumentation was indicating

high due to a calibration error and had the potential to impact the performance of technical specification surveillance requirements and power to flow map location determinations.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Configuration Control attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the failure to fully identify, evaluate, and correct the extent of condition associated with the jet pump flow summer calibration issue resulted in a condition where operators were unknowingly using inaccurate jet pump flow indications for the conduct of technical specification surveillances and for the conduct of abnormal operating procedures, had these abnormal operating procedures needed to be used. This impacted reasonable assurance that fuel cladding functionality, which is directly impacted by jet pump loop flows, would protect the public from releases caused by accidents.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609 Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Utilizing Inspection Manual Chapter (IMC) 0609, Attachment 4, "Initial Characterization of Findings," the inspectors determined that the Barrier Integrity cornerstone was affected by the performance deficiency. Utilizing IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3, the inspectors determined that the finding was of very low safety significance (Green) because it did not challenge fuel cladding integrity by unintentionally adding positive reactivity; there was no mismanagement of reactivity, foreign material exclusion, or chemistry controls; and there were no fuel handling errors.

Cross-Cutting Aspect: P.2 - Evaluation: The organization thoroughly evaluates issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. In this case, when the licensee identified the original calibration failure, while they did identify one resultant issue, they failed to thoroughly evaluate the underlying calibration issue in order to identify all the other resultant issues.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures be established to ensure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified.

Contrary to the above, from January 25, 2021, to August 18, 2021, the licensee failed to identify a condition adverse to quality. Specifically, the licensee failed to identify jet pump flow instrumentation, a system subject to the requirements of Appendix B, was indicating inaccurately due to a calibration error and had the potential to impact technical specification surveillance requirements and abnormal operating procedure requirements.

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

Failure to Perform Maintenance in Accordance with Work Instructions			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000416/2021003-05 Open/Closed	[H.9] - Training	71111.19
<p>An NRC-identified, Green finding and associated non-cited violation of Technical Specification 5.4.1.a was identified when the licensee failed to perform maintenance in accordance with documented work instructions. Specifically, the licensee marked as “not applicable” pertinent steps in Work Order 52877238 to replace the watertight flood seals on door SZ10OCT5, which was contrary to both Procedure EN-HU-106, “Procedure and Work Instruction Use and Adherence,” Revision 8, and the corrective actions to prevent recurrence to address the significant condition adverse to quality documented in Condition Report CR-GGN-2011-07687.</p> <p><u>Description:</u> In response to multiple non-cited violations related to degraded probable maximum precipitation (PMP) door seals, the licensee initiated Condition Report (CR) CR-GGN-2011-07687 on October 28, 2011, classified the CR as a significant condition adverse to quality, and performed an associated root cause evaluation. Specifically, the licensee initiated the CR as a result of the issues described in non-cited violation (NCV) 05000416/2011005-01 (ADAMS Accession No. ML120330608) for the failure to perform adequate inspections of PMP door seals.</p> <p>To correct the identified root cause, the licensee created Corrective Action No. 20 (CA-20) and classified CA-20 as a corrective action to prevent recurrence. As part of CA-20, the licensee determined that the design of 9 of the 11 PMP doors was inadequate to ensure a sufficiently leak tight seal to keep external flood waters from entering safety-related portions of the plant. In response, the licensee developed a strategy to deploy sandbags to those nine PMP doors. Also, as part of CA-20, the licensee determined that doors SZ10OCT5 and 1X701D301 did not need sandbags because both doors were permanently locked and the PMP seals “are replaced on a five-year frequency and that changeout is adequate to mitigate any flood hazards.” Both doors SZ10OCT5 and 1X701D301 served a safety-related function to protect safety-related equipment in the control building and emergency diesel generator building, respectively.</p> <p>The inspectors reviewed the last performance of the seal replacement for both doors and identified that the seal for door SZ10OCT5 was not replaced as documented in safety-related Work Order (WO) 52877238. The instructions in WO 52877238 explicitly required the seals to be replaced and did not include any provisions to inspect the seals and replace only if necessary. Maintenance personnel performing the work made pen-and-ink changes to the work instructions to allow for them to inspect the seal and replace it if they deemed it necessary. The steps to replace the seal were subsequently marked “N/A,” the seal was not replaced, and the work order was closed. The preventive maintenance (PM) task was credited as being performed on April 2, 2021.</p> <p>Licensee Procedure EN-HU-106, “Procedure and Work Instruction Use and Adherence,” Revision 8, Section 5.1.3, prohibited marking a step “N/A” if doing so would change the intent. The inspectors concluded, and the licensee agreed, that the intent of the work instructions for WO 52877238 was to change the door seal regardless of its as-found condition. Therefore, marking WO steps to replace the seal as “N/A” was not appropriate.</p>			

Because the PM task had a 6-year frequency with a 25 percent allowable grace period, as opposed to 5 years as described in CA-20 of Condition Report CR-GGN-2011-07687, the inspectors determined that the next time the PM task could have been completed would have been as late as 2028. The inspectors verified that the seal for door SZ10OCT5 was last replaced on April 11, 2016, under WO 52593467. The inspectors questioned the licensee if they had an evaluation justifying a change to the replacement frequency described in CA-20 of Condition Report CR-GGN-2011-00767, but none was available. The inspectors noted that the due date (including an allowed grace period) to change the seal under the existing PM task frequency of 6 years was July 2022.

Corrective Actions: Licensee corrective actions included reinforcing the requirements for marking a procedure step as "N/A" in accordance with Procedure EN-HU-106 with the maintenance department, revoking the PM completion credit of WO 52877238, and generating WO 00565189 to replace the seal in December 2021, prior to the scheduled late date. The licensee also revised the PM work order instructions to include a reference that replacement of the seal is a requirement from Condition Report CR-GGN-2011-07687 regardless of the as-found condition and changed the frequency to every 5 years.

Corrective Action Reference: Condition Report CR-GGN-2021-05272.

Performance Assessment:

Performance Deficiency: The failure to replace the door seal, as required by WO 52877238, was contrary to licensee Procedure EN-HU-106, Revision 8, and was a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Protection Against External Factors attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee relied upon the door seal to be replaced every 5 years as part of their flood mitigation strategy and did not have any compensatory measures in place that would have addressed a failure of the door seal during a flood.

Significance: The inspectors assessed the significance of the finding using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors determined that the performance deficiency affected only the External Event Mitigating Systems. The inspectors determined that the finding was of very low safety significance (Green) because the door seal would still be replaced within the correct periodicity of 5 years plus 25 percent float (6 years 3 months) and because direct inspections of the seal did not identify degradation that would question the ability of the seals to perform their intended function. Therefore, the failure to replace the seal on April 2021 did not involve either the loss or degradation of equipment specifically designed to mitigate a flooding initiating event for greater than 14 days.

Cross-Cutting Aspect: H.9 - Training: The organization provides training and ensures knowledge transfer to maintain a knowledgeable, technically competent workforce and instill nuclear safety values. The inspectors determined that this finding had a cross-cutting aspect in the area of Human Performance – Training because the maintenance craft performing the work were unaware of the requirements and limitations associated with marking steps as "N/A" in work instructions.

Enforcement:

Violation: Technical Specification 5.4.1.a requires, in part, that written procedures shall be implemented covering “the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978.” Regulatory Guide 1.33, Revision 2, Appendix A, Section 9.a requires, in part, that maintenance that can affect the performance of safety-related equipment should be properly performed in accordance with written procedures and documented instructions appropriate to the circumstances. Safety-related Work Order (WO) 52877238 required PMP seal replacement for door SZ10OCT5. Procedure EN-HU-106, “Procedure and Work Instruction Use and Adherence,” Revision 8, Section 5.1.3, prohibited marking a step “N/A” if doing so would change the intent.

Contrary to the above, on or about April 2, 2021, the licensee failed to properly perform maintenance that could affect the performance of safety-related equipment in accordance with written procedures and documented instructions appropriate to the circumstances. Specifically, workers failed to follow Procedure EN-HU-106, Revision 8, when they changed the intent of the work instructions by marking the steps to replace the PMP seal for door SZ10OCT5 in Work Order 52877238 as “N/A.” Additionally, the workers failed to replace the PMP seal contrary to the work instructions for Work Order 52877238.

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

Licensee-Identified Non-Cited Violation

71111.11B

This violation of very low safety significance was identified by the licensee and has been entered into the licensee’s corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Violation: The inspectors reviewed a licensee-identified, Severity Level IV, non-cited violation of 10 CFR 55.21, “Medical Examination,” for the licensee’s failure to ensure that a medical examination by a physician was conducted every 2 years for a licensed senior operator.

Title 10 CFR 55.21 requires, in part, that a licensee shall have a medical examination by a physician every two years. Contrary to the above, a licensed senior operator failed to meet the medical examination requirements after June 19, 2021, which was required to determine satisfaction of 10 CFR 55.33(a)(1) requirements. Specifically, the licensed senior operator exceeded the two-year medical examination periodicity from June 19, 2021, to August 5, 2021. The senior operator did not perform any licensed duties during the period the medical examination was delinquent. As a corrective action, the licensee has conducted the required medical examination for the senior operator on August 5, 2021. This issue was entered into the licensee’s corrective action program as Condition Report 2021-05917.

Significance/Severity: It is necessary to address this violation using traditional enforcement because it had the potential to impact the NRC’s ability perform its regulatory function. Using the NRC Enforcement Policy Section 6.4.d.1.(c), dated January 15, 2020, the violation was determined to be a Severity Level IV violation because the licensed senior operator did not perform any licensed duties during the delinquent medical examination period.

Corrective Action Reference: Condition Report CR-GGN-2021-05917

EXIT MEETINGS AND DEBRIEFS

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

- On August 19, 2021, the inspectors presented the technical debrief for the biennial requalification inspection results to Mr. R. Franssen, Site Vice President, and other members of the licensee staff.
- On September 9, 2021, the inspectors presented the biennial requalification inspection results to Mr. B. Wertz, General Manager Plant Operations, and other members of the licensee staff.
- On September 16, 2021, the inspectors presented the independent spent fuel storage installation inspection results to Mr. R. Franssen, Site Vice President, and other members of the licensee staff.
- On September 26, 2021, the inspectors presented the cyber security full implementation problem identification and resolution inspection results to Mr. J. Hardy, Regulatory Assurance Manager, and other members of the licensee staff.
- On October 7, 2021, the inspectors presented the integrated inspection results to Mr. R. Franssen, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
60855	Corrective Action Documents Resulting from Inspection	CR-GGN-	2021-07100	
	Corrective Action Documents Resulting from Inspection	CR-HQN-	2021-01555	
60855	Engineering Changes	ECO-1021-120	Final Basket Length May be Attained by Adjusting the Height	1
	Engineering Changes	ECO-1021-134	Shims Shall be Coated to Achieve the Emissivity Values	1
	Engineering Changes	ECO-1021-137	Revision to Licensing Drawing 7195R13 (MPC-68M Fuel Basket Assembly)	0
	Engineering Changes	ECO-1021-145	Changes to MPC Enclosure Vessel Licensing Drawing 3923R40	0
	Engineering Changes	ECO-1021-147	Revise and Clarify Basket Flow Holes Requirements	0
	Engineering Changes	ECO-1021-150	Modified Lid Weld Prep and Lid-to-Shell Weld Shim	0
60855	Engineering Evaluations	ER-GG-2003-0018-033	ISFSI Protected Area Extension (Northern Perimeter) Electrical Modifications	0
60855	Miscellaneous	GRAND GULF NUCLEAR STATION 10 CFR 72.212 Report	Grand Gulf Nuclear Station 10 CFR 72.212 Report	11
60855	Miscellaneous	HI-2002444	Holtec International Final Safety Analysis Report for the HI-STORM 100 Cask System	13
60855	Self-Assessments	QA-20-2020-GGN-001	Independent Spent Fuel Storage Installations (ISFSI) Audit Notification/Audit Plan Memorandum	3
71111.01	Corrective Action	CR-GGN-	2011-07687, 2016-07945, 2016-08294, 2016-08295, 2016-	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents		08329, 2016-09758, 2018-12990, 2018-13006, 2018-13062, 2021-04399, 2021-04400, 2021-04560, 2021-05572, 2021-05576,	
	Engineering Changes	EC 41518	New Strategy for Protecting PMP Doors from PMP Flood	0
	Procedures	05-1-02-VI-1	Flooding	116
		05-1-02-VI-2	Hurricanes, Tornados, and Severe Weather	140
		EN-FAP-EP-010	Severe Weather Response	8
71111.04	Work Orders	WO	336989, 52696486, 52887428, 52938410-10, 52959020,	
	Corrective Action Documents	CR-GGN-	2011-07687, 2016-07945, 2016-08294, 2016-08295, 2016-08329, 2016-09758, 2018-12990, 2018-13006, 2018-13062, 2021-04399, 2021-04400, 2021-04560, 2021-05802, 2021-06351	
	Drawings	M-1078B	Reactor Recirculation System	14
	Engineering Changes	EC 41518	New Strategy from Protecting PMP Doors from PMP Flood	0
	Miscellaneous	Purchase Contract No. 10359911	Diesel Fuel Oil Deliveries	01/19/2015
	Procedures	05-1-02-VI-1	Flooding	116
	Procedures	05-1-02-VI-2	Hurricanes, Tornados, and Severe Weather	140
71111.04	Procedures	06-RE-1B33-D-0001	Jet Pump Functional Test	117
	Procedures	06-TE-1000-V-0001	Culvert No. 1 Embankment Stability/Survey	101
		17-S-02-5	Post Refueling Recirculation System Flow Instrumentation Calibration	12
		EN-FAP-EP-010	Severe Weather Response	8
	Work Orders	WO	336989, 558682, 52696486, 52887428, 52893379, 52959020	
71111.05	Corrective Action Documents	CR-GGN-	2021-04516, 2021-05054, 2021-05830, 2021-05831	
	Procedures	EN-DC-127	Control of Hot Work and Ignition Sources	21
		EN-DC-330	Fire Protection Program	8
		EN-OP-139	Fire Watch Program	6

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.06	Work Orders	WO	52976419	
71111.11B	Calibration Records		Auto Turbine Trip and Reactor Scram at 66% Power	07/07/2020
			Manual Reactor Scram at 87% Power	08/13/2020
			Turbine Trip Due to Low PW Tank Level at 100% Power	12/11/2020
			Turbine Trip Due to Low Flow PW Bushing at 83% Power	11/14/2020
			Simultaneous Trip of All Feedwater Pumps	10/08/2020
			Manual Scram	10/08/2020
	Corrective Action Documents	CR-GGN-	2019-02799, 2019-09534, 2019-10552, 2020-00076, 2020-07121, 2020-09875, 2020-10472, 2021-00869, 2021-03073, 2021-05321, 2021-05484, 2021-05917, 2021-06363	
		GJPM-OPS-E1204	Startup Suppression Pool Cooling	4
	Engineering Changes		Summary of Installed Engineering Changes	07/26/2021
	Miscellaneous		Summary of Close Simulator Discrepancies	07/26/2021
			Simulator Discrepancy Report	03/24/2021
			Cycle 23 Core Reload Test	09/23/2020
			Written Exam Overlap Summary	
			Sample Plan RO1	
			Sample Plan SRO1	
			Licensed Operator Medical Records (5)	08/18/2021
			19-21 Cycle 12 Biennial Operator Examinations B Shift Schedule	
			2021 Scenario Selections for Exams	
			2021 Annual OPS Crew JPM Performance and Selection	
			2020 Scenario Selections for Exams	
			2021 LOR RO Test 1	
			2021 LOR SRO Test 1	
			Week 1 LOR Annual Exam Status Report	
		197959	G-OPS Licensed Operator Requalification Report	08/19/2021
		GJPM-OPS-C6125	Operate RCIC from the Remote Shutdown Panel	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		GJPM-OPS-C7106	Reactor Manual Scram Switch Test	2
		GJPM-OPS-C7107	Transfer RPS B to Normal Power Source and RPS A to Alternate Power Source	0
		GJPM-OPS-E5105	Start RCIC for Retest	6
		GJPM-OPS-EOP18	Perform EP Attachment 18	0
		GSES-LOR-AEX41	Simulator Scenario 41	11/03/2020
		GSES-LOR-AEX42	Simulator Scenario 42	11/03/2020
		GSES-LOR-AEX44	Simulator Scenario 44	1
		GSES-LOR-AEX48	Simulator Scenario 48	1
		GSES-LOR-AEX50	Simulator Scenario 50	1
		GSES-LOR-AEX52	Simulator Scenario 52	10/22/2018
		GSES-LOR-AEX64	Simulator Scenario 64	2
		GSES-LOR-AEX69	Simulator Scenario 69	07/15/2019
		LM-0311	Qualification Matrix	08/19/2021
		NRC Form 398	Personal Qualification Statement	
		TQ4-201-IM05	Remedial Training Plan - Off Shift Crew	11/19/2020
		TQ4-201-IM05	Remedial Training Plan - SRO	10/20/2020
		TQF-201-IM05	Remedial Training Plan	13
	Procedures	ANS-3.5-2009	Nuclear Power Plant Simulators for Use in Operator Training and Examination	09/04/2009
		EN-TQ-100	Operations Training Program Description	0
		EN-TQ-201	Systematic Approach to Training Process	24
		EN-TQ-201-04	SAT - Implementation Phase	11

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EN-TQ-202	Simulator Configuration Control	11
		EN-TQ-210	Conduct of Simulator Training	16
		EN-TQ-212	Conduct of Training and Qualification	20
		EN-TQ-217	Examination Security	11
		TE-31	Simulator Exam Security	7
	Work Orders	WT-WTGGN-2020-00038		
71111.12	Corrective Action Documents	CR-GGN-	2020-09166, 2021-05844, 2021-05846, 2021-06403, 2021-06581, 2021-06582	
		CR-HQS-	2021-00092	
	Procedures	EN-DC-203	Maintenance Rule Program	4
		EN-DC-204	Maintenance Rule Scope and Basis	4
		EN-DC-205	Maintenance Rule Monitoring	7
		EN-DC-206	Maintenance Rule (a)(1) Process	4
71111.13	Procedures	EN-OP-119	Protected Equipment Postings	14
71111.15	Corrective Action Documents	CR-GGN-	2019-09182, 2020-09166, 2021-04848, 2021-04896, 2021-04909, 2021-05663, 2021-05758, 2021-05802, 2021-05820, 2021-05972, 2021-06351, 2021-06420, 2021-06950, 2021-06952	
	Corrective Action Documents Resulting from Inspection	CR-GGN-2021-06351	NRC Identified Concerns Regarding Jet Pump Instrument Calibration and Core Flow Indication	08/18/2021
		CR-GGN-2021-06420	NRC Identified Concern: Moderate Energy Line Break Evaluation for Diesel Generator Building Does Not Include Domestic Water	08/20/2021
	Engineering Changes	EC 72780	Turbine Control Protection System	
		EC 87858	EC to Demonstrate Continued Structural Integrity of Div. I Emergency Diesel Generator Jacket Water Cooler	0
	Miscellaneous		NDE Report BOP-UT-19-022	
			NDE Report BOP-VE-20-179	
			NDE Report BOP-UT-21-004	
			NDE Report BOP-UT-21-005	
		22A6084	Turbine Generator and Steam Bypass Systems	
	Procedures	01-S-18-6	Risk Assessment of Maintenance Activities	24

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		06-IC-1N32-R-0001-01	Main Turbine Bypass Valve System Functional Test	103
		06-OP-1N32-M-0002	Turbine Bypass Stop and Control Valve Test	103
		17-S-03-30	Technical Specification Surveillance Frequency List	3
	Work Orders	WO	501781-15, 522391, 544666, 553495, 52909827, 52931945, 52934040, 52936760	
71111.19	Corrective Action Documents	CR-GGN-	2011-07687, 2019-04161, 2019-04659, 2021-05272, 2021-06274, 2021-06401, 2021-06413, 2021-06710, 2021-06911, 2021-06912, 2021-07032	
71111.19	Corrective Action Documents Resulting from Inspection	CR-GGN-2021-06401	NRC Identified Concern: Incorrect Fasteners Found Installed on the Replacement Floating End for the Division I DG in Material Staging Area	08/19/2021
	Drawings	E-1183-06	Control Schematic HPCS Minimum Flow Valve	
	Miscellaneous	CN 90-0433	Field Run Dimensions for Annubar Support	0
	Procedures	06-OP-1P75-M-0001	Standby Diesel Generator 11 Functional Test	148
		EN-HU-106	Procedure and Work Instruction Use and Adherence	8
		EN-MA-107	Post Maintenance Testing	0
	Work Orders	WO	519285, 527873, 538760, 538763, 567580, 52593467, 52877238, 52878585, 52878586, 52879069, 52884886, 52887654, 52888114, 52894198, 52905990, 52972412, 52972479	
71111.22	Drawings	E-1181	Schematic Diagram Residual Heat Removal System	
	Procedures	06-EL-1E12-Q-0002A	Containment Spray Channel A Time Delay Relay Calibration and Functional Test	101
	Work Orders	WO	52756936, 52973140, 52975457	
71114.06	Miscellaneous		Scenario GSES-LOR-2021CPE-2	1
71151	Miscellaneous		MS08 Technique Data Sheet for Periods July 1, 2020 – June 30, 2021	
			MS07 Technique Data Sheet for Periods July 1, 2020 – June 30, 2021	
			MS06 Technique Data Sheet for Periods July 1, 2020 –	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			June 30, 2021	
71152	Corrective Action Documents	CR-GGN-	2015-02580, 2019-00330, 2019-00710, 2019-03562, 2019-03902, 2019-03940, 2019-05538, 2019-05539, 2019-05653, 2020-00194, 2020-00727, 2021-02675, 2021-03872, 2021-03990, 2021-04307, 2021-06044	
	Miscellaneous	CVE-1999-0199		
		CVE-2020-12351		
		CVE-2020-15436		
		CVE-2020-15670		
		CVE-2020-1601		
		LO-ALO-2021-00033	Cyber Security Pre-NRC Cyber PI&R Inspection Assessment	04/15/2021
	Procedures	EN-FAP-IT-009	Nuclear Cyber Security Terms and Definitions	7
		EN-FAP-IT-104	SQA Program Administration and Management	6
		EN-FAP-IT-105	Computer System Walkdown	1
		EN-IT-103	Nuclear Cyber Security Program	15
		EN-IT-103-02	Cyber Security Periodic Activities	7
		EN-IT-103-03	Cyber Security Assessment	5
		EN-IT-103-03	Cyber Security Assessment Process	5
		EN-IT-103-04	Critical Digital Asset Technical Control Requirements	3
		EN-IT-103-05	CDA Access Control	1
		EN-IT-103-06	Audit & Accountability	1
		EN-IT-103-07	Cyber Security Physical Access	8
		EN-IT-103-08	Nuclear Cyber Incident Response	3
		EN-IT-103-09	System Hardening & Secure Configuration	1
		EN-IT-103-11	Administration of Cyber Security Portable Digital Media Program	3
		EN-IT-103-12	Cyber Security Configuration and Changes Management	3
		EN-IT-103-14	Vulnerability Management	2
		EN-IT-103-15	Cyber Security Procurement & Disposal Requirements	2
		EN-IT-103-16	Cyber Security Defensive Architecture	0
		EN-IT-107	IT Projects	7
		EN-TQ-131	Nuclear Cyber Security Training & Qualifications	2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders		528364, 551094	