



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

January 29, 2018

Ernest J. Kapopoulos, Jr.  
Site Vice President  
H. B. Robinson Steam Electric Plant  
Duke Energy  
3581 West Entrance Road, RNPA01  
Hartsville, SC 29550

**SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT – NUCLEAR REGULATORY  
COMMISSION INTEGRATED INSPECTION REPORT 05000261/2017004**

Dear Mr. Kapopoulos:

On December 31, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your H. B. Robinson Steam Electric Plant, Unit 2. On January 17, 2018, the NRC inspectors discussed the results of this inspection with you and members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any finding or violation of more than minor significance.

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

Sincerely,

**/RA/**

LaDonna B. Suggs, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Docket No.: 50-261  
License No.: DPR-23

Enclosure:  
Inspection Report 05000261/2017004  
w/Attachment: Supplemental Information

cc: Distribution via ListServ

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COMMISSION INTEGRATED INSPECTION REPORT 05000261/2017004  
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**U. S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket Nos.: 50-261

License Nos.: DPR-23

Report No.: 05000261/2017004

Licensee: Duke Energy Progress, Inc.

Facility: H. B. Robinson Steam Electric Plant, Unit 2

Location: 3581 West Entrance Road  
Hartsville, SC 29550

Dates: October 1, 2017 through December 31, 2017

Inspectors: J. Rotton, Senior Resident Inspector  
A. Beasten, Resident Inspector  
M. Bates (Section 1R11.3)

Approved by: LaDonna B. Suggs, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Enclosure

## **SUMMARY**

Integrated Inspection Report 05000261/2017004, October 1, 2017, through December 31, 2017; Duke Energy Progress, LLC, H. B. Robinson Steam Electric Plant, Unit 2, Integrated Inspection Report

The report covered a 3-month period of inspection by resident inspectors and one specialist inspector. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

No findings were identified.

## REPORT DETAILS

### Summary of Plant Status

The unit began the inspection period at essentially 100 percent power. On November 17, 2017, the unit reduced power briefly to 49 percent power to accommodate main turbine valve testing, and on the same day returned to 100 percent power, where it remained for the remainder of the inspection period.

#### 1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

#### 1R01 Adverse Weather Protection (71111.01 – 2 samples)

##### a. Inspection Scope

##### .1 Seasonal Extreme Weather Conditions

The inspectors conducted a detailed review of the station's adverse weather procedures written for preparation of extreme low temperatures. The inspectors verified that weather-related equipment deficiencies identified during the previous year had been placed into the work control process and/or corrected before the onset of seasonal extremes. The inspectors evaluated the licensee's implementation of adverse weather preparation procedures and compensatory measures before the onset of and during seasonal extreme weather conditions. Documents reviewed are listed in the attachment. This inspection constitutes one readiness for seasonal extreme weather condition sample. The inspectors evaluated the following risk-significant systems:

- Service water intake area, including service water pumps, fire water pumps, and condenser circulating water pumps
- Steam driven auxiliary feedwater (AFW) pump

##### .2 Readiness to Cope with External Flooding

The inspectors evaluated the licensee's implementation of flood protection procedures and compensatory measures during impending conditions of flooding or heavy rains. The inspectors reviewed the updated final safety analysis report (UFSAR) and related flood analysis documents to identify those areas containing safety related equipment that could be affected by external flooding and their design flood levels. The inspectors reviewed procedures for coping with external flooding and reviewed corrective actions for past flooding events. The inspectors verified that the procedures for coping with flooding could reasonably be achieved. For those areas where operator actions are credited, the inspectors assessed whether the flooding event could limit or preclude the required actions. In addition, the inspectors conducted a walkdown of the site boundary and Robinson Dam and spillway "Tainter" gates to assess whether there had been any changes in the site topography that could impact external flood assumptions and to assess the adequacy of flood protection equipment relied upon to mitigate the effects of external flooding. Documents reviewed are listed in the attachment. This inspection constitutes one readiness for external flooding sample.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04 – 3 samples)

a. Inspection Scope

.1 Partial Walkdown

The inspectors verified that critical portions of the selected systems were correctly aligned by performing partial walkdowns. The inspectors selected systems for assessment because they were a redundant or backup system or train, were important for mitigating risk for the current plant conditions, had been recently realigned, or were a single-train system. The inspectors determined the correct system lineup by reviewing plant procedures and drawings. Documents reviewed are listed in the attachment.

The inspectors selected the following systems or trains to inspect:

- Instrument air compressors “A” and “B” while the primary air compressor was out of service for planned maintenance
- Steam driven AFW pump following completion of planned maintenance
- Motor Driven AFW pumps “A” and “B” while “C” AFW pump was out of service due to a start failure during surveillance testing and corrective maintenance

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05Q – 5 samples)

a. Inspection Scope

.1 Quarterly Inspection

The inspectors evaluated the adequacy of selected fire plans by comparing the fire plans to the defined hazards and defense-in-depth features specified in the fire protection program. In evaluating the fire plans, the inspectors assessed the following items:

- control of transient combustibles and ignition sources
- fire detection systems
- water-based fire suppression systems
- gaseous fire suppression systems
- manual firefighting equipment and capability
- passive fire protection features
- compensatory measures and fire watches
- issues related to fire protection contained in the licensee’s corrective action program

The inspectors toured the following five fire areas to assess material condition and operational status of fire protection equipment. Documents reviewed are listed in the attachment.

- Pipe alley, fire zone 11
- Transformer yard, fire zone 26
- Service water pump/intake area, fire zone 29
- Containment Spray Additive Tank Room, fire zone 7
- C Battery Enclosure, fire zone 34

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)

a. Inspection Scope

.1 Internal Flooding

The inspectors reviewed related flood analysis documents and walked down the areas listed below containing risk-significant structures, systems, and components (SSCs) susceptible to flooding. The inspectors verified that plant design features and plant procedures for flood mitigation were consistent with design requirements and internal flooding analysis assumptions. The inspectors also assessed the condition of flood protection barriers and drain systems. In addition, the inspectors verified the licensee was identifying and properly addressing issues using the corrective action program. This inspection constitutes one internal flooding sample. Documents reviewed are listed in the attachment.

- Safeguards Room

a. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11 – 3 samples)

a. Inspection Scope

.1 Resident Inspector Quarterly Review of Licensed Operator Requalification

On November 16, 2017, the inspectors observed a simulator scenario conducted for training of an operating crew in accordance with the licensee's accredited requalification training program. The scenario involved a Loss of Offsite Power without a Safety Injection, followed by a loss of all alternating current (AC) power. This inspection constitutes one licensed operator requalification sample.

The inspectors assessed the following:

- licensed operator performance
- the ability of the licensee to administer the scenario and evaluate the operators
- the quality of the post-scenario critique
- simulator performance

Documents reviewed are listed in the attachment.

.2 Resident Inspector Quarterly Review of Licensed Operator Performance in the Actual Plant/Main Control Room

The inspectors observed licensed operator performance in the main control room during a reactor downpower to 49 percent power to accommodate main turbine valve testing.

The inspectors assessed the following:

- use of plant procedures
- control board manipulations
- communications between crew members
- use and interpretation of instruments, indications, and alarms
- use of human error prevention techniques
- documentation of activities
- management and supervision

This inspection constitutes one licensed operator performance sample. Documents reviewed are listed in the attachment.

.3 Annual Review of Licensee Requalification Examination Results: On February 10, 2017, the licensee completed the comprehensive biennial requalification written examinations and the annual requalification operating examinations required to be administered to all licensed operators in accordance with Title 10 of the *Code of Federal Regulations* 55.59(a)(2), "Requalification Requirements," of the NRC's "Operator's Licenses." The inspectors performed an in-office review of the overall pass/fail results of the individual operating examinations, written examinations, and the crew simulator operating examinations in accordance with Inspection Procedure (IP) 71111.11, "Licensed Operator Requalification Program." These results were compared to the thresholds established in Section 3.02, "Requalification Examination Results," of IP 71111.11. This inspection constitutes one review of annual licensed operator requalification performance sample.

b. Findings

No findings were identified.



1R12 Maintenance Effectiveness (71111.12 – 2 samples)

a. Inspection Scope

The inspectors assessed the licensee's treatment of the issues listed below to verify the licensee appropriately addressed equipment problems within the scope of the maintenance rule (10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"). The inspectors reviewed procedures and records to evaluate the licensee's identification, assessment, and characterization of the problems as well as their corrective actions for returning the equipment to a satisfactory condition. In addition, the inspectors performed a review of quality control to ensure licensee was in compliance with their Quality Assurance Program requirements. Documents reviewed are listed in the attachment. This inspection constitutes one routine maintenance effectiveness sample and one quality control sample.

- Work Order (WO) 20016127, PCV-4, Pressurizer PORV nitrogen pressure regulator replacement (Quality Control Sample)
- Nuclear Condition Report (NCR) 02149087, Robinson 10 CFR 50.65(a)(3) Periodic Assessment completed August 17, 2017

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 4 samples)

a. Inspection Scope

The inspectors reviewed the maintenance activities listed below to verify that the licensee assessed and managed plant risk as required by 10 CFR 50.65(a)(4) and licensee procedures. The inspectors assessed the adequacy of the licensee's risk assessments and implementation of risk management actions. The inspectors also verified that the licensee was identifying and resolving problems with assessing and managing maintenance-related risk using the corrective action program. Additionally, for maintenance resulting from unforeseen situations, the inspectors assessed the effectiveness of the licensee's planning and control of emergent work activities. Documents reviewed are listed in the attachment.

- November 12, Green risk during troubleshooting to identify source of ground on safety related 480V Bus E2
- November 17, Green risk for power reduction to 49 percent reactor power and associated turbine valve testing
- November 28, Green risk for corrective maintenance due to failure of the "C" AFW pump to start during performance of functional test OP-402, Auxiliary Feedwater System.
- December 11, Green risk for planned replacement of "B" service water booster pump rotating assembly

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 4 samples)

a. Inspection Scope

.1 Operability and Functionality Review

The inspectors selected the operability determinations or functionality evaluations listed below for review based on the risk-significance of the associated components and systems. The inspectors reviewed the technical adequacy of the determinations to ensure that technical specification (TS) operability was properly justified and the components or systems remained capable of performing their design functions. To verify whether components or systems were operable, the inspectors compared the operability and design criteria in the appropriate sections of the technical specification and UFSAR to the licensee's evaluations. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the attachment.

- NCR 02157095, EDG-B air compressor unloader valve O-ring causing air leak
- NCR 02162291, AFW-PMP-B (Aux feedwater pump B) OB bearing oil cup weeping
- NCR 02164971, SST-2G (Station Service Transformer – supply to 480V Emergency Bus 2) electrical ground
- NCR 02162838, HVE-19A (Train "A" Control Room Emergency Ventilation Air Cleaning Unit Fan) high vibrations during performance of OST-750-1 (Control Room Emergency Ventilation System – Train A Monthly Surveillance test)

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 6 samples)

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the maintenance activities listed below to verify the work performed was completed correctly and the test activities were adequate to verify system operability and functional capability.

- WOs 20170798 and 20207426, train "B" control room emergency ventilation post maintenance testing following scheduled maintenance
- WO 20200420, "B" service water booster pump post maintenance testing following replacement of rotating assembly
- WOs 20207416 and 20207760, steam generator blowdown system valve post

- maintenance testing following solenoid replacement for flow control valves
- WOs 20072906 and 20180335, steam-driven AFW pump post maintenance testing following scheduled preventative maintenance
- WOs 20091680 and 20215340, motor driven “C” AFW pump post maintenance testing following corrective maintenance identified during a failure to start during OP-402
- WOs 20176036 and 20213896, “A” Lake Robinson Tainter gate following gate chain replacement and J-Seal bolt replacement

The inspectors evaluated these activities for the following:

- Acceptance criteria were clear and demonstrated operational readiness
- Effects of testing on the plant were adequately addressed
- Test instrumentation was appropriate
- Tests were performed in accordance with approved procedures
- Equipment was returned to its operational status following testing
- Test documentation was properly evaluated

Additionally, the inspectors reviewed a sample of corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with post-maintenance testing. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 4 samples)

a. Inspection Scope

The inspectors reviewed the surveillance tests listed below and either observed the test or reviewed test results to verify testing activities adequately demonstrated that the affected SSCs remained capable of performing the intended safety functions (under conditions as close as practical to design bases conditions or as required by TS) and maintained their operational readiness.

The inspectors evaluated the test activities to assess for preconditioning of equipment, procedure adherence, and equipment alignment following completion of the surveillance. Additionally, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with surveillance testing. Documents reviewed are listed in the attachment. This inspection constitutes three routine tests and one in-service test samples.

Routine Surveillance Tests

- OST-632, Unit 2 Fire Suppression Water System Flow Test
- OST-352-3, Unit 2 Comprehensive Flow Test for Containment Spray Pump “A”
- MST-23, Safeguard Relay Rack Train “B”

### In-Service Tests

- OST-302-2, Service water pumps “C” and “D” in-service test

#### b. Findings

No findings were identified.

### 4. OTHER ACTIVITIES

#### 4OA1 Performance Indicator Verification (71151 – 1 sample)

##### a. Inspection Scope

The inspectors reviewed a sample of the performance indicator (PI) data, submitted by the licensee, for the Unit 2 PI listed below. The inspectors reviewed plant records compiled between October 2016 and September 2017 to verify the accuracy and completeness of the data reported for the station. The inspectors verified that the PI data complied with guidance contained in Nuclear Energy Institute 99-02, “Regulatory Assessment Performance Indicator Guideline,” and licensee procedures. The inspectors verified the accuracy of reported data that were used to calculate the value of each PI. In addition, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with PI data. Documents reviewed are listed in the attachment. The PI reviewed is listed below:

- Unit 2 high pressure injection system

##### b. Findings

No findings were identified.

#### 4OA2 Problem Identification and Resolution (71152 – 2 samples)

##### .1 Routine Review

The inspectors screened items entered into the licensee’s corrective action program to identify repetitive equipment failures or specific human performance issues for followup. The inspectors reviewed condition reports, attended screening meetings, or accessed the licensee’s computerized corrective action database.

##### .2 Semi-Annual Trend Review

##### a. Inspection Scope

The inspectors reviewed issues entered in the licensee’s corrective action program and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors focused their review on repetitive equipment issues and human performance trends, but also considered the results of inspector daily condition report screenings, licensee trending efforts, and licensee human performance results. The review nominally considered the 6-month period of July 2017 through December 2017, although some examples extended beyond those dates when the

scope of the trend warranted. The inspectors compared their results with the licensee's analysis of trends. Additionally, the inspectors reviewed the adequacy of corrective actions associated with a sample of the issues identified in the licensee's trend reports. The inspectors also reviewed corrective action documents that were processed by the licensee to identify potential adverse trends in the condition of structures, systems, and/or components as evidenced by acceptance of long-standing non-conforming or degraded conditions. Documents reviewed are listed in the attachment. This inspection constitutes one semi-annual trend review.

b. Findings and Observations

No findings were identified. However, the inspectors have noted the continuing human performance issues specifically related to procedure use and adherence. During the second half of 2017, several NCRs, all licensee identified, were written for human performance errors, including but not limited to: valve mispositioning on "C" charging pump backup air (NCR 02152182); erroneous wiring on dedicated shutdown diesel generator soak back pump, which resulted in the pump failing to start (NCR 02145974); clearance error on breaker positioning (NCR 02164011). All of the above items were related to secondary support systems or non-safety related systems and were identified by the licensee during follow-up or post maintenance activities. Additionally, the errors had no impact on safety and therefore were determined to be minor issues.

Additionally, a minor violation of 10 CFR 50, Appendix B, Criterion XVI was identified for the licensee's failure to identify and correct a condition adverse to quality. On February 16, 2017, the resident inspectors identified several valve hand wheels, specifically, component cooling water and charging pump system valves that were chained to nearby stationary support structures (i.e, I-beam column support) that could restrict pipe movement. The inspectors determined that during a seismic event, the piping on which the valve was located could move; however, with the valve chained to the stationary rigid structural support, the valve and associated piping would be restrained from the allowed movement, potentially damaging the valve or piping. The inspector determined that the licensee's locked valve procedure, OMM-009, "Locked Valves," was inadequate, in that it failed to provide the necessary guidance against chaining valves to plant rigid stationary support structures that could restrict pipe movement. The configuration was corrected and engineering performed a pipe analysis that demonstrated that in these cases, the maximum pipe movement was bounded by the slack in the chains. The licensee planned to revise the procedure to provide proper guidance for chaining valves and initiated NCR 2100703 to address this issue. This NCR was closed on March 8, 2017, and a procedure revision request (PRR) was initiated, with a due date of June 29, 2017, to make the change to the procedure (NCR 2101188). However, on November 7, during walkdowns, the resident inspectors identified additional valves, which were chained to stationary support structures. Similar to previously identified issues an engineering evaluation showed that enough slack existed that no damage to the pipe or valve would have occurred had there been a seismic event. While the PRR had been initiated for OMM-009, no action had been taken, and at the time of discovery, the procedure still failed to provide the necessary guidance for chaining valves. The procedure has since been revised to include the necessary instructions. The licensee initiated NCR 02163830 to correct the additional locked valves. This issue was determined to be minor since no actual safety consequence was involved.

### .3 Annual Followup of Selected Issues

#### a. Inspection Scope

The inspectors conducted a detailed review of NCR 02142216, "Temporary Loss of Power to Robinson Switchyard due to Lightning Strike."

The inspectors evaluated the following attributes of the licensee's actions:

- complete and accurate identification of the problem in a timely manner
- evaluation and disposition of operability and reportability issues
- consideration of extent of condition, generic implications, common cause, and previous occurrences
- classification and prioritization of the problem
- identification of root and contributing causes of the problem
- identification of any additional condition reports
- completion of corrective actions in a timely manner

Documents reviewed are listed in the attachment. This inspection constitutes one annual followup of selected issues sample.

#### b. Findings

No findings were identified.

### 4OA5 Other Activities

#### .1 Operation of an Independent Spent Fuel Storage Installation (ISFSI) (60855.1)

#### a. Inspection Scope

The inspectors performed a walkdown of the onsite ISFSI. The inspectors reviewed changes made to the ISFSI programs and procedures, including associated 10 CFR 72.48, "Changes, Tests, and Experiments," screens and evaluations to verify that changes made were consistent with the license or certificate of compliance. The inspectors also reviewed surveillance records to verify that daily surveillance requirements were performed as required by TS. Documents reviewed are listed in the attachment. This inspection constitutes one operation of an ISFSI sample.

#### b. Findings

No findings were identified.

### 4OA6 Meetings, Including Exit

On January 17, 2018, the resident inspectors presented the inspection results to Mr. Kapopoulos and other members of the licensee's staff. The inspectors confirmed that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee personnel**

E. Kapopoulos, Site Vice President  
J. Krakuszeski, Plant General Manager  
F. Giannone, Training Manager  
T. Giese, Manager, Operations Training  
D. Hall, Nuclear Organizational Performance Manager  
S. Hall, Radiation Protection Manager  
G. Hartzler, Chemistry Manager  
D. Hoffman, Manager, Operations  
J. Kammer, General Manager, Engineering  
C. Orr, Manager, Nuclear Work Management  
T. Pilo, Regulatory Affairs Manager  
D. Pitsley, Manager, Emergency Preparedness  
J. Ruff, Manager, Maintenance  
C. Sherman, Organizational Effectiveness Director  
J. Wild, Regulatory Affairs

#### **NRC personnel**

J. Rotton, Senior Resident Inspector  
A. Beasten, Resident Inspector  
L. Suggs, Branch Chief, Region II

### **LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

None

## LIST OF DOCUMENTS REVIEWED

### **Section 1R01: Adverse Weather Protection**

#### **Seasonal Extreme Weather Conditions**

AD-WC-ALL-0230, Seasonal Readiness  
AD-EG-ALL-1523, Temporary Ignition Source Control  
AP-058, Seasonal Readiness  
OP-925, Cold Weather Operation

#### **External Flooding**

AP-053, Severe Weather Response  
OMM-021, Operation during Adverse Weather Conditions  
OP-218, Lake Robinson Spillway Equipment  
GID-R87038-0007, Generic Issues Document – Hazard Analysis  
RNP-C-YSTR-1004, Site PMP Storm Event Inflow and External Flooding Analysis  
RNP-C-YSTR-1010, Hydrologic and Hydraulic (H&H) Tainter Gate Evaluation

### **Section 1R04: Equipment Alignment**

#### **Partial Walkdown**

Drawing G-190200, Sheet 2, Instrument & Station Air System Flow Diagram  
Drawing G-190197, Sheet 4, Auxiliary Feedwater System Flow Diagram

### **Section 1R05: Fire Protection**

AD-EG-ALL-1520, Transient Combustible Control  
OMM-002, Fire Protection Manual  
OMM-003, Fire Protection Pre-Plans/Unit No. 2  
AOP-041, Response to the Fire Event  
HBR2-11937, Fire Pre-Plan Transformer Yard, Sheet 57  
HBR2-11937, Fire Pre-Plan Pipe Alley, Sheet 13  
HBR2-11937, Fire Pre-Plan Service Water Pump/Intake Area, Sheet 45  
HBR2-11937, Fire Pre-Plan Spray Additive Tank and Waste Gas Compressors Area, Sheet 23  
HBR2-11937, Fire Pre-Plan "C" Battery Enclosure, Sheet 26

### **Section 1R06: Internal Flooding**

AOP-032, Response to Flooding from the Fire Protection System  
RNP-F-PSA-0009, Assessment of Internally Initiated Flood Events  
RNP-F-PSA-0104, RNP Internal Flooding PRA-Plant Partitioning and Walkdown Data  
RNP-F-PSA-0105, RNP Internal Flooding Analysis  
RNP-F-PSA-0113, RNP Internal Flooding PRA Quantification and Results Analysis  
RNP-M-MECH-1881, Internal Flooding Pipe Breaks for Reactor Auxiliary Building  
RNP-M-MECH-1882, Internal Flooding Displacement Evaluation for Reactor Auxiliary building  
RNP-M-MECH-1883, Internal Flooding Analysis Reactor Auxiliary building

### **Section 1R11: Licensed Operator Regualification**

#### **Resident Inspector Quarterly Review of Licensed Operator Regualification**

LOCT Segment 17-4: LOCT Simulator Exercise Guide, RNLOC1704R-N-S4  
EOP-ECA-0.0, Emergency Operating Procedure – Loss of All AC Power



**Resident Inspector Quarterly Review of Licensed Operator Performance in the Actual Plant/Main Control Room**

AD-OP-ALL-1000, Conduct of Operations  
 AD-OP-ALL-0203, Reactivity Management  
 OP-105, Maneuvering the Plant when Greater than 25% Power

**Section 1R12: Maintenance Effectiveness**

AD-EG-ALL-1210, Maintenance Rule Program  
 EC-406166, Engineering Change for Commercial Dedication of replacement PORV (PRV-4)  
 Nitrogen Pressure Regulator

**Section 1R13: Maintenance Risk Assessments and Emergent Work Evaluation**

AD-WC-ALL-0200, On-Line Work Management  
 AD-OP-ALL-0201, Protected Equipment  
 OMM-48, Work Coordination and Risk Assessment  
 AD-WC-ALL-0410, Work Activity Integrated Risk Management  
 AD-NF-ALL-0501, Electronic Risk Assessment Tool (ERAT)

**Section 1R15: Operability Evaluations**

**Operability and Functionality Review**

AD-OP-ALL-0102, Operational Decision Making  
 AD-OP-ALL-0105, Operability Determination and Functionality Assessments

**Section 1R19: Post Maintenance Testing**

PLP-033, Post Maintenance Testing Program  
 OST-750-2, Control Room Emergency Ventilation System Train "B" (Monthly)  
 OST-302-2, Service Water Booster Pump B Test  
 NCR 02170504, SWBP-B Oil Leak Rate Increase  
 OST-701-9, Steam Generator Blowdown System Inservice Valve Test  
 OST-707-9, Steam Generator Blowdown System Valve Position Indicator Verification  
 OST-202-2, Steam Driven Auxiliary Feedwater System Component Test

**Section 1R22: Surveillance Testing**

OMM-015, Operations Surveillance Testing

**Section 4OA1: Performance Indicator (PI) Verification**

AD-LS-ALL-004, NRC Performance Indicators and Monthly Operating Report  
 AD-BD-ALL-0002, Performance Measures Program  
 RNP-M/MECH-1904, RNP NRC Mitigating System Performance Index (MSPI) Basis Document

**Section 4OA2: Problem Identification and Resolution**

AD-PI-ALL-0100, Corrective Action Program  
 AD-PI-ALL-0101, Root Cause Evaluation  
 AD-PI-ALL-0102, Apparent Cause Evaluation  
 AD-PI-ALL-0103, Quick Cause Evaluation  
 AD-PI-ALL-0104, Prompt Investigation Response Team  
 AD-LS-ALL-0006, Notification/Reportability Evaluation  
 AD-EG-ALL-1311, Failure Investigation Process (FIP)

**Section 40A5: Other Activities****Operation of an Independent Spent Fuel Storage Installation (ISFSI)**

ISFS-101, ISFSI Equipment Receipt, Setup and Checkout

ISFS-102, ISFS DSC Loading and Storage

ISFS-103, ISFSI HSM Temperature Monitoring

ISFS-105, NUHOMS 24PTH Dry Storage Canister Welding

ISFS-009, 7P-ISFSI High Radiation

ISFS-022, Cask Preparation Area HVAC and HEPA Filter Operation

AD-EG-ALL-1005, Conduct of Dry Storage

Certificate of Compliance for Spent Fuel Storage Cask #1004, Amendment 13