



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

February 3, 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  
05000416/2020004

Dear Mr. Franssen:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Grand Gulf Nuclear Station. On January 13, 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.

No NRC-identified or self-revealing findings were identified during this inspection.

A licensee-identified violation which was determined to be of very low safety significance is 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 violation or the 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.

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,

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

Docket No. 05000416  
License No. NPF-29

Enclosure:  
As stated

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GRAND GULF NUCLEAR STATION – INTEGRATED INSPECTION  
REPORT 05000416/2020004 – DATED FEBRUARY 3, 2021

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**U.S. NUCLEAR REGULATORY COMMISSION**  
**Inspection Report**

Docket Number: 05000416

License Number: NPF-29

Report Number: 05000416/2020004

Enterprise Identifier: I-2020-004-0004

Licensee: Entergy Operations, Inc.

Facility: Grand Gulf Nuclear Station

Location: Port Gibson, MS

Inspection Dates: October 1, 2020, to December 31, 2020

Inspectors: D. Antonangeli, Health Physicist  
B. Baca, Health Physicist  
N. Greene, Senior Health Physicist  
M. Hayes, Operations Engineer  
S. Hedger, Emergency Preparedness Inspector  
J. O'Donnell, Senior Health Physicist  
E. Simpson, Health Physicist  
T. Steadham, Senior Resident Inspector  
M. Thomas, Senior Resident Inspector

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 71124.08.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## PLANT STATUS

Grand Gulf Nuclear Station, Unit 1, began this inspection period at 83 percent power. On November 6, 2020, a reactor scram occurred from 84 percent power following a sensed low primary water system coolant flow. This system provides cooling to components related to the main generator. Following modifications to the primary coolant flow instrument sensing lines and turbine control valve actuators, the unit was restarted on November 29, 2020. During startup, operators shutdown the plant from approximately 0 percent power on November 30, 2020, to conduct repairs on a condensate booster min flow valve, which had failed. Following repairs, the unit was restarted on December 2, 2020, and reached 98 percent power on December 6, 2020. On December 7, 2020, reactor power was reduced to 70 percent power for a rod pattern adjustment. On December 11, 2020, a reactor scram occurred following a low water level in the primary water system tank. The unit was restarted on December 12, 2020, following modifications to the primary water system. The unit was returned to 100 percent power on December 17, 2020, where it remained at or near 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 Disease 2019 (COVID-19), resident 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; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status;" 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 portions 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

### 71111.04 - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (4 Samples)

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

- (1) Division 2, 125 VDC lineup on October 19, 2020

- (2) Residual heat removal subsystem B during subsystem A testing on October 26, 2020
- (3) High pressure core spray partial alignment on November 9, 2020
- (4) Standby gas treatment system B alignment while the opposite train was undergoing maintenance on November 13, 2020

#### 71111.05 - Fire Protection

##### Fire Area Walkdown and Inspection Sample (IP Section 03.01) (3 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) Division 2 standby service water pump house on October 6, 2020
- (2) Outside control building, standby diesel generator building, fire pump house, and both standby service water pump houses, Fire Zone YARD, on October 6, 2020
- (3) Auxiliary building, Elevations 166 feet and 174 feet above main steam tunnel, Fire Zones 1A402 and 1A404, on December 10, 2020

#### 71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

##### Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered on November 9 through December 10, 2020.

#### 71111.13 - Maintenance Risk Assessments and Emergent Work Control

##### Risk Assessment and Management Sample (IP Section 03.01) (2 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) Condition Report CR-GGNS-2020-10382, equipment out of service model appears to be incorrect when removing standby service water inlet to residual heat removal heat exchanger valve from service on October 20, 2020
- (2) Maintenance risk assessment with moisture separator reheater drain tank level oscillations and primary water flow perturbations on December 11, 2020

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 03.01) (4 Samples)

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

- (1) Condition Report CR-GGNS-2020-10213, unexpected relay trip during Division 3 testing on October 5, 2020
- (2) Condition Report CR-GGNS-2020-12198, elevated drywell leakage and safety relief valve tailpipe weeping on December 29, 2020

- (3) Condition Report CR-GGNS-2020-12059, NRC-identified scaffolding within 2-inch rattle space of Division 2 emergency diesel generator on December 29, 2020
- (4) Condition Report CR-GGNS-2020-12062, overthrust condition with control room air conditioner service water return valve P41F189 on December 29, 2020

#### 71111.19 - Post-Maintenance Testing

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

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

- (1) Work Order 52894197, standby service water to residual heat removal heat exchanger A inlet valve test following maintenance on October 21, 2020
- (2) Work Order 543019, replace recirculation pump A suction temperature element on November 19, 2020
- (3) Work Order 553442, drywell cooler damper actuator rebuild on November 19, 2020
- (4) Work Order 549948, recirculation flow control valve A rotary variable differential transformer replacement on November 19, 2020
- (5) Work Order 550987, flush drywell cooler line on November 30, 2020

#### 71111.20 - Refueling and Other Outage Activities

##### Refueling/Other Outage Sample (IP Section 03.01) (2 Samples)

- (1) The inspectors evaluated the licensee's response to Forced Outage 23-03 from November 6, 2020, to December 3, 2020.
- (2) The inspectors evaluated the licensee's response to Forced Outage 23-04 from December 11, 2020, to December 13, 2020.

#### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

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

- (1) Work Order 52905300-01, Procedure 06-IC-1E31-A-1004, Attachment I, reactor core isolation cooling room high temperature calibration on October 19, 2020
- (2) Increased drywell unidentified leakage monitoring on December 21, 2020
- (3) Work Order 52935765, perform Procedure 06-OP-1P41-Q-0006-01, high pressure core spray service water pump and valve operability test on December 31, 2020

#### 71114.02 - Alert and Notification System Testing

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

- (1) The inspectors evaluated the maintenance and testing of the alert and notification system from November 3, 2018, to November 13, 2020.



#### 71114.03 - Emergency Response Organization Staffing and Augmentation System

##### Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the Emergency Preparedness Organization from November 3, 2018, to November 13, 2020. Inspectors also evaluated the licensee's ability to staff their emergency response facilities in accordance with emergency plan commitments.

#### 71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors evaluated the following emergency plan and emergency action level revisions:
  - Emergency Plan, Revision 79, submitted on October 29, 2019
  - Emergency Plan, Revision 81, submitted on November 30, 2020
  - Emergency Action Level bases document, submitted on November 30, 2020

In addition, the inspectors evaluated the 10 CFR 50.54(q) emergency plan change process and practices between November 3, 2018, and November 13, 2020. This involved review of licensee screening and evaluation documentation. The reviews of the emergency plan and emergency action level revisions, in addition to the change process documentation, do not constitute NRC approval.

#### 71114.05 - Maintenance of Emergency Preparedness

##### Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program between November 3, 2018, and November 13, 2020. The evaluation reviewed the conduct of drills and exercises, licensee audits and assessments, and the maintenance of equipment important to emergency preparedness.

#### 71114.06 - Drill Evaluation

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

- (1) Yellow team drill on October 28, 2020

## **RADIATION SAFETY**

#### 71124.05 - Radiation Monitoring Instrumentation

##### Walkdowns and Observations (IP Section 03.01) (10 Samples)

The inspectors evaluated the following radiation detection instrumentation during plant walkdowns:

- (1) Personnel contamination monitoring equipment at the plant 133 feet access control point: five Canberra ARGOS-5AB units
- (2) Personnel monitoring equipment at the plant 133 feet access control point: two Canberra GEM-5 units
- (3) Small article monitoring equipment at the plant 133 feet access control point: three Canberra Cronos-4 units
- (4) Plant area radiation monitor: auxiliary building sample station monitor 1D21K616
- (5) Plant area radiation monitor: hydrogen sample panel A, 1D21K618
- (6) Plant area process radiation monitor: fuel handling area 1D21K6124
- (7) Radiation monitoring equipment: CHP-CR-272, Ludlum Model 12 count-rate meter
- (8) Radiation monitoring equipment: CHP-DR-263, Ludlum Model 9-3 ion chamber
- (9) Radiation monitoring equipment: CHP-TEL-144, Mirion Telepole II
- (10) Radiation monitoring equipment: CHP-MF-136, Ludlum Model 12-4 (neutron) survey meter

#### Calibration and Testing Program (IP Section 03.02) (13 Samples)

The inspectors evaluated the calibration and testing of the following radiation detection instruments:

- (1) Ludlum Model 9-3, RBS-EPI-007, 11/17/2020
- (2) Eberline AMS-4, CHP-AMS-D067, 11/17/2020
- (3) RADeCO H-810 air sampler, CHP-ASA-027, 11/07/2019
- (4) Canberra Argos, ARGOS-012, 08/13/2020
- (5) Canberra Cronos, CRONOS-001, 09/02/2020
- (6) Canberra Gem-5, GEM-002, 07/07/2020
- (7) Main Steam Line High Radiation Monitor, 1D17-K610B, 05/19/2020
- (8) Main Steam Line High Radiation Monitor, 1D17-K610C, 07/17/2019
- (9) Containment High Range Radiation Monitor, 1D21K648A, 10/22/2019
- (10) Containment High Range Radiation Monitor, 1D21K648D, 04/25/2019
- (11) Radwaste Instrument Rack Area Radiation Monitor, 1D21K642, 04/24/2019
- (12) Solid Radwaste Area Radiation Monitor, 1D21K647, 02/05/2020
- (13) Standby Gas Treatment System B Ventilation System Particulate Iodine Noble Gas (SPING) Monitor, 1D17P024 and 1D17P025, 10/02/2020

#### Effluent Monitoring Calibration and Testing Program Sample (IP Sample 03.03) (2 Samples)

- (1) Work Order 52866647, Containment Building Vent Radiation Monitor, 1D17-K603, 02/06/2020
- (2) Work Order 52860275, Liquid Radwaste Effluent Radiation Monitor, SD17-K606, 01/16/2020

#### 71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

##### Walkdowns and Observations (IP Section 03.01) (4 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Unit 1 standby gas treatment system
- (2) Unit 1 off-gas and radwaste building ventilation system

- (3) Unit 1 turbine building ventilation system
- (4) Unit 1 liquid radwaste treatment system

#### Sampling and Analysis (IP Section 03.02) (3 Samples)

The inspectors evaluated effluent samples, sampling processes and compensatory samples, as available, for the following systems:

- (1) On November 17, 2020, the inspectors observed the weekly effluent sampling of particulate and iodine for the radwaste, turbine, and containment building ventilation systems using Procedure 06-CH-1D17-W-0017, "Gaseous Release Points, Iodine, Tritium, and Particulates."
- (2) On November 18, 2020, the inspectors observed the pre-release liquid effluent sampling of equipment drain sample tank A using Procedure 06-CH-SG17-P-0041, "Radwaste Pre-Release Analysis."
- (3) On November 19, 2020, the inspectors observed the turbine building monthly isotopic gas sampling using Procedure 06-CH-1D17-M-0005, "Building Ventilation Exhaust Gaseous Isotopic," and the turbine building monthly tritium sampling using Procedure 06-CH-1D17-M-0003, "Building Ventilation Gaseous Tritiums."

#### Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) Liquid Waste Batch Permits: 2018164, 2019040, 2019051, 2020001, 2020089, 2020148, 2020149
- (2) Continuous Gaseous Waste Permits: Containment Building Ventilation (2019012, 2019019); Fuel Handling Area Ventilation (2019020); Radwaste Building Ventilation (2018157, 2019036); Turbine Building Ventilation (2019017, 2019067)

#### Abnormal Discharges (IP Section 03.04) (1 Sample)

The inspectors evaluated the following abnormal discharges:

- (1) Turbine roof hatch release, December 5, 2019, through December 6, 2019; Condition Report CR-GGNS-2019-10085

#### 71124.07 - Radiological Environmental Monitoring Program

##### Environmental Monitoring Equipment and Sampling (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated environmental monitoring equipment and observed collection of environmental samples.

##### Radiological Environmental Monitoring Program (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the implementation of the licensee's radiological environmental monitoring program.

#### GPI Implementation (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's implementation of the Groundwater Protection Initiative program to identify incomplete or discontinued program elements.

#### 71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, and Transportation

#### Radioactive Material Storage (IP Section 03.01) (3 Samples)

- (1) The inspectors evaluated the licensee's performance in controlling, labelling, and securing radioactive materials.
- (2) The inspectors evaluated the following sealed sources:
  - 92-495, Ra-226
  - 92-581, Am-241/Be
  - 92-582, Am-241/Be
  - 92-583, Cs-137
  - 92-587, Cs-137
  - 92-588, Cs-137
  - 93-087, Cs-137
  - 93-088, Cs-137
- (3) The inspectors evaluated the following radioactive material storage areas:
  - Radwaste Building
  - Southeast Yard
  - Radwaste Pad
  - Northwest Laydown Area

#### Radioactive Waste System Walkdown (IP Section 03.02 (2 Samples)

- (1) The inspectors walked down accessible portions of the solid radioactive waste systems and evaluated system configuration and functionality.
- (2) The inspectors also walked down the radwaste control room to assess the operability of radwaste system equipment.

#### Waste Characterization and Classification (IP Section 03.03) (2 Samples)

- (1) The inspectors evaluated the licensee's characterization and classification of radioactive waste.
- (2) The inspectors evaluated waste characterizations for the following types of packages:
  - Dry active waste
  - Mechanical filters
  - Spent resin
  - Irradiated hardware

#### Shipment Preparation (IP Section 03.04) (1 Sample)

- (1) The inspectors observed a shipment containing radioactive material to determine if it was prepared according to the requirements contained in GGN-2020-1110; UN2912, Radioactive Material, LSA-I, 7; dated November 19, 2020.

#### Shipping Records (IP Section 03.05) (5 Samples)

The inspectors evaluated the following non-excepted radioactive material shipments through a record review:

- (1) GGN-2018-1201; UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Irradiated hardware; 12/11/2018
- (2) GGN-2019-0101; UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Irradiated hardware; 01/09/2019
- (3) GGN-2019-0202; UN3321, Radioactive Material, LSA-II, 7; Dewatered resin; 02/07/2019
- (4) GGN-2019-0313; UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; TriNuke Filters; 04/03/2019
- (5) GGN-2020-0518; UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Dewatered resin; 06/04/2020

#### **OTHER ACTIVITIES – BASELINE**

##### 71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

##### EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) January 1, 2019, through September 30, 2020

##### EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

- (1) January 1, 2019, through September 30, 2020

##### EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) January 1, 2019, through September 30, 2020

##### MS09: Residual Heat Removal Systems (IP Section 02.08) (1 Sample)

- (1) October 1, 2019, through September 30, 2020

##### MS10: Cooling Water Support Systems (IP Section 02.09) (1 Sample)

- (1) October 1, 2019, through September 30, 2020

##### 71152 - Problem Identification and Resolution

##### Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) The inspectors reviewed the licensee's corrective action program for potential adverse trends in troubleshooting practices that might be indicative of a more significant safety issue.

#### 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) Condition Report CR-GGNS-2020-00915 on November 30, 2020

#### 71153 - Followup of Events and Notices of Enforcement Discretion

#### Personnel Performance (IP Section 03.03) (6 Samples)

- (1) On December 1, 2020, the inspectors evaluated personnel performance related to the following plant scrams: May 25, August 8, August 24, and November 6, 2020.
- (2) On December 1, 2020, the inspectors evaluated personnel performance related to the June 16, 2020, unplanned down power due to reactor feed pump B high vibrations.
- (3) On December 1, 2020, the inspectors evaluated personnel performance during the July 18, 2020, unplanned down power due to the high-pressure turbine control valve A electrohydraulic control leak.
- (4) On December 1, 2020, the inspectors evaluated personnel performance during the August 8, 2020, reactor water Level 3 scram following manual scram recovery.
- (5) The inspectors evaluated personnel performance during the April 16, 2020, inadvertent low-pressure coolant injection.
- (6) On December 14, 2020, the inspectors evaluated personnel performance during the December 11, 2020, unplanned reactor scram.

### **INSPECTION RESULTS**

Licensee-Identified Non-Cited Violation	71124.08
This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.	
Violation: Technical Specification 5.4.1(a) requires, in part, that written procedures shall be implemented covering applicable procedures recommended in Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, Appendix A, February 1978. Section 7(e) of Regulatory Guide 1.33 covers "Radiation Protection Procedures."	
Contrary to the above, on April 24, 2020, the licensee failed to implement written procedures for radiation protection when they free released a temporary chiller with detectable radioactivity from the protected area, and subsequently shipped it offsite to a vendor without proper radiological controls. Specifically, the licensee failed to implement requirements in licensee Procedure EN-RP-121, "Radioactive Material Control," Revision 16.	
On April 24, 2020, two temporary chillers that were used during the licensee's refueling outage activities were shipped offsite without proper surveys conducted by radiation protection (RP) staff. One of those temporary chillers, the larger one, contained detectable levels of radioactivity. The temporary chiller was previously identified as having detectable radioactivity via chemistry samples performed on April 8, 2020. These water samples were verified on April 17, 2020, and again, determined there were detectable amounts of radioactivity. At that time, RP staff instructed that labeling be placed on the system plant chillers and supportive equipment, but staff failed to complete these requirements.	

Consequently, the equipment was not labeled as, "Potentially contaminated - Contact RP prior to breaching the system," before being stored away for any further use and to establish appropriate radiological controls. When the temporary plant chillers were shipped offsite, RP staff were not contacted and did not survey and frisk the temporary chillers prior to leaving the site. This resulted in free release of radioactive material from the licensee's protected area into the public domain.

Five days later, on April 29, 2020, RP staff discovered that the temporary chillers used to supplement the plant chill water system during the outage were no longer at the licensee's site when they questioned their location. RP staff understood that chemistry samples and surveys previously taken on these chillers identified low trace amounts (but detectable) of radioactivity, with contact dose rates of 0.1 millirem per hour; therefore, they immediately became concerned that the temporary chillers were not controlled as radioactive material. They soon confirmed these two chillers were shipped offsite without appropriate radiological controls, as required.

Procedure EN-RP-121, "Radioactive Material Control," Revision 16, states, in part, the following:

- Section 5.2.1.1 - Items indicating the presence of radioactive material, other than naturally occurring, MUST be labeled in accordance with this procedure.
- Section 5.6.1 - For "Control and Release of Material," items may be considered for free release as long as ALL of the following criteria are met:
  - No detectable fixed activity above background, other than naturally occurring isotopes
  - No detectable loose surface contamination
  - No detectable/suspected internal contamination
  - No detectable alpha contamination
  - No radioactive labels or markings
- Section 5.9.1 - All materials leaving the protected area through the sally port may be evaluated prior to being removed from the protected area by completion of Attachment 12.

Attachment 12 to Procedure EN-RP-121 essentially requires the licensee to evaluate/survey radioactive material prior to release, as authorized by RP staff.

Thus, the licensee failed to follow multiple procedural requirements when they did not label the radioactive temporary chiller, control it as radioactive material, failed to contact RP staff to evaluate/survey the temporary chiller prior to leaving the site, and free released it from the protected area. Upon discovery, the licensee conducted radiological surveys of the plant chiller system equipment and appropriately implemented radiological controls. The licensee identified 500 corrected counts per minute of fixed internal contamination on the larger temporary chiller that was free released offsite to a vendor.

As immediate corrective actions, the licensee contacted the vendor to which the uncontrolled material was delivered and sent a licensee representative to retrieve the items, conducted surveys of the plant chiller system, and reviewed and updated their procedures to enhance

the requirements.

Using NRC Inspection Manual Chapter 0612, Appendix E, "Examples of Minor Issues," the inspectors determined that the performance deficiency was more than minor because it was similar to Example 6.a, in which the licensee failed to survey the radioactive material, as required, resulting in a failure to adequately control the release of radioactive material from the site.

Significance/Severity: Green. The inspectors determined that the finding was of very low safety significance (Green) because although it involved a failure in radioactive materials control and was transported from the site, surface contamination levels were less than 5 times any limits and there was no radiation exposure above 1 percent of any occupational or public dose limit (less than .005 rem).

Corrective Action References: Condition Report CR-GGNS-2020-05694

Observation: Semiannual Trend Review

71152

Through a review of recent issues documented in the licensee's corrective action program, the inspectors noted a potential trend related to less than thorough troubleshooting practices at the site. The inspectors noted that these practices unnecessarily challenged plant staff in responding to multiple equipment issues. The following examples demonstrate this potential trend:

1. In the summer of 2020, the licensee wrote multiple condition reports detailing failures of the control room air conditioner compressor B (Condition Reports CR-GGNS-2020-08197 and CR-GGNS-2020-08349), for which the NRC issued a Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, in Integrated Inspection Report 05000416/2020003 (ADAMS Accession No. ML20302A448). The inspectors found, in this instance, that a failure to adequately troubleshoot the direct cause of the compressor trip such that there was high confidence that the direct cause of the trip was identified and corrected prior to returning it to service, led to the licensee declaring the component operable when it, in fact, would not have met safety function requirements as evidenced by its subsequent failure a day later.

2. As documented in Integrated Inspection Report 05000416/2019004 (ADAMS Accession No. ML20044F733), the inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, when the licensee failed to correct a condition adverse to quality related to the 208-foot elevation containment airlock door. Specifically, the inspectors identified that Condition Reports CR-GGNS-2016-03721, CR-GGNS-2018-02927, CR-GGNS-2018-03251, CR-GGNS-2018-03261, CR-GGNS-2018-07849, CR-GGNS-2018-08613, and CR-GGNS-2019-03109 were all closed with less than thorough troubleshooting. This lack of effective troubleshooting allowed the underlying condition to go undiagnosed and unresolved as described in the violation.

3. In 2020, the inspectors identified eight condition reports (Condition Reports CR-GGNS-2020-00872, CR-GGNS-2020-04116, CR-GGNS-2020-05780, CR-GGNS-2020-05784, CR-GGNS-2020-06048, CR-GGNS-2020-07317, CR-GGNS-2020-08156, CR-GGNS-2020-08734) detailing failures/issues of security Door OC708. In most of these condition reports, an issue was identified with the door handle sticking or otherwise not working properly causing the door to not secure properly. In Condition Report CR-GGNS-2020-08754, the inspectors identified potential issues with long-standing degradation of this security door. As evidenced by the repetitive failures of this



door, it appears that less than thorough troubleshooting practices for correcting the cause has led to continual challenges.

4. Condition Reports CR-GGNS-2020-09739, CR-GGNS-2020-09756, and CR-GGNS-2020-09797 document an issue with reactor recirculation flow control valve A unexpectedly changing position. The licensee's initial troubleshooting led them to believe there was an issue with the position indicator on the valve itself. Upon replacement of the position indicator, the licensee continued to observe issues with the flow controller. The licensee replaced another component within the control system, which appeared to have corrected the subsequent issue; however, while monitoring system response, the licensee observed continued issues with the controller necessitating additional troubleshooting and corrective maintenance.

5. Condition Reports CR-GGNS-2020-05268, CR-GGNS-2020-05270, CR-GGNS-2020-05404, CR-GGNS-2020-05405, and CR-GGNS-2020-05427 document an issue with the standby gas treatment system drawdown surveillance not meeting acceptance criteria. While the licensee's initial troubleshooting did identify leaking door seals and drains between rooms that could have contributed to the failed drawdown test, it did not identify the direct cause of the failure, which was containment configuration during this surveillance test.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On November 19, 2020, the inspectors presented the emergency preparedness program inspection technical debrief inspection results to Mr. M. Lewis, Manager, Emergency Preparedness, and other members of the licensee staff.
- On November 19, 2020, the inspectors presented the public radiation safety inspection results to Mr. R. Franssen, Site Vice President, and other members of the licensee staff.
- On December 16, 2020, the inspectors presented the emergency preparedness program inspection telephonic exit inspection results to Mr. B. Wertz, General Manager of Plant Operations and other members of the licensee staff.
- On January 13, 2021, the inspectors presented the integrated inspection results to Mr. R. Franssen, Site Vice President, and other members of the licensee staff.

## **THIRD PARTY REVIEWS**

The inspectors reviewed the most recently issued Institute of Nuclear Power Operations report during the inspection period.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Corrective Action Documents	CR-GGNS-	2020-11173, 2020-11193, 2020-11312	
71111.04	Drawings	E0121-09	Summary of Relay Setting 480V Load Center Engineered Safety Feature 16BB4, 16BB5, & 16BB6	6
71111.04	Drawings	E1020	One Line Meter and Relay Diagram 480V bus 15BA6 and 16BB6	11
71111.04	Drawings	E1023	One Line Meter and Relay Diagram 125V DC bus 11DA, 11DB, and 11DC	38
71111.04	Drawings	E1026	One Line Meter and Relay Diagram 120V Engineered Safety Feature Uninterruptible Power Supply	14
71111.04	Drawings	M-1086	P & I Diagram High Pressure Core Spray System	35
71111.04	Drawings	M-1102A	P & I Diagram Standby Gas Treatment	24
71111.04	Drawings	M-1102B	P & I Diagram Standby Gas Treatment	6
71111.04	Drawings	M-1469	HV & AC Auxiliary Building Elevation 208'-110" Area 9	25
71111.04	Procedures	04-1-01-E22-1	High Pressure Core Spray System	130
71111.04	Procedures	04-1-01-L11-1	Plant DC Systems	131
71111.04	Procedures	04-1-01-L62-1	Static Inverters Systems	54
71111.04	Procedures	04-1-01-T48-1	Standby Gas Treatment	39
71111.04	Procedures	DCP 82-4110	Addition of Opposed Blade Volume Dampers to the Standby Gas Treatment System	0
71111.04	Work Orders	WO	52849113	
71111.13	Corrective Action Documents	CR-GGNS-	2020-10382	
71111.13	Miscellaneous	MCR-GG-6796		
71111.13	Miscellaneous	MCR-GG-6797		
71111.13	Procedures	EN-DC-151	PRA Maintenance and Update	8
71111.15	Corrective Action Documents	CR-GGNS-	2020-10213, 2020-10258, 2020-12059, 2020-12062, 2020-12198	
71111.19	Procedures	06-OP-1P41-Q-0004	Standby Service Water Loop A Valve and Pump Operability Test	130
71111.19	Work Orders	WO	543019, 549948, 550987, 553442, 52894197	
71111.22	Corrective Action	CR-GGNS-	2020-11531	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents			
71111.22	Procedures	06-IC-1E31-A-1004, Attachment I	RCIC Equipment Room High Temperature Calibration Channel A	106
71111.22	Work Orders	WO	52905300, 52935765	
71114.02	Miscellaneous	GIN No. 2017-00031	Grand Gulf FEMA REP 10 Report	03/06/2017
71114.02	Procedures	01-S-10-3	Emergency Planning Department Responsibilities	24
71114.03	Miscellaneous	File No. GIN2018-00226	Quarterly Off-Hours Unannounced Everbridge Test	01/08/2019
71114.03	Miscellaneous	File No. GIN2019-00056	Quarterly Off-Hours Unannounced Everbridge Test, Notification ID: 315839010242543	03/25/2019
71114.03	Miscellaneous	File No. GIN2019-00100	Quarterly Off-Hours Unannounced Everbridge Test - 2nd Quarter 2019	06/14/2019
71114.03	Miscellaneous	File No. GIN2019-00145	Quarterly Off-Hours Unannounced Everbridge Test - 3rd Quarter 2019	08/15/2019
71114.03	Miscellaneous	File No. GIN2019-00268	Quarterly Off-Hours Unannounced Everbridge Test - 4th Quarter 2019	12/18/2019
71114.03	Miscellaneous	File No. GIN2020-00078	Quarterly Off-Hours Unannounced Everbridge Test - 1st Quarter 2020	03/30/2020
		File No. GIN2020-00108	Quarterly Off-Hours Unannounced Everbridge Test - 2nd Quarter 2020	06/20/2020
71114.03	Miscellaneous	File No. GIN2020-00152	Quarterly Off-Hours Unannounced Everbridge Test - 3rd Quarter 2020	08/28/2020
71114.03	Procedures	10-S-01-6	Notification of Offsite Agencies and Plant On-Call Emergency Personnel	58
71114.03	Procedures	EN-EP-310	Emergency Response Organization Notification System	9
71114.04	Miscellaneous	Attachment 1, 10CFR50.54(q)(2) Review	Procedure/Document Number: 10-S-02-1, Revision: 21, Facility: GGNS	02/20/2020
71114.04	Miscellaneous	Attachment 1, 10CFR50.54(q)(2) Review	Procedure/Document Number: EN-EP-308; Revision: 6; Facility: GGNS	02/04/2020
71114.04	Miscellaneous	Attachment 1,	Facility: GGNS, Title: Closure of Grand Gulf Road	03/17/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		10CFR50.54(q)(2) Review		
71114.04	Miscellaneous	Attachment 9.1, 10CFR50.54(q)(2) Review	Procedure/Document Number: 10-S-01-38, Revision: 6, Facility: Grand Gulf Nuclear Station	06/03/2019
71114.04	Miscellaneous	Attachment 9.2, 10CFR50.54(q)(3) Screening	Procedure/Document Number: EN-EP-801, Revision: 17, Facility: GGNS, Title: Emergency Response Organization	01/25/2019
71114.04	Miscellaneous	Attachment 9.2, 10CFR50.54(q)(3) Screening	Revision: Version 3.4.1.0; Equipment/Facility/Other: URI Version 3.4.1.0/GGNS; Title: Replace Dose Calc with URI Version 3.4.1.0 as the Primary Dose Assessment Software	12/10/2018
71114.04	Miscellaneous	Attachment 9.2, 10CFR50.54(q)(3) Screening	Procedure/Document Number: Emergency Plan, Revision: 79	09/18/2019
71114.04	Miscellaneous	Attachment 9.3, 10CFR50.54(q)(3) Evaluation	Revision: Version 3.4.1.0; Equipment/Facility/Other: URI Version 3.4.1.0/GGNS; Title: Replace Dose Calc with URI Version 3.4.1.0 as the Primary Dose Assessment Software	12/10/2018
71114.04	Miscellaneous	Attachment 9.3, 10CFR50.54(q)(3) Evaluation	Procedure/Document Number: EN-EP-801, Revision: 17, Facility: GGNS, Title: Emergency Response Organization	01/25/2019
71114.04	Miscellaneous	Attachment 9.3, 10CFR50.54(q)(3) Evaluation	Procedure/Document Number: Emergency Plan, Revision: 79; Facility: Grand Gulf	09/18/2019
71114.04	Miscellaneous	GIN No. 2020-00176	Emergency Plan Revision 81	10/30/2020
71114.04	Miscellaneous	GNRO-2019/00045	Emergency Plan, Revision 79; Grand Gulf Nuclear Station, Unit 1; NRC Docket No. 50-416; Renewed Facility Operating License No. NPF-29	10/29/2019
71114.04	Miscellaneous	GNRO-2020/00040	Emergency Plan, Revision 81 and Revision 0 of the EAL Technical Bases Document; Grand Gulf Nuclear Station, Unit 1; NRC Docket No. 50-416; Renewed Operating License No. NPF-29	11/27/2020
71114.04	Procedures	EN-EP-305	Emergency Planning 10CFR50.54(q) Review Program	7, 8
71114.04	Procedures	EN-EP-801	Emergency Response Organization	17

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.05	Corrective Action Documents	CR-GGNS-	2017-07550, 2018-11473, 2018-12041, 2018-12281, 2019-00174, 2019-00240, 2019-00468, 2019-00956, 2019-01439, 2019-04003, 2019-07102, 2019-08247, 2019-10145, 2020-04869, 2020-05947, 2020-06708, 2020-06914, 2020-07514, 2020-08304, 2020-08442, 2020-08624, 2020-08963, 2020-09863, 2020-09904, 2020-10044, 2020-10087, 2020-10587	
71114.05	Corrective Action Documents	Corporate Condition Reports (CR-HQN-)	2017-00610	
71114.05	Corrective Action Documents Resulting from Inspection	CR-GGNS-	2020-11398, 2020-11474, 2020-11477, 2020-11539, 2020-11542, 2020-11564, 2020-11586, 2020-11869	
71114.05	Miscellaneous		Fire Drill Report, Date: 6/28/19, Time: 14:00; Shift/Team: C	06/28/2019
71114.05	Miscellaneous		Fire Drill Report, Date: 10/16/20, Shift/Team: A	10/19/2020
71114.05	Miscellaneous		Grand Gulf Nuclear Station After Action Report/Improvement Plan, Exercise Date - September 18-19, 2018, Radiological Emergency Preparedness (REP) Program	11/06/2018
71114.05	Miscellaneous		Nuclear Independent Oversight Functional Area Performance Report, Site: Grand Gulf NS, Report Period: October 2019-January 2020	03/18/2020
71114.05	Miscellaneous		Nuclear Independent Oversight Functional Area Performance Report, Site: Grand Gulf NS, Report Period: February 1, 2020 - May 31, 2020	06/08/2020
71114.05	Miscellaneous		Nuclear Independent Oversight Functional Area Performance Report, Site: Grand Gulf NS, Report Period: June 2019-September 2019	10/11/2019
71114.05	Miscellaneous		After Action Report, Grand Gulf Nuclear Station, Radiological Emergency Preparedness Exercise, Exercise Date: March 13, 2019	06/04/2019
71114.05	Miscellaneous	EN-TQ-125, Attachment 1	Fire Drill Scenario, Date: 12/3/18, Time: 12:30, Shift/Team: B	12/03/2018
		GIN No. 2018-00146	State and Local Annual Review of GGNS Emergency Action Levels - 2018	08/20/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.05	Miscellaneous	GIN No. 2018-00210	GGN 2018 October 3 Red Team Wertz ERO Training Drill Report	11/05/2018
71114.05	Miscellaneous	GIN No. 2018-00234	GGN 2018 Site Medical Drill Report	12/13/2018
		GIN No. 2018-00241	Emergency Preparedness Letter of Agreement (LOA) Annual Review - 2018	12/17/2018
		GIN No. 2018-00248	2018 Annual Media Training	12/18/2018
		GIN No. 2019-00007	State and Local Annual Review of GGNS Emergency Action Levels - 2019	01/08/2020
71114.05	Miscellaneous	GIN No. 2019-00062	GGN 2018 November 14 Blue Team Wertz ERO Training Drill Report	12/12/2018
		GIN No. 2019-00091	GGNS March 13, 2019 Blue Team Wertz NRC Evaluated Exercise Report	06/13/2019
		GIN No. 2019-00092	GGNS May 9, 2019 Repair Team NRC Evaluated Exercise Report	06/13/2019
		GIN No. 2019-00095	GGNS March 13, 2019 First Half Semi-Annual Health Physics Drill Report	06/13/2019
		GIN No. 2019-00096	GGNS March 13, 2019 Radiological Monitoring Drill	06/13/2019
		GIN No. 2019-00118	Quarterly Emergency Response Facilities Inventory Report - 2nd Quarter 2019	07/08/2019
		GIN No. 2019-00181	Review of Census Growth Rates and Methodology for GGNS 2019 Annual ETE Update	09/11/2019
		GIN No. 2019-00192	GGNS August 28, 2019 Yellow Team 3rd Quarter Drill Report	10/10/2019
71114.05	Miscellaneous	GIN No. 2019-00193	GGNS 2019-01 EOF Mini Drill Report	10/14/2019
71114.05	Miscellaneous	GIN No. 2019-00194	GGNS 2019-02 EOF Mini Drill Report	10/14/2019
71114.05	Miscellaneous	GIN No. 2019-00224	GGNS October 23, 2019 Green Team 4th Quarter Drill Report	11/19/2019
71114.05	Miscellaneous	GIN No. 2019-00227	GGNS 2019-03 EOF Mini Drill Report	11/19/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.05	Miscellaneous	GIN No. 2019-00265	GGNS Medical Drill and Second Half Semi-Annual Health Physics Drill Report	12/12/2019
		GIN No. 2019-00275	2019 Annual Media Training	12/31/2019
		GIN No. 2020-00008	Emergency Preparedness Letter of Agreement (LOA) Annual Review - 2019	04/06/2020
71114.05	Miscellaneous	GIN No. 2020-00051	GGNS 2019-05 EOF Mini Drill Report	02/21/2020
71114.05	Miscellaneous	GIN No. 2020-00121	GGNS First Half Semi-Annual Health Physics Drill Report	07/14/2020
71114.05	Miscellaneous	GIN No. 2020-00142	GGNS 2020-02 EOF Mini Drill Report	08/20/2020
71114.05	Miscellaneous	GIN No. 2020-00179	EAL Technical Bases Document Revision 0	10/30/2020
71114.05	Miscellaneous	GIN No. 2020-00123	Quarterly Emergency Response Facilities Inventory Report - 2nd Quarter 2020	07/30/2020
71114.05	Miscellaneous	GIN No. 2020-00158	Review of Census Growth Rates and Methodology for Grand Gulf Nuclear Station 2020 Annual ETE Update	09/16/2020
71114.05	Miscellaneous	GNRO-2020/00026	Changes to Emergency Plan Implementing Procedures, Grand Gulf Nuclear Station, Unit 1; Docket No. 50-416; License No. NPF-29	09/14/2020
71114.05	Miscellaneous	QA-7-2019-GGNS-1	Quality Assurance Audit Report, Audited Area Title: Emergency Preparedness	05/20/2019
71114.05	Miscellaneous	QA-7-2020-GGNS-1	Quality Assurance Audit Report, Audited Area Title: Emergency Preparedness	05/11/2020
71114.05	Procedures	01-S-10-5	Control of Emergency Response Equipment and Facilities	17
71114.05	Procedures	01-S-10-7	Emergency Operations Facility Management Program	4
71114.05	Procedures	04-1-01-D21-1	Area Radiation Monitoring System	19
71114.05	Procedures	10-S-01-34	Joint Information Center (JIC) Operations	23
71114.05	Procedures	10-S-01-39	Grand Gulf Equipment Important to Emergency Response	6
71114.05	Procedures	10-S-02-1	ERF Inspections, Inventories, Operability Checks and Maintenance	21
71114.05	Procedures	EN-EP-306	Drills and Exercises	10
71114.05	Procedures	EN-LI-102	Corrective Action Program	42

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71114.05	Work Orders	WO	488789, 513199, 536655, 545092, 548558, 548559, 548560	
71124.05	Calibration Records		Calibration of the Canberra/Nuclear Data People Mover WBC System at the Entergy Grand Gulf Nuclear Station	08/17/2017
71124.05	Calibration Records	2019-B2.28-LABSTN-00001	Laboratory Standard Calibration/Verification Data	06/12/2019
71124.05	Calibration Records	2019-B2.28-SRCVER-0003	Source Verification	04/24/2019
71124.05	Calibration Records	2019-B2.28-SRCVER-0009	Source Verification	10/22/2019
71124.05	Calibration Records	2019-B2.28-SRCVER-0010	Source Verification	12/17/2019
71124.05	Calibration Records	2020-B2.28-CALDAT-01712	Portable Instrumentation Calibration Data Sheet	2020
71124.05	Calibration Records	WO 52761386-01	Standby Gas Treatment System B Normal/High Range Radiation Monitor System Calibration (P024)	03/12/2019
71124.05	Calibration Records	WO 52814444-01	Containment Building Ventilation Gaseous Monitor Calibration (D17-A-0025-03)	02/11/2019
71124.05	Calibration Records	WO 52860275	Liquid Radwaste Effulents Radiation Monitor Calibration (D17-A-1024)	01/21/2020
71124.05	Calibration Records	WO 52860275 Supplemental	Liquid Radwaste Effulents Radiation Monitor Calibration (D17-A-1024) Supplemental	01/21/2020
71124.05	Calibration Records	WO 52866647-01	Containment Building Ventilation Gaseous Monitor Calibration (D17-A-0025-03)	02/17/2020
71124.05	Calibration Records	WO 52871185-01	Standby Gas Treatment System B Normal/High Range Radiation Monitor System Calibration (P024)	10/07/2020
71124.05	Corrective Action Documents	CR-GGNS-	2018-11323, 2018-12961, 2019-00574, 2019-00801, 2019-02988, 2019-03264, 2019-03557, 2019-04061, 2019-05863, 2019-05986, 2019-08140, 2019-08468, 2019-08564, 2019-08910, 2019-08912, 2020-00209, 2020-04720, 2020-04747, 2020-07329, 2020-07669, 2020-08393, 2020-08442, 2020-08679, 2020-08990, 2020-09707	
71124.05	Miscellaneous		Grand Gulf Nuclear Station Offsite Dose Calculation Manual	42
71124.05	Procedures		Entergy Quality Assurance Program Manual	39
71124.05	Procedures	10-S-01-1	Grand Gulf Nuclear Station Emergency Plan Procedure	132



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.05	Procedures	EN-RP-303	Source Checking of Radiation Protection Instrumentation	4
71124.05	Self-Assessments	LO-GLO-2019-171	Self-Assessment for Pre-NRC Inspection: Radiation Monitoring Instrumentation Assessment (IP 71124.05)	07/30/2020
71124.05	Self-Assessments	QA-14-15-2019-GGNS-1	Combined Radiation Protection and Radwaste	10/21/2019
71124.06	Calculations	GIN 2020-00037	Calculation for Unmonitored Radioactive Effluent Release from Turbine Building Roof Hatch (CR-GGNS-2019-10085)	01/31/2020
71124.06	Calculations	GIN 2020-00047	Calculation for Unmonitored Radioactive Effluent Release from Turbine Building Roof Hatch (CR-GGNS-2020-0013)	02/12/2020
71124.06	Corrective Action Documents	CR-GGNS-	2019-00099, 2019-00652, 2019-00934, 2019-01419, 2019-02059, 2019-06409, 2019-07662, 2019-07766, 2019-07909, 2019-08776, 2019-10085, 2020-00013, 2020-00597, 2020-05002, 2020-06046, 2020-08990, 2020-09540, 2020-10264, 2020-10303, 2020-10577, 2020-10779	
71124.06	Miscellaneous		2018 Grand Gulf Nuclear Station Annual Radioactive Effluent Release Report	04/30/2019
71124.06	Miscellaneous		2019 Grand Gulf Nuclear Station Annual Radioactive Effluent Release Report	04/30/2020
71124.06	Miscellaneous		Spent Fuel Storage Radioactive Effluent Release Report for 2019	02/20/2020
71124.06	Miscellaneous		Spent Fuel Storage Radioactive Effluent Release Report for 2018	02/21/2019
71124.06	Miscellaneous		Grand Gulf Nuclear Station Offsite Dose Calculation Manual	42
71124.06	Miscellaneous	EN002-3P50GRAND-14 (L88546)	Teledyne Brown Engineering Inc. Report of Sample Analysis/Certificate of Conformance	09/04/2020
71124.06	Procedures	06-CH-1000-M-0049	Effluent Dose Calculations	105
71124.06	Procedures	06-CH-1D17-M-0003	Building Ventilation Gaseous Tritium	110
71124.06	Procedures	06-CH-1D17-M-0005	Building Ventilation Exhaust Gaseous Isotopic	113
71124.06	Procedures	06-CH-1D17-W-0017	Gaseous Release Points Iodine, Tritium, and Particulates	108

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.06	Procedures	06-CH-1T48-M-0037	Standby Gas Treatment Exhaust Gaseous Isotopic	111
71124.06	Procedures	06-CH-SG17-P-0041	Radwaste Release Pre-Release Analysis	110
71124.06	Procedures	08-S-04-218	Radiological Effluent Tracking and Dose Assessment User's Guide	10
71124.06	Procedures	EN-CY-102-01	Quality Control for Analytical Laboratory Interlab and Intralab Cross-Check Programs	1
71124.06	Radiation Surveys	2020083	Unit 1 Turbine Building Ventilation Gas Isotopic Sample Analysis (Isotopic)	11/19/2020
71124.06	Radiation Surveys	2020162	Equipment Drain Sample Tank Liquid Pre-Release Sample	11/17/2020
71124.06	Radiation Surveys	2020163	Equipment Drain Sample Tank A Pre-Release Liquid Sample Analysis	11/18/2020
71124.06	Self-Assessments	1000-1-19-002	Grand Gulf Nuclear Station 2019 Radiometric INTERLAB and INTRALAB Cross-Check Results	10/17/2019
71124.06	Self-Assessments	LO-GLO-2019-0173	Pre-NRC 71124.06 Inspection – Radioactive Gaseous and Liquid Effluent Treatment	08/14/2020
71124.06	Self-Assessments	QA-2-6-2019-GGNS-01	Combined Chemistry, Effluent and Environmental Monitoring Audit Notification/Audit Plan Memorandum	2019
71124.07	Calibration Records	2020-B2.28-CALDAT-03905	Environment Air Sampler	06/03/2020
71124.07	Calibration Records	2020-B2.28-CALDAT-03906	Environment Air Sampler	06/03/2020
71124.07	Calibration Records	2020-B2.28-CALDAT-03907	Environment Aire Sampler	06/03/2020
71124.07	Calibration Records	2020-B2.28-CALDAT-03908	Environment Air Sampler	06/03/2020
71124.07	Corrective Action Documents	CR-GGNS-	2018-13098, 2019-00771, 2019-07646, 2019-10479, 2020-01555, 2020-05098, 2020-06817, 2020-07780, 2020-10134, 2020-10189	
71124.07	Corrective Action Documents Resulting from Inspection	CR-GGNS-	2020-11520, 2020-11583	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.07	Miscellaneous		Annual Radiological Environmental Operating Report (AREOR) - 2018	04/30/2019
71124.07	Miscellaneous		Annual Radiological Environmental Operating Report (AREOR) - 2019	04/17/2020
71124.07	Miscellaneous		Groundwater Monitoring Plan for Grand Gulf Nuclear Station	6
71124.07	Miscellaneous		2019 Grand Gulf Meteorological Data Review	03/31/2020
71124.07	Miscellaneous	2020 MET Tower Data Monthly Review	Meteorological Data Review from March through October of 2020	2020
71124.07	Procedures	06-IC-SC84-SA-1003	Primary Tower Wind Speed/Direction, Air Temperature (T/dT) and Relative Humidity	109
71124.07	Procedures	08-S-04-964	MET Data Processing	3
71124.07	Procedures	EN-CY-127	Land Use Census	1
71124.07	Procedures	EN-CY-130-02	Radiological Environment Monitoring Program (REMP) - Grand Gulf Nuclear Station	1
71124.07	Procedures	EN-RP-113	Response to Contaminated Spills/Leaks	9
71124.07	Self-Assessments		Pre-NRC Self-Assessment: Radioactive Environmental Monitoring Program - IP 71124.07	07/23/2020
71124.07	Self-Assessments	NUPIC Number 24791	2019 Radioanalytical Laboratory Audit Report: Teledyne Brown Engineering- Environmental Services (TBE-ES)	04/19/2019
71124.07	Work Orders	WO-GGN-52739965	2018 Biannual Land Use Census	11/20/2018
71124.07	Work Orders	WO-GGN-52876579	Primary Tower Wind Speed/Direction, Air Temperature (T/dT) and Relative Humidity	11/07/2019
71124.07	Work Orders	WO-GGN-52905611	Primary Tower Wind Speed/Direction, Air Temperature (T/dT) and Relative Humidity	06/02/2020
71124.08	Corrective Action Documents	CR-GGNS-	2019-07812, 2019-08048, 2019-08334, 2019-08335, 2019-08336, 2019-08347, 2020-01408, 2020-05694, 2020-06915, 2020-07906, 2020-08235, 2020-08951, 2020-09791, 2020-10704	
71124.08	Corrective Action Documents Resulting from Inspection	CR-GGNS-	2020-011573	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.08	Miscellaneous		Grand Gulf Nuclear Generating Station Updated Final Safety Analysis Report (UFSAR), Chapter 11.4 - Solid Radwaste System	4
71124.08	Miscellaneous	GIN-2019-00179	2018-2019 10CFR61 Waste Stream Analysis for BR-D-NA-SRT Bead Resin	09/10/2019
71124.08	Procedures	02-S-01-11	Rad Waste Operations	23
71124.08	Procedures	EN-RP-121	Radioactive Material Control	7
71124.08	Procedures	EN-RW-101	Radioactive Waste Management	3
71124.08	Procedures	EN-RW-102	Radioactive Shipping Procedure	19
71124.08	Procedures	EN-RW-102	Radioactive Shipping Procedure	19
71124.08	Procedures	EN-RW-105	Process Control Program	5
71124.08	Procedures	EN-RW-106	Integrated Transportation Security Plan	6
71124.08	Radiation Surveys	GG-1205-0988	Mausoleum	05/16/2012
71124.08	Radiation Surveys	GGN-2001-00273	Northwest Laydown Area	01/23/2020
71124.08	Radiation Surveys	GGN-2010-00170	118' Radwaste Entire Elevation	10/19/2020
71124.08	Radiation Surveys	GGN-2011-00188	136' Radwaste Truck Bay	11/12/2020
71124.08	Radiation Surveys	GGN-2011-00278	Radwaste Southeast Yard	11/14/2020
71124.08	Radiation Surveys	GGN-2011-00279	Radwaste Pad Monthly	11/14/2020
71124.08	Radiation Surveys	GGN-2011-00318	Yard - Other	11/16/2020
71124.08	Self-Assessments	LO-GLO-2019-00172-CA-1	Pre-NRC Inspection Module 71124-08	07/27/2020
71124.08	Self-Assessments	QA-14-15-2019-GGNS-1	Combined Radiation Protection and Radwaste Audit	10/21/2019
71124.08	Self-Assessments	WT-GGN-2019-00071 CA-30	Radwaste Training	10/17/2019
71124.08	Shipping Records	GGN-2018-1201	UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Irradiated hardware	12/11/2018
71124.08	Shipping Records	GGN-2019-0101	UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Irradiated hardware	01/09/2019
71124.08	Shipping Records	GGN-2019-0202	UN3321, Radioactive Material, LSA-II, 7; Dewatered Resin	02/07/2019
71124.08	Shipping Records	GGN-2019-0313	UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; TriNuke Filters	04/03/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71124.08	Shipping Records	GGN-2019-1208	UN2912, Radioactive Material, LSA-I, 7; Dry Active Waste	12/17/2019
71124.08	Shipping Records	GGN-2020-0518	UN2916, Radioactive Material, Type B(U), 7, Fissile-Excepted, RQ; Dewatered resin	06/04/2020
71124.08	Work Orders	WO-52881814	Leak Test of Sealed Sources	11/14/2019
71124.08	Work Orders	WO-52908073	Leak Test of Sealed Sources	05/13/2020
71151	Corrective Action Documents	CR-GGNS-	2019-02168, 2020-07481	
71151	Corrective Action Documents	CR-GGNS-	2020-11575, 2020-11578	
71151	Miscellaneous		MSPI Datasheets	
71151	Miscellaneous	GIN No. 2019-00099	Alert Notification System Test	06/17/2019
71151	Miscellaneous	GIN No. 2019-00177	Alert Notification System Test	09/05/2019
71151	Miscellaneous	GIN No. 2020-00061	Alert Notification System Test - FEB20	02/27/2020
71151	Miscellaneous	GIN No. 2020-00128	Alert Notification System Test - July 2020	07/30/2020
71151	Miscellaneous	GIN No. 2020-00138	Alert Notification System Test - August 2020	08/05/2020
71151	Procedures	GGNS-SA-06-00002	GGNS MSPI Basis Document and Supporting Information	6
71152	Corrective Action Documents	CR-GGNS-	2020-00872, 2020-00915, 2020-04116, 2020-05268, 2020-05270, 2020-05404, 2020-05405, 2020-05427, 2020-05780, 2020-05784, 2020-06048, 2020-07317, 2020-08156, 2020-08197, 2020-08349, 2020-08734, 2020-08754, 2020-09739, 2020-09756, 2020-09797, 2020-10231, 2020-10279	
71152	Work Orders	WO	478532, 497673, 508458, 538756, 538759, 538760, 538761, 538762, 538763, 538764, 52831300	