



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

April 28, 2016

Mr. Steven D. Capps
Site Vice President
Duke Energy Carolinas, LLC
McGuire Nuclear Station
MG01VP/12700 Hagers Ferry Road
Huntersville, NC 28078

SUBJECT: MCGUIRE NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT
05000369/2016001 AND 05000370/2016001

Dear Mr. Capps:

On March 31, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your McGuire Nuclear Station Units 1 and 2. On April 7, 2016, the NRC inspectors discussed the results of this inspection with you and other members of your staff. Inspectors documented the results of this inspection in the enclosed inspection report.

NRC inspectors documented one finding of very low safety significance (Green) in this report. The finding involved a violation of NRC requirements. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the McGuire Nuclear Station. Also, 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 Regional Administrator, Region II; and the NRC resident inspector at the McGuire Nuclear Station.

In accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS).

S. Capps

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ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Frank Ehrhardt, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Docket Nos.: 50-369, 50-370
License Nos.: NPF-9, NPF-17

Enclosure:
NRC IR 05000369/2016001 and
05000370/2016001 w/Attachment:
Supplemental Information

cc: Distribution via ListServ

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NAME	J. Zeiler	R. Cureton	M. Toth	J. Worosilo	F. Ehrhardt	
DATE	4/27/2016	4/25/2016	4/26/2016	4/26/2016	4/28/2016	
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S. Capps

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Letter to Steven D. Capps from Frank Ehrhardt dated April 28, 2016.

SUBJECT: MCGUIRE NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT
05000369/2016001 AND 05000370/2016001

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-369, 50-370

License Nos.: NPF-9, NPF-17

Report No.: 05000369/2016001, 05000370/2016001

Licensee: Duke Energy Carolinas, LLC

Facility: McGuire Nuclear Station, Units 1 and 2

Location: Huntersville, NC 28078

Dates: January 1, 2016, through March 31, 2016

Inspectors: J. Zeiler, Senior Resident Inspector
R. Cureton, Resident Inspector

Approved by: Frank Ehrhardt, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Enclosure

SUMMARY

IR 05000369/2016001 and 05000370/2016001; 01/01/2016 – 03/31/2016; McGuire Nuclear Station, Units 1 and 2; Fire Protection.

The report covered a 3-month period of inspection by resident inspectors. There was one NRC-identified finding documented in this report. The significance of inspection findings are indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," (SDP) dated April 29, 2015. Cross-cutting aspects are determined using IMC 0310, "Aspects Within The Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated February 4, 2015. The NRC's program for overseeing the safe operations of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision (Rev.) 5.

NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. An NRC-identified Green non-cited violation (NCV) of the McGuire Nuclear Station Unit 1 and Unit 2 Renewed Facility Operating License Condition 2.C.4, "Fire Protection Program (FPP)," was identified for failure to perform annual maintenance on fire extinguishers located in contaminated radiation control zones (RCZs). The licensee took immediate corrective action to replace the past due fire extinguishers and entered the issue into their corrective action program as action request (AR) 02009794.

The performance deficiency (PD) was more than minor because if left uncorrected the PD could have the potential to lead to a more significant safety concern, in that, fire extinguishers located in any contaminated RCZs may not be functional for firefighting purposes due to lack of maintenance. Every fire extinguisher, five total, located in a contaminated RCZ, did not have its annual maintenance up-to-date. The longest duration without annual maintenance was six years for two of the five extinguishers. The finding was determined to be of very low safety significance (Green) within the mitigating system cornerstone because it would not affect the ability to reach and maintain a safe shutdown condition, in that, for each of the fire areas where the out-of-date extinguishers were present, there were also properly maintained fire extinguishers and hose stations outside of the RCZ. The out-of-date extinguishers were weighed and it was determined that they would have performed their function, if needed. The cause of the PD was directly related to the cross-cutting aspect of field presence in the cross-cutting area of human performance because the licensee failed to correct deviations from the FPP and ensure proper oversight of the vendor contracted to perform fire extinguisher maintenance. [H.2] (Section 1R05)

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at approximately 100 percent rated thermal power (RTP) until March 19, 2016, when the unit was shutdown for a refueling outage.

Unit 2 operated at approximately 100 percent RTP for the entire inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

Impending Adverse Weather Conditions

The inspectors reviewed the licensee's preparations to protect risk-significant systems from a winter storm warning on January 21, 2016, and a tornado watch on February 24, 2016. The inspectors evaluated the licensee's implementation of adverse weather preparation procedures and compensatory measures, including operator staffing, before the onset of and during the adverse weather conditions. The inspectors reviewed the licensee's plans to address the consequences that may result from the adverse weather conditions. The inspectors verified that operator actions specified in the licensee's adverse weather procedure maintain readiness of essential systems. The inspectors verified that required actions and surveillances were current, or were scheduled and completed, if practical, before the onset of anticipated adverse weather conditions. The inspectors also verified that the licensee implemented periodic equipment walkdowns or other measures to ensure that the condition of plant equipment met operability requirements. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

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 four systems or trains to inspect:

- 2A component cooling water (KC) pumps while the 2B KC pumps were out of service for planned maintenance
- 1B motor driven auxiliary feedwater (CA) pump while the 1A motor driven CA pump was out of service for planned maintenance
- Unit 1 and Unit 2 120 volt DC shared vital batteries EVCA, EVCC, and EVCD while EVCB was out of service for scheduled battery cell replacement
- 1B residual heat removal (ND) pump while the 1A ND pump was inoperable for scheduled room air handling unit (AHU) maintenance

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05AQ)

a. Inspection Scope

Quarterly Inspection

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

- control of transient combustibles and ignition sources
- fire detection systems
- 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.

- Unit 1 fuel pool area (fire area 26)
- Unit 2 fuel pool area (fire area 27)
- Auxiliary building 716 foot elevation (fire area 4)
- Unit 1 and Unit 2 vital battery rooms (fire area 13)
- Unit 1 and Unit 2 auxiliary building 695 foot elevation (fire area 1)

b. Findings

Introduction: An NRC-identified Green non-cited violation (NCV) of the McGuire Nuclear Station Unit 1 and Unit 2 Renewed Facility Operating License Condition 2.C.4, "Fire Protection Program (FPP)," was identified for failure to perform annual maintenance on fire extinguishers located in contaminated radiation control zones (RCZs).

Description: During a fire protection walkdown on the 716 foot elevation of the auxiliary building, the inspectors identified that fire extinguisher FX-9805 was past due for annual maintenance, and the last time it was performed was May of 2013. It was determined that the vendor, which the licensee contracted for inspections and maintenance of fire extinguishers, did not perform the annual inspections on fire extinguishers located in contaminated RCZs of the plant. The vendor notified the licensee that maintenance on fire extinguishers located in contaminated RCZs was not being conducted, as annotated in work order completion comments, however, the licensee failed to take any actions to address the missed inspection activities. The extent of condition review revealed that there were four other contaminated RCZs containing fire extinguishers and they were also past due for annual maintenance. The longest duration without annual maintenance was six years for two of the five extinguishers. The licensee took immediate corrective action to replace the past due fire extinguishers.

Analysis: The licensee's programmatic failure to maintain fire extinguishers located in contaminated RCZs in accordance with the FPP was a performance deficiency (PD). The PD was more-than-minor because if left uncorrected the PD could have the potential to lead to a more significant safety concern, in that, fire extinguishers located in any contaminated RCZ may not be functional for firefighting purposes due to lack of maintenance. Every fire extinguisher, five total, located in a contaminated RCZ, did not have its annual maintenance up-to-date. The finding was screened using IMC 0609 Appendix F, "Fire Protection Significance Determination Process," dated September 20, 2013, and determined to be of very low safety significance (Green) within the mitigating systems cornerstone because it would not affect the ability to reach and maintain a safe shutdown condition. For each of the fire areas where the out-of-date extinguishers were present, there were also properly maintained fire extinguishers and hose stations outside of the radiation control zone. The out-of-date extinguishers were weighed and it was determined that they would have performed their function, if needed. The cause of the PD was directly related to the cross-cutting aspect of field presence in the cross-cutting area of human performance because the licensee failed to correct deviations from the FPP and ensure proper oversight of the vendor contracted to perform fire extinguisher maintenance. [H.2]

Enforcement: McGuire Nuclear Station Renewed Facility Operating License Condition 2.C.4 required the licensee to implement and maintain in effect all provisions of the approved FPP as described in Section 9.5.1 of the Updated Final Safety Analysis Report (UFSAR) as approved in Supplement 2 of the safety evaluation report (SER) dated March 1, 1979. McGuire UFSAR Section 9.5.1 stated, in part, that the McGuire FPP was contained in design basis document MCS-1465.00-00-0008, "Plant Design Basis Specification for Fire Protection." The FPP required that portable fire extinguisher are provided in accordance with the guidelines of National Fire Protection Association

(NFPA) 10-1978, "Standard for Portable Fire Extinguishers," which states that extinguishers shall be subjected to maintenance not more than one year apart or when specifically indicated by inspection. Contrary to the above, from approximately 2010 to 2016, the licensee failed to maintain fire extinguishers located in contaminated RCZs in accordance with NFPA 10. Because this violation was determined to be of very low safety significance and has been entered into the licensee's corrective action program as AR 02009794, it is being treated as an NCV consistent with Section 2.3.2.a of the NRC Enforcement Policy and is identified as NCV 05000369, 370/2016001-01, "Failure to Maintain Fire Extinguishers in Contaminated Radiation Control Zones in Accordance with the Fire Protection Program."

1R11 Licensed Operator Regualification Program and Licensed Operator Performance (71111.11)

a. Inspection Scope

.1 Resident Inspector Quarterly Review of Licensed Operator Regualification

On February 10, 2016, the inspectors observed a simulator scenario conducted for training of an operating crew for preparation for an upcoming outage. The scenario consisted of performing a natural circulation cooldown to cold shutdown conditions following a reactor trip and loss of all reactor coolant pumps due to a common mode failure event.

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 Unit 1 shutdown to Mode 5 on March 19, 2016, to conduct a scheduled refueling outage.

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

Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors assessed the licensee's treatment of the two 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. The inspectors also interviewed plant personnel to assess the licensee's treatment of performance deficiencies and extent of condition. Documents reviewed are listed in the attachment.

- AR 01965547, Failed stroke time testing of Unit 2 containment isolation valve 2NC-56B
- AR 01935341, Trip Condition on radiation monitor OEMF-41 caused auxiliary building ventilation (VA) system auto alignment

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed the five 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.

- Complex activity plan for the 2B ND pump and the 2B KC pumps being out of service for planned maintenance
- Risk assessment for impending winter ice storm
- Complex activity plan for replacing the 2A1 emergency diesel generator (EDG) room ventilation system (VD) fan
- Critical activity plan for replacing the EVCB 120 volt DC vital batteries
- Critical activity plan for replacing the 1A ND room AHU

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15)

a. Inspection Scope

.1 Operability and Functionality Review

The inspectors selected the five 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 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 updated final safety analysis report 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.

- AR 01984653, Raw water leak in Unit 1 containment
- ARs 01986809, 01987136, and 01987481, Unit 1 main feedwater pump recirculation valve circuit reset control board light dimly lit
- AR 01988881, Valve 0RN-10AC failure to close and reportability evaluation
- AR 01990527, Water leak from 1A containment spray pump room AHU
- AR 02005730, Total mini-flow for the 2A ND pump was in the required action low point

.2 Operator Work-Around Review

The inspectors performed a detailed review of the licensee's operator work-around, operator burden, and control room deficiency lists for the station in effect on February 16, 2016, to verify that the licensee was identifying issues at an appropriate threshold and entering them in the corrective action program. The inspectors verified that the licensee identified the full extent of issues, performed appropriate evaluations, and

planned appropriate corrective actions. The inspectors reviewed compensatory actions and their cumulative effects on plant operation. In addition, the inspectors attended a licensee quarterly aggregate operator impact assessment team meeting to ensure the licensee was evaluating potential operator challenge issues, appropriately characterizing, and prioritizing the issues. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

a. Inspection Scope

The inspectors verified that the plant modification (EC) listed below did not affect the safety functions of important safety systems. The inspectors confirmed the EC did not degrade the design bases, licensing bases, and performance capability of risk significant structures, systems and components. The inspectors also verified modifications performed during plant configurations involving increased risk did not place the plant in an unsafe condition. Additionally, the inspectors evaluated whether system operability and availability, configuration control, post-installation test activities, and changes to documents, such as drawings, procedures, and operator training materials, complied with licensee standards and NRC requirements. In addition, the inspectors reviewed a sample of related corrective action documents to verify the licensee was identifying and correcting any deficiencies associated with modifications. Documents reviewed are listed in the attachment.

- EC-401936, Revise EDG VD system design bases to allow one VD fan to be out of service if outside ambient temperature is less than or equal to 68 degrees Fahrenheit

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

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.

- 2A motor driven CA pump suction isolation valve 2CA-11A following VIPER testing
- 1A EDG slave start following hot web deflection maintenance
- 2A nuclear service water (RN) pump following bearing repairs

- 1A ND pump room AHU following repairs for increased fan bearing vibration
- 2A ND pump following troubleshooting to address decreased mini-flow
- Unit 2 turbine driven CA pump following decrease in performance data trend

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.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

For the Unit 1 refueling outage from March 19, 2016, through the remainder of the inspection period, the inspectors evaluated the following outage activities:

- outage planning
- shutdown, cooldown, and defueling
- reactor coolant system instrumentation and electrical power configuration
- reactivity and inventory control
- decay heat removal and spent fuel pool cooling system operation
- containment closure

The inspectors verified that the licensee:

- considered risk in developing the outage schedule
- controlled plant configuration per administrative risk reduction methodologies
- developed work schedules to manage fatigue
- developed mitigation strategies for loss of key safety functions
- adhered to operating license and technical specification requirements

The inspectors verified that safety-related and risk-significant structures, systems, and components not accessible during power operations were maintained in an operable condition. The inspectors also reviewed a sample of related corrective action

documents to verify the licensee was identifying and correcting any deficiencies associated with outage activities. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed the five surveillance tests listed below and either observed the test or reviewed test results to verify testing adequately demonstrated equipment operability and met technical specification and current licensing basis. 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.

Routine Surveillance Tests

- PT/2/A/4252/001, #2 TD CA Pump Performance Test, Rev. 117
- PT/1/A/4200/041, Unit 1 SSF Systems Integrated Test, Rev. 5 (Section 12.5)
- PT/1/A/4350/036A, D/G 1A 24 Hour Run, Rev. 47

In-Service Tests (IST)

- PT/2/A/4204/001A, 2A ND Pump Performance Test, Rev. 65

Reactor Coolant System Leak Detection

- PT/1/A/4150/001B, Reactor Coolant Leakage Calculation, Rev. 93

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed the emergency preparedness drill conducted on February 17, 2016. The inspectors observed licensee activities in the simulator and technical support center to evaluate implementation of the emergency plan, including event classification,

notification, and protective action recommendations. The inspectors evaluated the licensee's performance against criteria established in the licensee's procedures. Additionally, the inspectors attended the post-exercise critique to assess the licensee's effectiveness in identifying emergency preparedness weaknesses and verified the identified weaknesses were entered in the corrective action program. Documents reviewed are listed in the attachment.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

a. Inspection Scope

The inspectors reviewed a sample of the performance indicator (PI) data, submitted by the licensee, for the Unit 1 and Unit 2 PIs listed below. The inspectors reviewed plant records compiled between January 2015 and December 2015 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.

Cornerstone: Initiating Events

- unplanned scrams per 7000 critical hours
- unplanned power changes per 7000 critical hours
- unplanned scrams with complications

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152)

.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 follow-up. The inspectors reviewed problem identification program reports, attended screening meetings, or accessed the licensee's computerized corrective action database.

.2 Annual Followup of Selected Issues

a. Inspection Scope

The inspectors conducted a detailed review of action request AR 01935341, Trip II condition on radiation monitor OEMF-41 caused VA auto alignment. 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 apparent 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.

b. Findings and Observations

No findings were identified.

4OA6 Meetings, Including Exit

On April 7, 2016, the resident inspectors presented the inspection results to Mr. Steven Capps, Site Vice President, and other members of the licensee's staff. The inspectors verified 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:

B. Anderson, Superintendent of Operations
D. Brenton, Maintenance Superintendent
S. Capps, Vice President, McGuire Nuclear
J. Gabbert, Chemistry Manager
J. Glenn, Organizational Effectiveness Manager
M. Kelly, Outage and Scheduling Manager
K. Kinard, Security Manager
S. Mooneyhan, Radiation Protection Manager
C. Morris, Station Manager
G. Murphy, Regulatory Affairs Nuclear Operations Specialist
J. Robertson, Regulatory Affairs Manager
P. Schuerger, Training Manager
S. Snider, Engineering Manager

LIST OF REPORT ITEMS

Closed

05000369, 370/2016001-01 NCV Failure to Maintain Fire Extinguishers in Contaminated
Radiation Control Zones in Accordance with the Fire
Protection Program (1R05)

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Impending Adverse Weather Conditions

RP/0/A/5700/006, Natural Disasters, Rev. 29 and 30
AD-OP-ALL-1000, Conduct of Operations, Rev. 5
ARs 01993805 and 01993844

Section 1R04: Equipment Alignment

Partial Walkdown

OP/1/A/6200/004, Residual Heat Removal System, Rev. 132
MCFD-1561-01.00, Flow Diagram of Residual Heat Removal System, Rev. 23
OP/0/A/6350/001A, 125 VDC/120 VAC Vital Instrument and Control Power System, Rev. 102
OP/2/A/6400/005 A, Component Cooling Water System Valve and Power Supply Checklists, Rev. 31
OP/1/A/6250/002, Auxiliary Feedwater System, Rev. 118

Section 1R05: Fire Protection

Quarterly Inspection

MCS-1465.00-00-0008, Design Basis Specification for Fire Protection, Rev. 19
MCS-1465.00-00-0022, Appendix R Safe Shutdown Analysis, Rev. 14
MCC-1435.00-00-0059, NFPA 805 – Appendix R Safe Shutdown Deterministic Analysis, Rev. 2
AD-EG-ALL-1520, Transient Combustible Control, Rev. 3
NSD-104, Material Condition/Housekeeping, Foreign Material Exclusion and Seismic Concerns, Rev. 38
NSD-316, Fire Protection Impairment and Surveillance, Rev. 17
AP/0/A/5500/45, Plant Fire, Rev. 6
MFSD-013, Vital Battery Room, Rev. 0
McGuire Nuclear Station Fire Strategy – Vital Battery Room, Elevation 733
MFSD-001, Aux 695, Rev. 0
FS/0/B/9000/001, (Aux 695) Fire Strategy #1, Rev. 0
FS/0/B/9000/004, (Aux 716) Fire Strategy #4, Rev. 0
Strategy Number 1-26, Aux U1 Fuel Pool Area
Strategy Number 1-27, Aux U2 Fuel Pool Area

Section 1R11: Licensed Operator Regualification Program and Licensed Operator Performance

Resident Inspector Quarterly Review of Licensed Operator Regualification

NSD-509, Site Standards in Support of Operational Focus, Rev. 6
SOMP 01-07, Control Room Oversight, Rev. 2
EP/1/A/5000/ES-0.2, Natural Circulation Cooldown, Rev. 14

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

AD-OP-ALL-1000, Conduct of Operations, Rev. 5
NSD-509, Site Standards in Support of Operational Focus, Rev. 6
OP/1/A/6100/002, Controlling Procedure for Unit Shutdown, Rev. 182
OP/1/A/6100/003, Controlling Procedure for Unit Operation, Rev. 197

Section 1R12: Maintenance Effectiveness

EDM-210, Engineering Responsibilities for the Maintenance Rule, Rev. 29
 AD-EG-ALL-1204, Single Point Vulnerability Identification, Elimination and Mitigation, Rev. 2
 AD-EG-ALL-1206, Equipment Reliability Classification, Rev. 2
 AD-EG-ALL-1209, System, Component, and Program Health Reports and Notebooks, Rev. 4
 AD-EG-ALL-1211, System Performance Monitoring and Trending, Rev. 3
 SSC Function Scoping Database
 PT/2/A/4151/002B, NC Train B Valve Stroke Timing - Quarterly, Rev. 29
 WO 20027139, 2NC-56B stroke time failure
 Waste Gas (WG) System Health Report Q4 2015
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