



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

May 10, 2019

Mr. Tom Vehec
Vice President
Southern Nuclear Operating Co., Inc.
Edwin I. Hatch Nuclear Plant
11028 Hatch Parkway North
Baxley, GA 31513

SUBJECT: HATCH UNITS 1, 2 – NUCLEAR REGULATORY COMMISSION INTEGRATED
INSPECTION REPORT 05000321/2019001 AND 05000366/2019001

Dear Mr. Vehec:

On March 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Hatch Units 1, 2. On April 23, 2019 the NRC inspectors discussed the results of this inspection with Richard Spring and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented two findings of very low safety significance (Green) in this report. These findings involved violations of NRC requirements.

If you contest the violations, 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 II; the Director, Office of Enforcement; and the NRC resident inspector at Hatch.

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

T. Vehec

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Sincerely,

/RA/

Alan J. Blamey, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos.: 05000321 and 05000366
License Nos.: DPR-57 and NPF-5

Enclosure:
Inspection Report 05000321/2019001
and 05000366/2019001

cc w/ encl: Distribution via ListServ

SUBJECT: HATCH UNITS 1, 2 – NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 05000321/2019001 AND 05000366/2019001 dated May 10, 2019

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ADAMS ACCESSION NUMBER: ML 19130A209

OFFICE	RII/DRS	RII/DRP	RII/DRP	RII/DRP	RII/DRP	RII/DRS
NAME	B. Collins	A. Blamey	N. Staples	C. Jones	J. Hickman	C. Dykes
DATE	5/3/2019		5/3/2019	5/6/2019	5/6/2019	5/6/2019
OFFICE	RII/DRP	RII/DRS	RII/DRS	RII/DRS	RII/DRS	RII/DRS
NAME	D. Mas-Peñaranda	W. Pursley	J. Viera	P. Cooper	M. Greenleaf	W. Loo
DATE	5/8/2019	5/5/2019	5/3/2019	5/7/2019	5/6/2019	5/6/2019

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U.S. NUCLEAR REGULATORY COMMISSION

Inspection Report

Docket Number(s): 05000321 and 05000366

License Number(s): DPR-57 and NPF-5

Report Number(s): 05000321/2019001 and 05000366/2019001

Enterprise Identifier: I-2019-001-0026

Licensee: Southern Nuclear Operating Co., Inc.

Facility: Hatch, Units 1 and 2

Location: Baxley, GA 31513

Inspection Dates: January 01, 2019 to March 31, 2019

Inspectors: B. Collins, Reactor Inspector
C. Dykes, Health Physicist
J. Hickman, Resident Inspector
C. Jones, Senior Resident Inspector
W. Loo, Senior Health Physicist
W. Pursley, Health Physicist
J. Viera, Operations Engineer
M. Greenleaf, Resident Inspector
P. Cooper, Reactor Inspector

Approved By: Alan J. Blamey, Chief
Reactor Projects Branch 2
Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee’s performance by conducting a Quarterly inspection at Hatch Units 1 and 2 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. Findings and violations being considered in the NRC’s assessment are summarized in the table below.

List of Findings and Violations

Failure to Brief Worker of Radiation Dose Rate Levels Prior to Entering a High Radiation Area			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000321,05000366/2019001-01 Open/Closed	[H.5] - Work Management	71124.01
A self-revealing, Green, Non-Cited Violation (NCV) of Technical Specifications 5.7.1.b was identified when a worker entered a high radiation area (HRA) near the N2NG nozzle piping on the 156 foot elevation of the Unit 2 (U2) drywell without receiving an accurate briefing on radiological conditions and consequently the worker received a dose rate alarm in the drywell.			

Failure to apply engineering controls in accordance with plant procedures to minimize potential concentrations of radioactive material in air.			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000366,05000321/2019001-02 Open/Closed	[H.5] - Work Management	71124.03
NRC Identified a Green NCV of 10CFR 20.1701, “Use of process or other engineering controls,” for the licensee’s failure to use a High Efficiency Particulate Air Filter (HEPA) unit as prescribed by plant procedures.			

Additional Tracking Items

Type	Issue number	Title	Report Section	Status
URI	05000321,05000366 /2017007-01	Potential Failure to Adequately Justify the Activation Energies by Licensee	71111.21N	Closed
URI	05000321,05000366 /2017007-02	Potential Failure to Adequately Justify the Activation Energies Determined by 10 CFR 50 Appendix B Vendors	71111.21N	Closed

PLANT STATUS

Unit 1 began the inspection period at 100 percent rated thermal power (RTP). On January 13, 2019, the unit was down powered to 80 percent due to an air intrusion event from the condensate system. On January 14, 2019, the unit was returned to 100 percent RTP and operated there for the remainder of the inspection period.

Unit 2 began the inspection period at 95 percent RTP in the end of cycle coast down for the spring 2019 refueling outage. On February 4, 2019, the operators shut the unit down for a scheduled refueling outage. The unit was restarted on March 18, 2019, and reached approximately 97 percent RTP on March 24, 2019, when the operators took manual action to insert a scram due to a loss of condenser vacuum. The unit was restarted on March 27, 2019, and reached 100 percent RTP on March 31, 2019.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515 Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.03) (1 Sample)

The inspectors evaluated readiness for impending adverse weather conditions for extended below freezing temperatures on January 29, 2019.

71111.04 - Equipment Alignment

Partial Walkdown (IP Section 02.01) (3 Samples)

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

- (1) Main control room environmental control system on January 31, 2019.
- (2) Unit 2 'C' emergency diesel generator (EDG) following Logic System Functional Test on March 4, 2019.
- (3) Unit 2 high pressure coolant injection (HPCI) system following return to service testing on March 20, 2019.

71111.04S - Equipment Alignment

Complete Walkdown (IP Section 02.02) (1 Sample)

The inspectors evaluated system configurations during a complete walkdown of the Torus spray system following 42SV-E11-007-2, Air Test On Torus Headers and Nozzles on February 22, 2019.

71111.05Q - Fire Protection

Quarterly Inspection (IP Section 03.01) (6 Samples)

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

- (1) Unit 1 and 2, station battery rooms, fire zones: 1004, 1005, 2004, and 2005, on January 24, 2019.
- (2) Unit 2 north and south Torus, fire zones 2203A and 2205A on February 19, 2019.
- (3) Unit 2 main steam chase, fire zone 2205H on February 20, 2019.
- (4) Unit 2 south east residual heat removal (RHR) & core spray pump room, fire zone 2205B on February 25, 2019.
- (5) Unit 2 control rod drive (CRD) pump room, fire zone 2205C on February 26, 2019.
- (6) Unit 2 HPCI room, fire zone 2205Z on February 26, 2019.

71111.06 - Flood Protection Measures

Inspection Activities - Underground Cables (IP Section 02.02c.) (1 Sample)

The inspectors evaluated cable submergence protection in:

Safety related cable vaults PB2-AP, PB2-AO, PB2-AN, PB2-AM, and PB2-G.

71111.08G - Inservice Inspection Activities (BWR)

BWR Inservice Inspection Activities Sample - Nondestructive Examination and Welding Activities (IP Section 03.01) (1 Sample)

The inspectors evaluated boiling water reactor non-destructive testing by reviewing the following examinations from February 11 to February 15, 2019:

03.01.a - Nondestructive Examination and Welding Activities.

1. Ultrasonic Examination (UT)
 - a. 12" feedwater elbow-to-pipe weld (2B21-1FW-12AB-9), ASME Class 2, manual UT (observed).
2. Liquid Penetrant Examination (PT)
 - a. Work Order (WO) 948451, two 6" plant service water pipe-to-pipe welds (FW-1/ and FW-2/SNC948451-SK1), ASME Class 3 (reviewed; associated with welding package, which was also reviewed).

- b. two 6" control rod drive mechanism housing pipe-to-pipe welds (2B11/2-50-19-1, 2B11/2-50-23-1), ASME Class 1 (observed).

3. Magnetic Particle Examination (MT)

- a. four pipe lugs near 20" residual heat removal pipe-to-pipe weld (2-E11-2RHR-20-RS-2PL), ASME Class 2 (observed).

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

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

The inspectors observed and evaluated licensed operator performance in the Control Room during final feedwater temperature reduction, Unit 1 power ascension from 83% to 100% following an air intrusion event, Unit 2 control rod scram testing, and the restoration of the Unit 2 4160VAC System on January 10 & 14, and March 11 & 13, 2019.

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

The inspectors observed and evaluated a crew of licensed operators in the plant's simulator during licensed operator regualification training on January 10, 2019.

Inspectors evaluated the facility program for licensed SRO reactivations associated with outage related refueling floor management activities on February 26, 2019. Inspection activities remain in progress with closure planned in a future report.

71111.12 - Maintenance Effectiveness

Quality Control (IP Section 02.02) (1 Sample)

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

Fire Main Rupture Repairs on January 27, 2019.

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (2 Samples)

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

- (1) 2B Station Service Air Compressor spurious trips on January 25, 2019.
- (2) Maintenance rule functional failure of the S11-01 power transmission function on the 1C startup transformer (SUT) on February 23, 2019.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

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

- (1) Unit 2 risk during final feedwater temperature reduction and several heavy lifts onsite on January 9, 2019.
- (2) Unit 1 and Unit 2 elevated risk during a conservative system operation warning while switchyard work was ongoing on March 5, 2019.
- (3) Unit 1 and Unit 2 risk during drywell plug installation on March 13, 2019.
- (4) Unit 2 risk during reactor startup mode changes while one of two reactor core isolation cooling (RCIC) room coolers were out of service on March 19, 2019.

71111.15 - Operability Determinations and Functionality Assessments

Sample Selection (IP Section 02.01) (8 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Unit 2, 2A EDG operability determination following failure of the fuel lines to hold pressure during pressure testing per WO SNC948747 on January 24, 2019.
- (2) Unit 1, 1A plant service water (PSW) pump operability determination following discovery of the wrong bolts installed during the visual inspection of seismic supports per WO SNC917621 on January 29, 2019.
- (3) Unit 1, 2B standby gas treatment (SBGT) operability determination following indication issues during the logic system functional testing (LSFT) per 34SV-T46-005-2, SBGT LSFT, Ver. 1.0, on January 31, 2019.
- (4) Unit 2, 2A Core Spray (CS) pump operability determination following discovery of cut stress cone and exposed wiring after tape removal prior to motor replacement per WO SNC926452 on January 31, 2019.
- (5) Unit 1, 1B EDG operability determination following 1B EDG voltage exceeded the acceptance criteria of 4800VAC following a load reject during performance of 34SV-R43--21-2, 1B EDG LOCA/LOSP LSFT on February 18, 2019.
- (6) Unit 1, 2B SBGT operability determination following failure to start during periodic performance of 34SV-T46-003-2, Standby Gas Treatment Ventilation and Operability Ver. 11.2, on February 27, 2019.
- (7) Unit 2, 2C EDG operability determination following 86G relay lockout exceeding the acceptance criteria during performance of 34SV-R43-022-2, Diesel Generator 2C LOCA/LOSP LSFT Ver. 2.2, on March 1, 2019.
- (8) Unit 2, RCIC operability determination following RCIC pump speed response was not as expected and Turbine Cooling Water Supply Valve motor tripped on overload per WO SNC1008315 on March 26, 2019.

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (3 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Design change package (DCP) SNC489864, Degraded Grid modifications to Unit 2.
- (2) DCP SNC996054, Power Cell Part Replacement for Adjustable Speed Drive (ASD), Rev. 1.0, following non-availability of the original parts.

- (3) DCP SNC494055, Units 1 & 2 Intermediate Range Monitor Signal Filter Circuit Improvement.

71111.19 - Post Maintenance Testing

Post Maintenance Test Sample (IP Section 03.01) (8 Samples)

The inspectors evaluated the following post maintenance tests:

- (1) Unit 2, Loop A RHR pump operability test following the replacement of 2A RHR pump cabling, 34SV-E11-001-2, Residual Heat Removal Pump Operability, Ver. 20.2 on January 30, 2019.
- (2) Diesel Generator 1B Logic System Functional Test, 34SV-R43-024-2, Ver. 3.0, following 2F switchgear degraded grid modification on February 15, 2019.
- (3) 34SV-R43-022-2, Diesel Generator 2C LOCA/LOSP LSFT, Ver. 2.1 after Degraded Grid modifications performed on Unit 2, February 23, 2019.
- (4) Unit 2, drywell return air fan replacement and testing after removing the temporary modification from the 2018 forced outage per WO SNC936300 on February 26, 2019.
- (5) Visual Inspection of 2C EDG engine/generator coupling after wrong phase connections of 2C startup transformer (SUT), potential transformers and improper parallel between 2C EDG and 2C SUT, WO SNC1001043 on February 27, 2019.
- (6) 34SV-E11-010-2, Residual Heat Removal System LPCI LSFT & Auto Actuation, Ver. 3.0 after replacement of the 2D RHR pump motor on March 3, 2019.
- (7) Unit 2, 34 SV-E41-005-2, HPCI Operability 165# Test, Ver. 7.13 after repairs made to HPCI auxiliary oil pump breaker connectors, WO SNC1006582, on March 20, 2019.
- (8) 57SV-S32-002-2, Emergency Buses 2E, 2F, and 2G Undervoltage Relay FT&C, Ver. 14.1 after low voltage on 2G emergency bus alarm received during pump start, WO SNC1000394, February 22, 2019.

71111.20 - Refueling and Other Outage Activities

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

- (1) The inspectors evaluated the Unit 2 refueling outage H2R26 activities from Feb. 4, 2019 to Mar. 20, 2019.
- (2) The inspectors evaluated a Unit 2 forced outage due to a loss of condenser vacuum from March 23, 2019 to March 29, 2019.

71111.21N - Design Bases Assurance Inspection (Programs)

The inspectors evaluated environmental qualification program information to facilitate closure of the unresolved items (URIs) opened on October 13, 2017, in Design Bases Assurance Inspection (Programs) Report 05000321, 366/2017007 (ADAMS Accession No. ML17286A528).

Select Sample Components to Review - Risk Significant/Low Design (Inside/Outside Containment) (IP Section 02.01) (2 Partial)

- (1) (Partial) 1R24S011 AMC, 600 V motor control center (MCC) 1C.
- (2) (Partial) 1C11D001-0611 solenoid operated valve (SOV), C11-D001EP117, control rod drive (CRD) hydraulic control unit (HCU) SCRAM SOV.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Containment Isolation Valve (ISO) (IP Section 03.01) (1 Sample)

A and C main steam isolation valve (MSIV) local leak rate test (LLRT). 42SV-TET-001-0, LLRT Testing Methodology, Ver. 13.0 and 42SV-TET-001-2, Primary Containment Periodic Type B and Type C Leakage Tests, Ver. 37.1 on February 19, 2019.

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

34SV-P41-001-2, Plant Service Water Pump Operability, Ver. 15.0 on January 4, 2019.

Surveillance Testing (IP Section 03.01) (6 Samples)

- (1) 34SV-E11-001-1, Residual Heat Removal Pump Operability, Ver. 27.0 on January 16, 2019.
- (2) 42SP-09-18-17-RM-1-2, Unit 2 Startup Transformer 2E (SUT 2E) Functional Test, Version 1.2 on February 12, 2019.
- (3) 42SV-E11-007-2, Air Test on Torus Headers and Nozzles, Ver. 1.8 on February 21, 2019.
- (4) 34SV-R43-003-1, 1C, Diesel Generator 1C Monthly Test, Ver. 20.0 on February 25, 2019.
- (5) 34SV-C11-010-2, Alternate Rod Insertion LSFT, Ver. 1.0 on March 8, 2019.
- (6) 52SV-R42-011-2, Unit 2 Station Service Battery Combined Service Performance / Modified Performance Test, Ver. 5.0 on March 12, 2019.

RADIATION SAFETY

71124.01 - Radiological Hazard Assessment and Exposure Controls

Contamination and Radioactive Material Control (IP Section 02.03) (1 Sample)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material. The inspectors verified the following sealed sources are accounted for and are intact:

- J.L. Shepherd and Associates, Model 6810 Calibrator, Serial No. 79CS-513.
- J.L. Shepherd and Associates, Model 89-400 Calibrator, Serial No. 0302GY.

High Radiation Area and Very High Radiation Area Controls (IP Section 02.05) (1 Sample)

The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Instructions to Workers (IP Section 02.02) (1 Sample)

The inspectors evaluated instructions to workers including radiation work permits used to access high radiation areas:

Radiation Work Packages (RWP)

- RWP No. 19-2013, Reactor Building (RB) - Remove, Replace Torus Proper Hatches, Radiation Protection (RP) Initial Entry, Foreign Material Exclusion (FME)/Access Control Monitor, Coatings/Painting and Support Activities and Diving Activities.
- RWP No. 19-2209, Refuel Floor Vessel Disassembly/Reassembly, Cavity Work and Support.
- RWP No. 19-2601, Drywell (DW)/Suppression Chamber (SC) RP and Chemistry Inspection, Surveillance, Sampling, Surveys and Job Coverage.
- RWP No. 19-2604, DW/SC Operations Inspection, Surveillance, Clearances, LLRT, Valve Line-Ups Includes HCU's/Tip Room and Torus.

Electronic alarming dosimeter alarms

- 2 electronic dosimeter (ED) alarms, Event Date: 02/04/19
- ED alarm, event date: 02/06/19

Labeling of containers

- Unit 2 drywell, units 1 and 2 reactor buildings, waste separation and temporary storage facility

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 02.06) (1 Sample)

The inspectors evaluated radiation worker performance and radiation protection technician proficiency.

Radiological Hazard Assessment (IP Section 02.01) (1 Sample)

The inspectors evaluated radiological hazards assessments and controls. The inspectors reviewed the following:

Radiological surveys

- Unit 2 Condenser Bay 112 (2TB112), Survey No. 165254
- Unit 2 Drywell (2DW156), Survey No. 165407
- Unit 2 Reactor Cavity (2RX228), Survey No. 165263

Risk significant radiological work activities

- Removal of reactor pressure vessel head
- Valve lineup of F45A/120 (drywell ventilation fan)
- Initial entry for Torus diving

Air sample survey records

- Air Sample Record No. 19-035-4, Unit 2 Refuel Floor, General Area
- Air Sample Record No. 19-036-3, Unit 2 Refuel Floor, Disassembly/General Area

- Air Sample Record No. 19-037-3, Unit 2 Reactor Building RX 228, Reactor Pressure Vessel Head Grab sample

Radiological Hazards Control and Work Coverage (IP Section 02.04) (1 Sample)

The inspectors evaluated in-plant radiological conditions during facility walkdowns and observation of radiological work activities.

Radiological work package for areas with airborne radioactivity

- Removal of reactor vessel pressure head

71124.02 - Occupational ALARA Planning and Controls

Implementation of ALARA and Radiological Work Controls (IP Section 02.03) (1 Sample)

The inspectors reviewed as low as reasonably achievable (ALARA) practices and radiological work controls by reviewing the following activities:

- RWP # 19-2209, 2R24 U2 Reactor Disassembly and Reassembly.
- RWP # 19-2609, 2R24 In service Inspection (ISI)/Flow Accelerated Corrosion (FAC) Inspections.

Radiation Worker Performance (IP Section 02.04) (1 Sample)

The inspectors evaluated radiation worker and radiation protection technician performance during reactor head disassembly activities, drywell activities and ISI inspections.

Radiological Work Planning (IP Section 02.01) (1 Sample)

The inspectors evaluated the licensee's radiological work planning by reviewing the following activities:

- ALARA Plan # 19-2209, 2R25 U2 Reactor Disassembly and Reassembly.
- ALARA Plan # 19-2609, 2R25 ISI/FAC Inspections.
- ALARA Plan # 19-2615, 2R25 Drywell/CRD Exchange and Support Activities.

Verification of Dose Estimates and Exposure Tracking Systems (IP Section 02.02) (1 Sample)

The inspectors evaluated dose estimates and exposure tracking. The inspectors reviewed the following ALARA planning documents:

- ALARA Plan # 19-2209, 2R24 U2 Reactor Disassembly and Reassembly.
- ALARA Plan # 19-2609, 2R24 ISI/FAC Inspection.
- ALARA Plan # 19-2615, 2R24 Drywell/CRD Exchange and Support Activities.

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Engineering Controls (IP Section 02.01) (1 Sample)

The inspectors evaluated airborne controls and radioactive monitoring. The inspectors reviewed the following.

Installed ventilation systems

- Plant Hatch refueling floor ventilation.

Temporary ventilation system setups

- Reactor pressure vessel head activity high efficiency and particulate air unit.

Portable or installed monitoring systems

- AMS-4 #1879 on U-1 RX-185, Calibrated 07/70/2018.
- AMS-4 #1901 on U-2 R/F Floor, Calibrated 04/30/2018.

Self-Contained Breathing Apparatus (SCBA) for Emergency Use (IP Section 02.03) (1 Sample)

The inspectors evaluated SCBA program implementation.

Status and surveillance records for SCBAs

- Observed inventory of SCBA kits in the control room and reviewed NMP-HP-501-004, Data Sheet 2, monthly "In-Service SCBA Inspection," performed 02/28/2019.

SCBA fit for on-shift operators

- Reviewed training plan for SCBA qualifications and discussed verified spectacle kits and mask size availability for operators in the control room.

SCBA maintenance check

- Complete SCBA Test MAS Firehawk 3000 S/N AMZ050191, dated 11/18/2018.
- Complete SCBA Test MAS Firehawk 3000 S/N AMY165843, dated 09/26/2018.
- Complete SCBA Test MAS Firehawk 3000 S/N AMZ051237, dated 09/27/2018.

Use of Respiratory Protection Devices (IP Section 02.02) (1 Sample)

The inspectors evaluated respiratory protection. The inspectors reviewed the following:

Evaluations for the use of respiratory protection

- None were available during this inspection.

Respiratory protection use during work activities

- Reactor vessel disassembly
- Condenser bay welding activities

Medical fitness for use of respiratory protection devices

- 2 operators on shift
- 2 RP technicians

Observation of donning, doffing and functional test

- Welders in condenser bay donning/doffing welding hoods
- Workers entering/exiting drywell
- Workers on reactor head activities

Respiratory protection device evaluation

- Powered air purifying respirators staged for issue
- MSA air purifying respirators for emergency use
- SCBAs in control room for emergency use

71124.04 - Occupational Dose Assessment

External Dosimetry (IP Section 02.02) (1 Sample)

The inspectors evaluated the external dosimetry program implementation.

Internal Dosimetry (IP Section 02.03) (1 Sample)

The inspectors evaluated the internal dosimetry program implementation.

Whole Body Counts

- Body count personnel contamination event (PCE) #774, 02/07/19
- Body counts PCE #780, 2/22/19
- Body counts PCE #779, 2/22/19

In-vitro internal monitoring

- None available during the inspection period.

Dose assessments performed using air sampling and derived air concentration (DAC)-hr monitoring

- PCE #779 DAC-hr evaluated no dose assigned.

Source Term Categorization (IP Section 02.01) (1 Sample)

The inspectors evaluated the licensee's characterization of the source term and use of scaling factors for the use of hard-to-detect radionuclide activity.

Special Dosimetric Situations (IP Section 02.04) (1 Sample)

The inspectors evaluated special dosimetric situations.

Declared Pregnant Workers (DWP)

- DPW #1 declaration end date 3/2019
- DPW #2 declaration end date 11/2018

EDEX exposures

- Multibadging was not used during the inspection period.

Shallow Dose Equivalent

- None available for the inspection period.

Neutron Dose Assessment

- Unit 1 Drywell Access- November 2018
- Unit 2 Drywell Access- February 2019
- Dry Cask Storage- November 2018

71124.05 - Radiation Monitoring Instrumentation

Calibration and Testing Program (IP Section 02.02) (1 Sample)

The inspectors evaluated the calibration and testing program implementation.

Alarm setpoint and calibration method check of personnel contamination monitors, portal monitors and small article monitors:

- Small Article Monitor (SAM) 12 D21-N2024
- Gamma exit monitor (GEM) 5 1301-013 D21-N1900
- Argos 5AB 1301-013 D21-N1903

Failure to meet calibration or source check acceptance criteria

- HandE Count #554

Walk Downs and Observations (IP Section 02.01) (1 Sample)

The inspectors evaluated radiation monitoring instrumentation during plant walkdowns.

Portable survey instruments

- Electra #1548, calibration dates 2/3/17, 2/7/18
- RM25 # 702, calibration dates 6/6/17, 5/4/18
- Telepole # 0116, calibration dates 9/21/18, 9/5/17
- Eberline RO-20 #4566, 7/11/18
- RM25 #689, 5/3/18

Source check demonstration

- Telepole
- Microrem
- RO-20
- Eberline E-20
- Electra, RO-2A

Area radiation monitors and continuous air monitors

- AMS-4 D21-N1754 #1876 (particulate) Cal 04/13/18, #1901 (iodine)
- AMS-4 D21-N1745, 04/06/17

Personnel contamination monitors, portal monitors and small article monitors

- Argos 5AB PESB
- GEM 5 PESB
- ARGOS 5AB Control Point
- GEM 5 Control Point
- SAM 11 Control Point

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

IE01: Unplanned Scrams per 7000 Critical Hours Sample (IP Section 02.01) (2 Samples)

- (1) Unit 1 from January 1, 2018 to December 31, 2018.
- (2) Unit 2 from January 1, 2018 to December 31, 2018.

IE03: Unplanned Power Changes per 7000 Critical Hours Sample (IP Section 02.02) (2 Samples)

- (1) Unit 1 from January 1, 2018 to December 31, 2018.
- (2) Unit 2 from January 1, 2018 to December 31, 2018.

IE04: Unplanned Scrams with Complications Sample (IP Section 02.03) (2 Samples)

- (1) Unit 1 from January 1, 2018 to December 31, 2018.
- (2) Unit 2 from January 1, 2018 to December 31, 2018.

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

- (1) Unit 1 from March 2018 through December 2018.
- (2) Unit 2 from March 2018 through December 2018.

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual
Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences
Sample. (IP Section 02.16) (1 Sample)

- (1) Unit 1 from March 2018 through December 2018.
- (2) Unit 2 from March 2018 through December 2018.

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:

Unit 2, potential transformer wiring at 2C startup transformer (SUT) did not match drawing SNC489862E101, Condition Report (CR) 10585184.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

71003 - Post-Approval Site Inspection for License Renewal

The inspectors reviewed a sample of license renewal activities to verify that the licensee completed the necessary actions to comply with the conditions listed in the renewed facility operating license.

Post-Approval Site Inspection for License Renewal (1 Sample)

1. Treated Water Systems Piping Inspection Program (UFSAR Section 18.4.2)
 - a. Ultrasonic Testing (UT), 2E21F002B, Group A-1, 14" Carbon Steel
 - b. UT, 2N22F367, Group A-2, 2.5" Carbon Steel
 - c. UT, 2E21F020A, Group A-3, 2" Carbon Steel
 - d. UT, 2E41F3029B, Group B-1, 1" Stainless Steel
 - e. UT, CRD HCU46-43, Group B-1, 3/4" Stainless Steel
 - f. UT, 2B21F015, Group B-3, 3/4" Stainless Steel
2. Gas System Components Inspection (UFSAR Section 18.4.3)
 - a. UT, 2Y52A001C, Group A, Carbon Steel Tank
 - b. UT, 2G11F019, Group A, 3" Carbon Steel Pipe
 - c. UT, 2E41F3029A, Group B, 1" Stainless Steel Pipe
 - d. Visual Exam (VE), 2T41B002A/B, Group C, Room Coolers
 - e. VE, 2R43R003A, Group D, Internal

INSPECTION RESULTS

Minor Violation	71111.21N
<p>Minor Violation: The licensee's failure to maintain an auditable qualification record in accordance with 10 CFR 50.49(j) was a performance deficiency. Specifically, the qualification test report for the scram solenoid pilot valves did not document the basis for the activation energy value used for its diaphragm elastomer (Viton) subcomponent.</p> <p>The scram solenoid pilot valves' (SSPV) safety function was to change position to allow the control rods to be inserted during a reactor trip. The licensee's qualification test report for these valves did not document the basis for the activation energy value used for its diaphragm elastomer subcomponent. The licensee's EQ specification stated, in part, that the contractor clearly identifies and documents the aging characteristics (e.g. activation energy) of all age sensitive components and provides detailed description, auditable analysis, and justification of how the accelerated aging characteristics were established. After the inspection had concluded, the licensee was able to contact the SSPV vendor and retrieve the missing information.</p> <p>10 CFR 50.49(j) requires, in part, that an auditable record be maintained to permit verification that equipment important to safety subject to 10 CFR 50.49 are qualified to perform their safety function during and following a design bases accident. Contrary to the above, the licensee failed to maintain an auditable record when they were unable to produce the necessary documentation to permit verification that the SSPVs were qualified as required.</p> <p>Screening: The inspectors determined the performance deficiency was minor. This performance deficiency was screened in accordance with Inspection Manual Chapter (IMC) 0612 Appendix B, "Issue Screening," dated January 1, 2018, and was determined to be of minor significance because the failure to maintain the record in an auditable manner could not be reasonably viewed as a precursor to a significant event, would not have the potential to lead to a more significant safety concern if left uncorrected, did not relate to a performance indicator that would have caused the performance indicator to exceed a threshold, and did not adversely affect a cornerstone objective. Specifically, the licensee was ultimately able to retrieve the missing information in the qualification test report.</p> <p>Enforcement: This failure to comply with 10 CFR 50.49(j) constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee has taken actions to restore compliance.</p>	

Minor Violation	71111.21N
<p>Minor Violation: The licensee's failure to maintain an auditable qualification record in accordance with 10 CFR 50.49(j) was a performance deficiency. Specifically, the licensee misidentified the material of construction (and therefore activation energy) of the SSPV needle obturator.</p> <p>The scram solenoid pilot valves (SSPVs) safety function was to change position to allow the control rods to be inserted during a reactor trip. Inspectors determined that the licensee's calculation, BH1-CS-0035, Rev. 2, attributed an activation energy for their SSPV needle obturator to that of a Nylon/glass fiber composite material. The actual material used in the obturator, Zytel 103, was a Nylon 6/6 material that lacked any glass fiber reinforcement. Due to this discrepancy, an incorrect activation energy was assigned by the licensee for this needle.</p>	

10 CFR 50.49(j) requires, in part, that a record of qualification must be maintained in an auditable form to permit verification that each item of electric equipment important to safety covered by 10 CFR 50.49 is qualified for its application and meets its performance requirements when subjected to the conditions predicted to be present when it must perform its safety function up to the end of its qualified life. Contrary to the above, the failure to maintain accurate calculations limiting the qualified life of the SSPVs failed to permit verification that the SSPVs were qualified for their application and that they meet their performance requirements when subjected to the conditions predicted to be present when they must perform their safety function.

Screening: The inspectors determined the performance deficiency was minor. This performance deficiency was screened in accordance with Inspection Manual Chapter (IMC) 0612 Appendix B, "Issue Screening," dated January 1, 2018, and was determined to be of minor significance because the failure to use the proper material in the analysis could not be reasonably be viewed as a precursor to a significant event, would not have the potential to lead to a more significant safety concern if left uncorrected, did not relate to a performance indicator that would have caused the performance indicator to exceed a threshold, and did not adversely affect a cornerstone objective. Specifically, the failure to have a technical justification for the needle obturator's activation energy did not adversely affect the designated qualified lives of the SSPVs.

Enforcement: This failure to comply with 10 CFR 50.49(j) constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee has taken actions to restore compliance.

Minor Violation	71111.21N
<p>Minor Violation: The licensee's failure to justify the basis by which the activation energy was established for Bussman/Gould fuses installed in motor control center 1R24S011 was a performance deficiency. Specifically, the licensee used activation energies taken from an Appendix B vendor's database without justifying that the activation energies selected were applicable to the materials or failure mechanisms present in the fuses.</p> <p>Bussman/Gould fuses are used in 600 V motor control centers which connect to safety-related equipment used in the mitigation of design basis events. The inspectors noted that on August 21, 2001, the licensee updated qualified life calculation SMNH-89-035 for the Bussman/Gould fuses by mixing qualification testing performed by two separate Appendix B vendors, Nutherm International and Wyle Laboratories. Nutherm qualified the fuses using a high temperature/long time aging regime, coupled with a low activation energy to obtain a qualified life of approximately 15 years. Wyle qualified the fuses using a low temperature/short time aging regime, coupled with a high activation energy to obtain a qualified life of approximately 15 years. In calculation SMNH-89-035, the licensee replaced the activation energies established by Nutherm with the values established by Wyle. This combined data from the two vendors resulted in a qualified life of over 100 years for the fuses.</p> <p>The inspectors determined that licensee calculation SMNH-89-035 did not establish that the updated activation energies selected were suitable and/or applicable to replace the existing values. Specifically, the calculation did not demonstrate that the values were based on the same material, failure parameters or degradation mechanisms as the activation energies originally chosen.</p>	

10 CFR 50.49(j) requires, in part, that a record of qualification must be maintained in an auditable form to permit verification that each item of electric equipment important to safety is qualified for its application and meets its specified performance requirements. Contrary to the above, the licensee failed to maintain a record of qualification that demonstrated that the fuses were qualified for their application and that they met their specified performance requirements when the licensee's calculation failed to ensure that the activation energies selected from the Wyle Aging Library were appropriate for their fuses' materials of construction.

Screening: The inspectors determined the performance deficiency was minor. This performance deficiency was screened in accordance with Inspection Manual Chapter (IMC) 0612 Appendix B, "Issue Screening," dated January 1, 2018, and was determined to be of minor significance because in this case the failure to ensure the updated activation energies were suitable could not be reasonably be viewed as a precursor to a significant event, would not have the potential to lead to a more significant safety concern if left uncorrected, did not relate to a performance indicator that would have caused the performance indicator to exceed a threshold, and did not adversely affect a cornerstone objective. Specifically, the licensee was able to use test data and activation energies provided by the original Appendix B vendor, along with actual plant temperatures, to establish a qualified life longer than the licensee's current license period.

Enforcement: This failure to comply with 10 CFR 50.49(j) constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee has taken actions to restore compliance.

Unresolved Item (Closed)	Potential Failure to Adequately Justify the Activation Energies by Licensee 05000321,05000366/2017007-01	71111.21N
<p>Description: unresolved item (URI) 05000321, 366/2017007-01 was opened in inspection report 05000321, 366/2017007 (Agency wide Documents Access and Management System (ADAMS) Accession No. ML17286A528) to determine if a performance deficiency existed and if that performance deficiency was more than minor for the licensee's potential failure to justify the activation energies of their scram solenoid pilot valve (SSPV) Zytel needle obturator and their 600 V motor control center (MCC) (1R24S011) fuses.</p> <p>The inspectors performed additional inspection and review of licensee-supplied additional documentation, as well as consulted with NRC staff via environment qualification panel discussions. Based upon information provided to the inspectors as well as the industry (see Agency wide Documents Access and Management System (ADAMS) Accession No. ML18338A088 and ML19036A556), and based upon the results of the panel discussions, the inspectors determined that two minor violations of 10 CFR 50.49(j) existed.</p> <p>Specifically, a minor violation was identified by the inspectors with regard to the basis of the activation energy of the SSPV needle obturator. The licensee mis-identified the material of construction (and therefore the activation energy) of the SSPV needle obturator. An additional minor violation was identified by the inspectors for the licensee's failure to ensure that the activation energies that were used for their MCC fuses was applicable to the materials of fuse construction when they revised them to higher (less conservative) values.</p>		

These violations were determined to be minor because even though the licensee had not documented all necessary information to justify qualification, the incomplete or undocumented information was determined to not adversely impact the licensee's determination of qualification for the SSPVs and the MCC fuses.

The licensee generated two condition reports and intends to revise the necessary qualification documentation to include the missing information and correct the incorrect information.

Corrective Action Reference(s): 10593732
10593733

Unresolved Item (Closed)	Potential Failure to Adequately Justify the Activation Energies Determined by 10 CFR 50 Appendix B Vendors 05000321,05000366/2017007-02	71111.21N
<p>Description: unresolved item (URI) 05000321, 366/2017007-02 was opened in inspection report 05000321, 366/2017007 (Agency wide Documents Access and Management System (ADAMS) Accession No. ML17286A528) to determine if a performance deficiency existed for the licensee's potential failure to have an adequate justification for the activation energies of their ASCO scram solenoid pilot valve (SSPV) diaphragms and their 600 V motor control center (MCC) subcomponents, when that qualification work was performed by their Appendix B vendors. Specifically, inspectors were concerned that the basis was incomplete with respect to the requirements of 10 CFR 50.49.</p> <p>Inspectors reviewed additional information provided by the licensee, performed further inspection, and held discussions with an NRC environmental qualification panel to resolve this URI. Additionally, the inspectors reviewed the updated guidance in ADAMS Accession Number ML18338A088 and Inspection Manual Chapter Inspection Procedure 71111.21N (Accession No. ML19036A556), which stated that:</p> <p>"Beyond ensuring that vendor programs satisfy the 10 CFR Part 50, Appendix B, requirements and confirming that EQ equipment is received as procured, licensees are not required to validate information (e.g., activation energy) contained in the EQ reports provided by Appendix B vendors."</p> <p>Based on the additional review and the above mentioned guidance, the inspectors identified one minor violation of 10 CFR 50.49(j) for the missing references to the basis for the activation energy of the Viton material in the SSPVs. With regard to the qualification work presented by NLI for the various MCC components, the inspectors did not identify a performance deficiency.</p> <p>The licensee generated a condition report to address this minor violation and condition adverse to quality and plans to update their qualification documentation to include the missing information.</p>		
Corrective Action Reference(s): 10593734		

Failure to Brief Worker of Radiation Dose Rate Levels Prior to Entering a High Radiation Area			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000321,05000366/2019001-01 Open/Closed	[H.5] - Work Management	71124.01
<p>A self-revealing, Green, Non-Cited Violation (NCV) of Technical Specifications 5.7.1.b was identified when a worker entered a high radiation area (HRA) near the N2NG nozzle piping on the 156 foot elevation of the Unit 2 (U2) drywell without receiving an accurate briefing on radiological conditions and consequently the worker received a dose rate alarm in the drywell.</p> <p><u>Description:</u> On February 6, 2019, a worker received a 265 milli-roentgen per hour (mrem/hr) electronic dosimeter (ED) dose rate alarm while performing ultrasound (ISI) on the N2NG piping nozzle on the 156 foot elevation of the U2 drywell. The U2 Drywell was a posted HRA. Prior to entering, the worker was briefed on dose rates in the area based on a radiation survey performed on February 5, 2019, with the N2NG shield doors closed. Maximum dose rates in the area did not exceed 60 mrem/hr. Based on the licensee work order, the ISI is required to be performed with the N2NG shield doors open. On February 6, 2019, prior to the worker's entry, the shield doors were opened and RP performed a survey. However, RP did not use this survey to brief the worker and RP did not reevaluate his ED setpoints based on this information. The worker received an ED alarm upon entering the N2NG piping area and immediately exited the area and reported to RP. A follow-up radiation survey found general area dose rate levels in the area up to 385 mrem/hr.</p> <p>Corrective Action(s): The licensee took immediate corrective action including restricting RCA access for the individuals involved and performing confirmatory surveys of the area. In addition, the licensee established an event investigation team to perform a causal analysis and determine if additional actions are necessary.</p> <p>Corrective Action Reference(s): Condition Report 10579232</p> <p><u>Performance Assessment:</u></p> <p>Performance Deficiency: The worker's entry to perform work on the N2NG piping inside the U2 Drywell which was a posted HRA without being made aware of the dose rates in the area, as required by Technical Specification 5.7.1.b.</p> <p>Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Occupational Radiation Safety cornerstone.</p> <p>Significance: The inspectors assessed the significance of the finding using Appendix C, "Occupational Radiation Safety SDP". This finding was determined to be more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of Human Performance and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Specifically, workers who enter HRAs without knowledge of the radiological conditions in the area could receive unintended occupational exposures.</p>			

Cross-cutting Aspect: H.5 - Work Management: The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities. During the inspection, the NRC observed weaknesses in RP processes for planning, controlling, communicating and executing high risk radiological activities assuring radiological safety is the overriding priority.

Enforcement:

Violation: Technical Specification 5.7.1.b requires, in part, that entry into a HRA with a radiation monitoring device may be made after dose rate levels in the area have been established and personnel are made aware of them. Contrary to this, on February 6, 2019, a worker entered a HRA area near the N2NG nozzle piping on the 158 foot elevation of the U2 drywell, without being made aware of the dose rates in the area.

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

Failure to apply engineering controls in accordance with plant procedures to minimize potential concentrations of radioactive material in air.

Cornerstone	Significance	Cross-cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000366,05000321/2019001-02 Open/Closed`	[H.5] - Work Management	71124.03

NRC Identified a Green NCV of 10CFR 20.1701, "Use of process or other engineering controls," for the licensee's failure to use a High Efficiency Particulate Air Filter (HEPA) unit as prescribed by plant procedures.

Description: On February 5, 2019, The licensee failed to adequately use engineering controls during removal of U2 reactor pressure vessel (RPV) head vent piping. The inspectors observed workers being exposed to primary reactor coolant system (RCS) steam when disconnecting the piping flanges because the HEPA inlet was too far away. Licensee procedure NMP-HP-509, Selection and Control of Portable Ventilation Units, Figure 2, "Effective Capture Velocity Based on Distance From End of Hose," list a capture velocity for a 2000 CFM HEPA unit at 15 inches from the source of the contaminant as 123 feet per minute (FPM) for an open ended 10 inch hose. Figure 1, "Range of Capture Velocities for Various Work Activities," recommends 200-500 FPM for active dispersion of contaminants. Based on the presence of steam in the workers' breathing zone the engineering control was not adequately applied under the circumstances.

The workers were on a high risk radiation work permit (RWP) due to potential for airborne and high dose rates. The area was posted as a High Radiation Area and a Highly Contaminated Area. Dose rates in the work area were as high as 100 millirem per hour (mr/hr) and loose surface contamination levels were as high as 32 mr/hr per 100 square centimeters in the work area. The U2 reactor head internal components are considered an Alpha Level II area until results are evaluated. The ALARA plan, "Reactor Cavity Disassembly and Reassembly 2R25," directed a 2000 CFM HEPA unit be used. .

There was an RP technician (RPT) and a Lead RPT observing from the hand rails on the refuel floor. The workers on the RPV head were performing the work in accordance with licensee procedure 52GM-MME-105-2, "Reactor Vessel Disassembly." The HEPA hose was positioned at the main flange into the RPV and the 2000 CFM HEPA unit was turned on. The workers began loosening the bolts on two flanges simultaneously. The second flange appeared to be a few feet away from the HEPA inlet. Some steam from the first flange and all steam from the second flange was out of the effective range of the HEPA and was observed in the worker's breathing zone. At no time did the RPT or the lead RPT stop the work to remedy the HEPA controls. There were no measurable intakes of radioactive material as a result of RPs failure to implement the required radiological work controls.

Corrective Action(s):

Licensee performed an RP organizational stand down on February 6, 2019, to reinforce RP fundamentals and plans additional corrective actions following processing of the event through the corrective action program (CAP).

Corrective Action Reference(s): 10579200

Performance Assessment:

Performance Deficiency: Failure to employ engineering controls as required by licensee procedure NMP-HP-509.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Human Performance attribute of the Occupational Radiation Safety cornerstone. The failure to provide clear instructions for the application of engineering controls in work plans coupled with the failure of workers to use these devices within their evaluated limits, if left uncorrected, could result in unplanned uptakes of airborne radioactive material by workers when breaching primary systems.

Significance: The inspectors assessed the significance of the finding using Appendix C, "Occupational Radiation Safety SDP," dated August 12, 2008, and IMC 0609, Attachment 4, "Initial Characterization of Findings," dated October 7, 2016. Because the inspection finding is not related to ALARA, the finding does not involve an overexposure or substantial potential for overexposure and it did not affect the licensee's ability to assess dose the inspectors determined it to be of very low safety significance (GREEN).

Cross-cutting Aspect: H.5 - Work Management: The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities. During the inspection, the NRC observed weaknesses in RP processes for planning, controlling, communicating and executing high risk radiological activities assuring radiological safety is the overriding priority.

Enforcement:

Violation: 10CFR 20.1701, requires that, "The licensee shall use, to the extent practical, process or other engineering controls (e.g. containment, decontamination, or ventilation) to control the concentration of radioactive material in air. Licensee procedure NMP HP-509, "Selection and Control of Portable Ventilation Units", defines the limits for the application of open ended HEPA hoses as an engineering control. Specifically, procedure NMP-HP-509,

Version 1.3, Figure 2, "Effective Capture Velocity Based on Distance From End of Hose," list capture velocities for a 2000 CFM HEPA when used with an open ended 10 inch hose. Capture velocities are not evaluated for distances greater than 15 inches from the source of the contaminant. Contrary to the above, on February 5, 2019, while disassembling the reactor vessel head piping the licensee failed to implement adequate engineering controls to control the concentration of radioactive material in air in that the licensee failed to follow procedure NMP-HP-509, Figure 2, and position the HEPA hose inlet within 15 inches from the source of the contaminant.

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

EXIT MEETINGS AND DEBRIEFS

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

- On April 23, 2019, the inspector presented the quarterly resident inspector inspection results to Richard Spring and other members of the licensee staff.
- On March 21, 2019, the inspector presented the Design Bases Assurance Inspection (programs) URI Closure Exit Meeting to James Collins and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71003	Work Orders	SNC656530 SNC656545 SNC656533 SNC605730 SNC656538 SNC724547 SNC401628 SNC656490 SNC656503 SNC640464 SNC655758		
71111.01	Engineering Evaluations	SCNH-13-020	Hatch Probable Maximum Flood Hydraulics – Severe Accident Management (SAM) for Fukushima Near-Term Task Force (NTTF) Recommendation 2.1 Flooding Re-evaluation	Version 1.0
		SCNH-13-021	Evaluation of Plant Hatch Local Intense Precipitation – Severe Accident Management (SAM) for Fukushima Near-Term Task Force (NTTF) Recommendation 2.1 Flooding Re-evaluation	Version 1.0
	Procedures	34AB-Y22-002-0	Naturally Occurring Phenomena	Version 19.0
		DI-OPS-36-0989	Cold Weather Checks	Version 23.4
		NMP-OS-017	Severe Weather	Version 1.1
71111.04	Drawings	H-16042	Control BLDG & Cable Spreading Rooms Air Conditioning Control Diagram	Version 37.0
		H-26014, Sheet 1	Unit 2 RHR System P&ID	Version 65.0
		H-26015, Sheet 2	Unit 2 RHR System P&ID	Version 60.0
		H-26020, Sheet 1	Unit 2 HPCI System P&ID	Version 52.0
	Procedures	34SO-E41-001-2	High Pressure Coolant Injection (HPCI) System	Version 30.4
		34SO-R43-001-2, Attachments 3 and 4	Diesel Generator Standby AC System	Version 30.1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		34SO-Z41-001-1	Control Room Ventilation System	Version 23.1
		42SV-E11-007-2	Air Test on Torus Headers and Nozzles	Version 1.8
71111.05Q	Drawings	A-43965, Sheet 101B	Unit 2 SE RHR & Core Spray Pump Room, Fire Zone 2205B.	Ver. 1.0
		A-43965, Sheet 102B	Unit 2 CRD Pump Room, Fire Zone 2205C.	Ver. 1.0
		A-43965, Sheet 103B	Unit 2 HPCI Room, Fire Zone 2205Z.	Ver. 1.0
		A-43965, Sheet 108B	Unit 2 Main Steam Chase, Fire Zone 2205H.	Ver. 3.0
		A-43965, Sheets 011, 012, 017, and 018	Station Battery Rooms, Fire zones: 1004, 1005, 2004, and 2005.	Ver. 2.0
		A-43965, Sheets 104B and 105B	Unit 2 North and South Torus, Fire Zones 2203A and 2205A.	Ver. 2.0
	Miscellaneous		Fire Protection Fire Hazards Analysis (FHA)	36.0
71111.06	Calculations	BH2-M-387	Mechanical Calculations	July 14, 1983
	Miscellaneous		Updated Final Safety Analysis Report	
			E.I. Hatch Individual Plant Examination	December 1992
	Procedures	52PM-Y46-001-0	Inground Pullbox Debris Removal/Inspection	Version 10.0
71111.08G	Calibration Records	IR Thermometer	Exelon PowerLabs, LLC, Certificate of Calibration	08/08/2018
		10# MT Test Weight	Georgia Power Company Equipment Calibration Information Sheet	12/18/95
	Engineering Evaluations	DOEJ-HRSNC947680-S001	Flaw Evaluation of 6" HBC Service Water Piping (Hatch Unit 2) to 2C Diesel Generator	1
	Miscellaneous	508	Procedure Qualification Record	1-26-84
		562	Procedure Qualification Record	8-22-84
		563	Procedure Qualification Record	9-6-84
		Arnaud	Sonic Systems International, Inc. Certificate of Qualification (MT)	1/3/19
Arnaud	Sonic Systems International, Inc. Vision Acuity Record	01/03/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Chabotte, Jr.	International Quality Consultants, Inc. Nondestructive/Visual Examination Certification Record (PT)	2/02/2018
		Chabotte, Jr.	International Quality Consultants, Inc. Vision Examination Record	01/28/19
		FW-1/SNC948451-SK1	Weld Process Control Sheet for WO SNC948451	2-21-19
		FW-2/SNC948451-SK1	Weld Process Control Sheet for WO SNC948451	2-21-19
		HNP-34	Welder Performance Qualification Test (Baxley)	03/02/2011
		Jennings	Sonic Systems International, Inc. Certificate of Qualification (UT LII-PDI)	1/7/19
		Nash	Sonic Systems International, Inc. Certificate of Qualification (PT)	1/23/2019
		Nash	Sonic Systems International, Inc. Vision Acuity Record	01/17/2019
		Shipping #N1285476	Lincoln Electric Company Certified Material Test Report for SNC46023-0068	27AUG2018
		Sir-Chem Dry Powder 63	Circle Systems, Inc. Certificate of Compliance	October 17, 2017
		Spotcheck Cleaner, SKC-S	Magnaflux Certification	04/20/2015
		Spotcheck Developer, SKD-S2	Magnaflux Certification	03/30/2015
		Spotcheck Penetrant, SKL-SP2	Magnaflux Certification	10/24/2013
		TS110A-13	Welding Procedure Specification	3
		Ultrage II UT Couplant	Magnaflux Certification	03/03/2017
		UT Calibration Block Number 165-H	Certification Report	January 19, 2006

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	NDE Reports	2B11/2-50-19-1	Southern Nuclear Liquid Penetrant Examination Record	2/13/2019
		2B11/2-50-23-1	Southern Nuclear Liquid Penetrant Examination Record	2/13/2019
		2B21-1FW-12AB-9	Southern Nuclear UT Calibration/Examination Record	2/12/2019
		2E11-2RHR-20-RS-2PL-1,-2,-3,-4	Southern Nuclear Magnetic Particle Examination Report	2/13/2019
		FW-1,-2/SNC948451-SK1	Southern Nuclear Liquid Penetration Examination Record	2-21-2019
		Jennings	Sonic Systems International, Inc. Vision Acuity Record	12-11-2018
	Operability Evaluations	2-18-004/0	Prompt Determination of Operability: Pinhole Leak in PSW Piping to 2C Diesel Generator	05/29/18
	Procedures	NMP-ES-024-301	Southern Nuclear Liquid Penetrant Examination Color Contrast and Fluorescent	13.0
		NMP-ES-024-501	Southern Nuclear PDI Generic Procedure for the Ultrasonic Examination of Austenitic Pipe Welds (Appendix VIII)	7.0
		NMP-MA-05-002	General Welding Standard for Pressure Boundary Applications	5.4
Work Orders	WO SNC948451	Work Order: CR10496677 – PSW Leak Permanent Repair	0	
71111.11Q	Corrective Action Documents	10570690	Derate due to degraded condensate demin system	January 13, 2019
	Miscellaneous	H-LT-SG-50322	LORP Scenario, Shutdown Cooling Operations/Loss of SD cooling	January 10, 2019
	Procedures	34GO-OPS-005-1	Power Changes	Version 30.2
		34GO-OPS-042-2	MSR Extraction Steam and Heater Shell Drain System	Version 23.1
		34SO-R22-001-2	4160 V A/C System	Version 22.1
42SV-C11-003-0		Control Rod Scram Testing	Version 11.0	
71111.12	Corrective Action Documents	10559746	2P51C001B 2B SSAC Tripped/Shutdown alarm received	December 4, 2018
		10567790	Maintenance Rule Functional Failure	January 3, 2019
		10576716	UL/FM Documentation	January 30, 2019
		10593128	CR to declare a Maintenance Rule FF for the S11-01 Power	March 19,

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Transmission Function on SAT 1C	2019
	Engineering Evaluations	TE1038008	Perform MRule Evaluation for CR10585184 – PT Wiring found incorrect at SAT 2C	March 19, 2019
	Procedures	50AC-MNT-001-0	Maintenance Program	Version 35.0
		NEI 99-02	Regulatory Assessment Performance Indicator Guideline	7
		NMP-ES-027	Maintenance Rule Program	Version 9.0
		NMP-ES-074-006	Fleet Lubrication Instruction	Version 3.1
		NUMARC 93-01	Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	4A
	Work Orders	SNC984094	2B SSAC Tripped/Shutdown Alarm received	March 4, 2019
		SNC985001	2B SSAC Running Loaded for a Long Period of Time	March 27, 2019
		SNC994098	Fire Main Rupture Between 1Y43F300D and 1Y43F308H	January 26, 2019
71111.13	Calculations		Equipment Out of Service Calculations	January 10, 2019
			Equipment Out of Service Calculations	March 5, 2019
			Equipment Out of Service Calculations	March 13, 2019
	Corrective Action Documents	10591933	2T41B004B (RCIC Pump Room Cooler) Low Flow	March 15, 2019
	Procedures	NMP-DP-001	Operational Risk Awareness	Ver. 16.0
		NMP-OS-010-002	Hatch Protected Equipment Logs	Ver. 11.0
		NMP-RE-008-F01	Detailed Reactivity Management Plan for Final Feedwater Temperature Reduction	Ver. 2.1
	Work Orders	SNC1005958	2T41B004B Low Flow	March 21, 2019
		SNC1006487	2T41B004B Low Flow (RCIC Pump Room Cooler)	March 20, 2019
71111.15	Corrective Action Documents	10165289	1B PSW pump lower restraint broken bolt	January 7, 2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		10569967	Bolts not installed per drawing	January 10, 2019
		10574672	Results of the 2A EDG Fuel Line(s) Pressure Testing	January 24, 2019
		10576814	Failure of Relay 2T46-CR6B to Energize	January 30, 2019
		10577193	2A CS Pump Phase 2 stress cone cut, exposing wires	January 31, 2019
		10582811	Engineering to evaluate B EDG maximum generator voltage following load reject testing	February 16, 2019
		10587089	86 G Relay lockout outside acceptance criteria	March 1, 2019
		10587094	Investigate and resolve why acceptance criteria was exceeded during 2C EDG LOCA/LOSP LSFT	March 1, 2019
		10593459	Breaker for alternate 600V supply would not close on first attempt	March 20, 2019
		10594609	RCIC speed response not as expected	March 24, 2019
		10594968	RCIC steam line cond drain valve tripped on overload when operated	March 25, 2019
			Procedures	34SV-R43-21-2
NMP-AD-012	Operability Determinations and Functional Assessments			Ver. 13.3
	Work Orders	SNC1008315	2E51-F046 Tripped on Overload	March 27, 2019
71111.18	Corrective Action Documents	CAR 269621	Unit 1 auto scram due to 'A' and 'B' IRMs spiking upscale	June 27, 2017
	Engineering Changes	DCP SNC489864	Degraded Grid – U2 SAT C & E Replacement	Ver. 8.0
		Design Change Package (DCP) SNC494055	Units 1 & 2 IRM Signal Filter Circuit Improvement	December 20, 2018
	Procedures	NMP-AD-008	Applicability Determinations	Ver. 21.0
		NMP-AD-009	Licensing Document Change Requests	Ver. 15.0
		NMP-AD-010	10 CFR 50.59 Screenings and Evaluations	Ver. 16.0
		NMP-MA-014	Post Maintenance Testing/Post Modification Testing	Ver. 2.1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.19	Corrective Action Documents	10585018	Update findings on 4160V bus 2G UV alarm during 2B CS start	February 22, 2019
		10592769	HPCI aux oil pump failed to start	March 19, 2019
	Procedures	34SV-024-2	Diesel Generator 1B LSFT	Ver. 3.0
		34SV-E11-001-2	Residual Heat Removal Pump Operability	Ver. 20.2
		34SV-E11-010-2	Residual Heat Removal System LPCI LSFT & Auto Actuation	Ver. 3.0
		34SV-E11-012-2	Residual Heat Removal System SDC LSFT	Ver. 3.0
		34SV-E41-005-2	HPCI Operability 165# Test	Ver. 7.13
		42SP-03-04-19-SB-1-2	RHR 2B Loop Auto-Start LSFT	Ver. 1.0
		42SP-03-04-19-SB-2-2	RHR Bus Power Monitoring LSFT	Ver. 1.0
		52PM-T47-001-0	Primary Containment Cooling System Maintenance	Ver. 10.4
		57SV-S32-002-2	Emergency Buses 2E, 2F and 2G Undervoltage Relay FT&C	Ver. 14.1
		NMP-MA-014	Post Maintenance Testing/Post Modification Testing	Ver. 2.1
	NMP-MA-014-001	Post Maintenance Testing Guidance	Ver. 5.2	
	Work Orders	SNC1000394	Received Alarm 2G 4160V Low Voltage Alarm on Pump Start	February 22, 2019
		SNC1000862	2C Auto Voltage Regulator Repairs	February 26, 2019
		SNC1001043	Visual Inspection of 2C EDG Engine/Generator Coupling	February 24, 2019
		SNC1006582	HPCI Aux Oil Pump Failed to Start	March 19, 2019
SNC936300		Replace Fan Motor per 51GM-MEL-001-0	March 19, 2019	
SNC946205		Replace Fan Motor per 51GM-MEL-001-0	March 29, 2019	
71111.20	Procedures	31GO-OPS-024-0	Outage Safety Assessment	Ver. 5.0
		34GO-G41-003-2	Fuel Pool Cooling and Cleanup System	Ver. 28.0
		34GO-OPS-001-2	Plant Startup	Ver. 51.2
		34GO-OPS-013-2	Normal Plant Shutdown	Ver. 33.2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		34GO-OPS-015-2	Maintaining Cold Shutdown or Refueling Condition	Ver. 16.0
		34GO-OPS-028-2	Drywell Closeout	Ver. 7.21
		34GO-OPS-029-0	Torus and Torus Area Closeout	Ver. 3.2
		34GO-OPS-065-0	Control Rod Movement	Ver. 15.4
		34SV-SUV-019-2	Mode 4 Surveillance Checks	Ver. 41.18
		42FH-ERP-001-0	Control Blade Unlatching, Installation, Removal and Exchange	Ver. 9.0
		42IT-TET-006-2	ISI Pressure Test of the Class 1 System and Recirculation Pumps(s) Runback Test	Ver. 18.10
		52GM-C11-001-0	CRD Removal and Installation	Ver. 7.0
		52GM-MME-004-2	Reactor Vessel Reassembly	Ver. 20.2
71111.21N	Corrective Action Documents Resulting from Inspection	10593732		
		10593732		
		10593733		
71111.22	Corrective Action Documents	10589354	2R42-S001A Recharge PCV Readings	March 8, 2019
	Procedures	34SV-C11-010-2	Alternate Rod Insertion LSFT	Ver. 1.0
		34SV-E11-001-1	Residual Heat Removal Pump Operability	Ver. 27.0
		34SV-E11-002-1	RHR Valve Operability	Ver. 21.6
		34SV-P41-001-2	Plant Service Water Pump Operability	Ver. 15.0
		34SV-R43-003-1	Diesel Generator 1C Monthly Test	Ver. 20.0
		42SP-09-18-17-RM-1-2	Unit 2 Station Auxiliary Transformer 2E Functional Test	Ver. 1.2
		42SV-E11-007-2	Air Test on Torus Headers and Nozzles	Ver. 1.8
		42SV-TET-001-0	LLRT Testing Methodology	Ver. 13.0
		42SV-TET-001-2	Primary Containment Periodic Type B and Type C Leakage Tests	Ver. 37.1
		52IT-CAL-017-2	Transformer Fault Pressure Relay	Ver. 5.0
		52IT-MEL-021-2	Trip Test of Start Up Transformer 2E Protective Relays	Ver. 2.0
		52SV-R42-011-2	Unit 2 Station Service Battery Combined Service Performance/Modified Performance Test	Ver. 5.0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	SNC660508	52SV-R42-006-0 & 52SV-R42-011-2 Battery Service Test	March 11, 2019
		SNC971671	New 2E SAT Transformer Testing	March 1, 2019
71124.01	Corrective Action Documents	CR 10514273		
		CR 10578680		
		CR 10578754		
		CR 10580308		
	Procedures	62RP-RAD-016-0	Control of High Radiation Areas	Version 35.4
		NMP-HP-001	Radiation Protection Standard Practices	Version 6.2
		NMP-HP-206	Issuance, Use, and Control of Radiation Work Permits	Version 5.0
		NMP-HP-300	Radiation and Contamination Surveys	Version 5.2
		NMP-HP-302	Restricted Area Classification, Postings, and Access Control	Version 10.6
		NMP-HP-302-001	Radiological Key Control	Version 3.2
		NMP-HP-303	Personnel Decontamination	Version 4.0
		NMP-HP-403	Control and Monitoring of Materials in Radiation Controlled Areas	Version 3.8
	Radiation Surveys	NMP-HP-404	Release of Materials from the RCA and Protected Areas	Version 4.2
			Air Sample Record Nos. 19-036-1 and 19-036-2, Unit 2 Refuel Floor, General Area	
			Unit 2 Condenser Bay (2TB112), Survey Nos. 165241 and 165272	
		Unit 2 Drywell (2DW156), Survey Nos. 165320 and 165392		
Radiation Work Permits (RWPs)	RWP No. 19-2605	DW/SC ISI and Supporting Activities	0	
71124.02	Procedures	NMP-AD-035	ALARA Program	Version 1.9
		NMP-HP-204	ALARA Planning and Job Review	Version 6.4
		NMP-HP-204-001	ALARA Planning	Version 1.0
71124.03	ALARA Plans	NMP-HP-204-001 - ALARA PLAN	Reactor Cavity Disassembly and Reassembly 2R25	02/04/2019
	Calibration Records	Supplied Breathing Air Compressors,	Grade D Air Sample Results for 2nd and 3rd Quarters of 2018	05/17/2018 and 9/14/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Atlas Copco, U1 TB 130 and Eagle Air Compressed Gas System Compressors		
	Procedures	52GM-MME-015-2	Reactor Vessel Disassembly	Version 1.0
		62HI-OCB-002-0	Portable HEPA Air Filtration Units and Vacuum Maintenance and Operation	Version 10.3
		NMP-HP-301	Airborne Radioactivity Sampling and Evaluation	Version 4.1
		NMP-HP-501	Radiological Respiratory Protection Program	Version 1.2
		NMP-HP-509	Selection and Control of Portable Ventilation Units	Version 1.3
	Radiation Surveys	MNP-HP-305 2018 Alpha Program	2018 Alpha Characterization Study	10/17/2018
		RIS #165339	U2 Cavity (2RX226)	02/05/2019
		RIS #165417	U2 Reactor Cavity (2RX228)	02/05/2019
	Radiation Work Permits (RWP)	RWP 19-2209	Refuel Floor Vessel Disassembly/Reassembly, Cavity Work and Support	Revision 0.0
71124.04	Corrective Action Documents	10586796		
	Miscellaneous	Gamma Spec 06Feb19-005	Nasal Swabs Left	02/06/2019
		Gamma Spec 06Feb19-006	Nasal Swabs Right	02/06/2019
		NMP-HP-104	Environmental Background reads, authenticated	02/21/2018
		NMP-HP-105, Data Sheet 1	DDE Discrepancy Investigation Form, ID # ***28 ; ID# **43,	03/05/2018; 03/05/2018
		PCE Analysis	PCE, Analysis report ID ***63, multiple analysis reports; PCE, Analysis report ID ***14, multiple analysis reports; PCE, Analysis report ID ***78,	2/22/19; 2/22/19; 02/07/19
	Procedures	NMP-HP-104-003	Performing Whole Body Counts	Version 1.2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		NMP-HP-104-008	Resolving Unidentified Peaks and Assignments of Dose	Version 1.0
		NMP-HP-104-011	Performing Whole Body Counts Using Apex-In Vivo	Version 1.0
		NMP-HP-108	Issuance, Use and Collection of Personnel Dosimetry	Version 2.7
		NMP-HP-303	Personnel Decontamination	Version 4.0
	Radiation Surveys	Survey #166368	PCE #779	02/17/19
		Survey #166372	PCE #780	02/17/19
71124.05	Calibration Records	62HI-OCB-100: HPX-1052	Electra 1B/AP5BD Calibration Data Sheet #D21-N1631,	02/03/17, 02/07/18
		62HI-OCB-107: HPX-1115	RM-25 Calibration Data Sheet Dn21-N 1539,	06/13/2017, 05/04/2018
		64CL-OCB-011-0	Post-LOCA Monitors, MPL # 2D11-K621A,	03-05-15
		Apex-In Vivo Calibration	Apex-In Vivo Calibration Check Count	01/2019 - 02/2019
		HPX-0977,	AMS-4 High Voltage and Flow Calibration #D21-N1754 Radial Head; #D21-N1754 InLine Head	04/17/2018
		HPX-0978 AMS-4 Calibration	#D21-N1745 Radial Head; #D21-N1745 InLine Head	04/09/2017
		NMP-HP-104	Mirion Technologies, Calibration of the Canberra People Mover WBC System at the SN Plant Hatch Dosimetry Department; Mirion Technologies, Calibration of the Canberra People Mover WBC System at the SN Plant Hatch In-Processing Facility; Efficiency Calibration Verification Counts, In-Processing People Mover,	06/08/2017; 06/08/2017; 06/17/2017
		NMP-HP-711	Operation and Calibration of HandECount Sample Counter,	10/2018- 12/2018
		NMP-HP-78, Data Sheet 1	Telepole Gamma Calibration, #0116,	09/21/2018, 09-15-2017
	NP-HP-703	RO-2, RO-2A, RO-20 Operation and Calibration, #4566,	07/11/18	
	Corrective Action Documents	10503223 10518282 10453715		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Miscellaneous	64CL-OCB-042-0,	Inter laboratory Cross-Check	10/31/2018
		NMP-HP-701	Daily Instruments Source Check Log	01/2019-02/2019
	Procedures	64CL-OCB-011-0	Post-LOCA Monitors	Version 7.2
		NMP-HP-718	Operation and Calibration of the Canberra GEM-5 Gamma Exit Monitor	Version 2.4
	Self-Assessments	NMP-GM-003-F18	Check-in Self-Assessment Report	08/2018
71151	Corrective Action Documents	CAR 272541	Cause Determination Report Summary for 3 Incidents Involving RP Procedural and Regulatory Non-Compliance, 04/11/2018.	
	Miscellaneous		Hatch Key Performance Indicators	January 2018 through December 2018
		CR#10461882	Dose and Dose Rate Alarm Report from 02/14/2018 to 07/11/2019	07/11/2018
		G-20181225-211-C	Radioactive Gas Release Permit	12/26/2018
		HIS-20 Report	Plant Hatch Access Control Alarms Report From 07/25/2018 to 01/02/2019	01/10/2019
		L-2018113-367-B	Radioactive Liquid Release Permit	11/13/2018
		NEI 99-02	Regulatory Assessment Performance Indicator Guideline	Rev. 7
	Procedures	NMP-AD-029	Preparation and Reporting of Regulatory Assessment Performance Indicator Data and the Monthly Operating Report	Ver. 1.1
71152	Corrective Action Documents	10585184	PT Wiring found incorrect at SAT 2C	February 23, 2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		10585783	Unexpected loss of 1C Startup Transformer	February 26, 2019
		10586844	Ground associated with wire D8 never installed	March 1, 2019
		10587094	Investigate and resolve why acceptance criteria was exceeded on the 2C EDG LOCA/LOSP LSFT	March 1, 2019
		10587312	Wires found reversed (2H11P652)	March 2, 2019
		10587356	Relay did not energize as it should during LSFT	March 3, 2019
	Procedures	NMP-AD-029	Preparation and Reporting of Regulatory Assessment Performance Indicator Data and the Monthly Operating Report	Ver. 1.0
		NMP-GM-002	Corrective Action Program	Version 15.1
		NMP-GM-002-002	Effectiveness Review Instructions	Ver. 5.2
	Work Orders	SNC489862	Degraded Grid - U2 Splice Box & Cable Bus DCP	March 29, 2017