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

August 8, 2014

Steven D. Capps
Duke Energy Carolinas, LLC
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION – NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000369/2014007 AND 05000370/2014007

Dear Mr. Capps:

On June 26, 2014, the Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution biennial inspection at your McGuire Nuclear Station Units 1 and 2. The enclosed report documents the inspection results, which were discussed on June 26, 2014, with Mr. Chuck Morris, and on August 7, 2014, with Mr. J. Robertson and other members of your staff. The inspection team documented the results of this inspection in the enclosed inspection report.

Based on the inspection sample, the inspection team determined that your staff's implementation of the corrective action program supported nuclear safety. In reviewing your corrective action program, the team assessed how well your staff identified problems at a low threshold, your staff's implementation of the station's process for prioritizing and evaluating these problems, and the effectiveness of corrective actions taken by the station to resolve these problems. In each of these areas, the team determined that your staff's performance was adequate to support nuclear safety.

The team also evaluated other processes your staff used to identify issues for resolution. These included your use of audits and self-assessments to identify latent problems and your incorporation of lessons learned from industry operating experience into station programs, processes, and procedures. The team determined that your station's performance in each of these areas supported nuclear safety.

Finally, the team determined that your station's management maintains a safety-conscious work environment adequate to support nuclear safety. Based on the team's observations, your employees are willing to raise concerns related to nuclear safety through at least one of the several means available.

NRC inspectors documented one finding of very low safety significance (Green) in this report. This 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 NRC 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, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the McGuire Nuclear Station.

If you disagree with the 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 10 CFR 2.390 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 the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Steven D. Rose, Chief
Reactor Projects Branch 7
Division of Reactor Projects

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

Enclosure: Inspection Report 05000369/2014007 and 05000370/2014007
w/Attachment: Supplemental Information

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Letter to Steven D. Capps from Steven D. Rose dated August 8, 2014.

SUBJECT: MCGUIRE NUCLEAR STATION – NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000369/2014007 AND 05000370/2014007

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REGION II

Docket No.:	50-369, 50-370
License No.:	NPF-9, NPF-17
Report No:	05000369/2014007, 05000370/2014007
Licensee:	Duke Energy Carolinas, LLC
Facility:	McGuire Nuclear Station, Units 1 and 2
Location:	Huntersville, NC 28078
Dates:	June 9-13, 2014 June 23-26, 2014
Inspectors:	P. Lessard, Resident Inspector, Team Leader D. Anderson, Project Engineer J. Graham, Physical Security Inspector N. Pitoniak, Fuel Facility Inspector R. Taylor, Senior Project Inspector
Approved by:	Steven D. Rose, Branch Chief, Reactor Projects Branch 7 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000369/2014007, 05000370/2014007; 06/09/2014 – 06/26/2014; McGuire Nuclear Station, Units 1 and 2; Biennial Inspection of the Problem Identification and Resolution Program.

The inspection was conducted by one senior project inspector, one fuel facility inspector, one physical security inspector, one project engineer and one resident inspector. One Green non-cited violation (NCV) was identified. The significance of most findings is identified by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, Significance Determination Process (SDP); cross-cutting aspects were determined using IMC 0310; Aspects Within Cross-Cutting Areas; and findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, Reactor Oversight Process (ROP).

Identification and Resolution of Problems

The team concluded that, in general, problems were properly identified, evaluated, prioritized, and corrected. The threshold for initiating Problem Identification Program entries (PIPs) in the corrective action program (CAP) was appropriately low, as evidenced by the types of problems identified and the number of PIPs entered annually into the CAP. However, the team did identify deficiencies in the areas of identification of problems, prioritization and evaluation of identified problems, and effectiveness of corrective actions. The team noted that the licensee's 2014 CAP audit results were in line with the team's observations and findings.

The inspectors determined that overall audits and self-assessments were adequate in identifying deficiencies and areas for improvement in the CAP, and appropriate corrective actions were developed to address the issues identified. Operating experience usage was found to be generally acceptable and integrated into the licensee's processes for performing and managing work, and plant operations.

Based upon interviews conducted with plant employees from various departments and a review of the 2013 Safety Culture Assessment Report, the team determined that personnel at the site felt free to raise safety concerns to management and use the CAP to resolve those concerns.

Cornerstone: Mitigating Systems

- Green: An NRC-identified NCV of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Action, was identified when the licensee failed to promptly identify a condition adverse to quality associated with the inadequate sealing for safety related cabinet 1FWPNRWLP (Unit 1 Refueling Water Storage Tank (RWST) Channel 4 Level Instrumentation loop). Specifically, the licensee did not identify that the seal around a cable bundle entering the top of 1FWPNRWLP had degraded to the point where it would no longer protect against water intrusion into the cabinet. The licensee placed this issue into their CAP as PIP M-14-05643 and took corrective action by replacing the seal. The inspectors determined that the failure to promptly identify a condition adverse to quality associated with the inadequate sealing of 1FWPNRWLP was a performance deficiency.

This performance deficiency was more than minor because it was associated with the equipment performance attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective of ensuring the capability of the automatic RWST swap over function to respond to initiating events to prevent undesirable consequences. Using IMC 0609, Significance Determination Process, Appendix A, Exhibit 2 - Mitigating Systems Screening Questions, dated June 19, 2012, the inspectors determined this finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification and did not represent an actual loss of system and/or function. The finding had a cross-cutting aspect of Procedure Adherence, as described in the Human Performance cross-cutting area because the licensee failed to adequately implement the walkdown process outlined in EDM-203 and promptly identify this degradation (H.8). (Section 4OA2.a(3)(i))

REPORT DETAILS

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

a. Corrective Action Program Effectiveness

(1) Inspection Scope

The team reviewed the licensee's CAP procedures which described the administrative process for initiating and resolving problems primarily through the use of PIPs. To verify that problems were being properly identified, appropriately characterized, and entered into the CAP, the team reviewed a sample of PIPs that had been issued between August 2012 and June 2014, including a detailed review of selected PIPs associated with the following risk-significant systems and components: Auxiliary Feedwater (AFW), 125 Volt DC, Residual Heat Removal (RHR) and Nuclear Service Water (NSW). Where possible, the team independently verified that the corrective actions were implemented as intended. The team also reviewed selected common causes and generic concerns associated with root cause evaluations (RCE) to determine if they had been appropriately addressed. To help ensure that samples were reviewed across all cornerstones of safety identified in the ROP, the team selected a representative number of PIPs that were identified and assigned to the major plant departments, including operations, maintenance, engineering, health physics, chemistry, emergency preparedness and security. These PIPs were reviewed to assess each department's threshold for identifying and documenting plant problems, thoroughness of evaluations, and adequacy of corrective actions. The team reviewed selected PIPs, verified corrective actions were implemented, and attended meetings where PIPs were evaluated for significance to determine whether the licensee was identifying, accurately characterizing, and entering problems into the CAP at an appropriate threshold.

Plant walkdowns of equipment within the selected systems listed above and other plant areas were conducted by inspectors to assess the material condition and to identify deficiencies that had not been previously entered into the CAP. The team reviewed PIPs, maintenance history, completed work orders (WOs) for the systems, and reviewed associated system health reports. These reviews were performed to verify that problems were being properly identified, appropriately characterized, and entered into the CAP. Items reviewed generally covered a two-year period of time; however, a five-year review was performed for selected systems to identify trends and age related issues.

Control room walkdowns were also performed to assess the main control room (MCR) deficiency list and to ascertain if deficiencies were being tracked to resolution. A sample of operator workarounds and operator burden screenings were reviewed and the team verified compensatory measures for deficient equipment were being implemented in the field.

Detailed reviews of selected PIPs were performed by the inspectors to assess the adequacy of root-cause and apparent-cause evaluations for identified problems. The team reviewed these evaluations against the descriptions of the problem described in the PIPs and the guidance in licensee procedure NSD-212, Cause Analysis. The team assessed if the licensee had adequately determined the cause(s) of identified problems, and addressed operability, reportability, common cause, generic concerns, extent-of-condition, and extent-of-cause. The review also assessed if the licensee had appropriately identified and prioritized corrective actions to prevent recurrence as applicable.

The team reviewed selected industry operating experience items, including NRC generic communications and Part 21 reports, to verify that they had been appropriately evaluated for applicability or used in licensee activities and that issues identified through these reviews had been entered into the CAP.

The team reviewed site trend reports to determine if the licensee effectively trended identified issues and initiated appropriate corrective actions when adverse trends were identified.

Various plant meetings were attended by the team to observe management oversight functions of the corrective action process. These included meetings for the Centralized Screening Team (CST), Performance Improvement Oversight Committee (PIOC), Operating Experience Screening Team (OEST), Core Team, Plant Health Committee (PHC), CAP Review and Operational Focus.

(2) Assessment

Problem Identification

The team determined that the licensee was generally effective in identifying problems and entering them into the CAP and there was a low threshold for entering issues into the CAP. This conclusion was based on a review of the requirements for initiating PIPs as described in licensee procedure NSD-208, Problem Investigation Program, management's expectation that employees were encouraged to initiate PIPs for any reason, and the relatively few number of deficiencies identified by the team during plant walkdowns not already entered into the CAP. Trending was generally effective in monitoring equipment performance. Site management was actively involved in the CAP and focused appropriate attention on significant plant issues. Based on reviews and walkdowns of accessible portions of the selected systems, the team determined that system deficiencies were being identified and placed in the CAP. However, the team identified the following deficiencies related to problem identification.

- The inspectors identified a performance deficiency related to 10 CFR Part 50, Appendix B, Criterion III, "Design Control," and EDM-601, Engineering Change Manual, for the failure to perform an adequate design change evaluation while modifying the suction filtration design for AHU-16 (switchgear room safety related air handler). This condition was documented in PIPs M-14-06016 and M-14-5671.

Based upon no adverse impact on the safety function of the air handler, the inspectors determined this was a minor violation of NRC requirements and not subject to enforcement in accordance with the NRC's Enforcement Policy.

- During the RHR system walkdown, the inspectors identified an inadequate seal around a cable penetration into the Channel 4 RWST level instrumentation cabinet. A finding associated with this condition is documented in Section 4OA2.a(3)(i) of the report.

Problem Prioritization and Evaluation

Based on the review of PIPs sampled by the inspection team during the onsite period, the team concluded that problems were generally prioritized and evaluated in accordance with the licensee's CAP procedures as described in the PIP severity level determination guidance in procedure NSD-208. Each PIP was assigned a severity level at the CST meeting, and this determination was reviewed at the CAP Review meeting. Adequate consideration was given to system or component operability and associated plant risk.

The team determined that station personnel had conducted root cause and apparent cause analyses in compliance with the licensee's CAP procedures and the assigned cause determinations were appropriate, considering the significance of the issues being evaluated. A variety of formal causal-analysis techniques were used depending upon the type and complexity of the issue consistent with licensee procedures.

Corrective Actions

Based on a review of corrective action documents, interviews with licensee staff, and verification of completed corrective actions, the team determined that generally, corrective actions were timely, commensurate with the safety significance of the issues, and effective, in that conditions adverse to quality were corrected and non-recurring. For significant conditions adverse to quality, the corrective actions directly addressed the cause and effectively prevented recurrence in that a review of performance indicators, PIPs, and effectiveness reviews demonstrated that the significant conditions adverse to quality had not recurred. Effectiveness reviews for CAPRs were sufficient to ensure corrective actions were properly implemented and effective.

The team identified the following deficiencies related to corrective actions:

- The inspectors identified a performance deficiency related to TS 5.4.1.a, Procedures and Programs, for the failure to have an adequate operating procedure as recommended by RG 1.33, Quality Assurance Program Requirements, Appendix A, Section 3.c and 3.d. Specifically, licensee procedure OP/1/A/6100/SD-6A, Placing Train "A" RHR in Service, allowed the system to be used for plant cooldown at temperatures which could result in steam voiding if RHR had to perform its safety function as part of the Emergency Core Cooling System. After a detailed review of operational history, additional procedures, and training, the inspectors determined that this issue was a minor violation and not subject to enforcement in accordance

with the NRC's Enforcement Policy because the additional existing guidance was deemed adequate to prevent this condition as demonstrated by the system not being used at elevated temperatures. This condition was placed in CAP as PIP M-14-5669 and affected procedure revisions are scheduled.

- The inspectors identified a performance deficiency associated with the failure to properly install machine guards on the Unit 1 motor driven AFW (MDAFW) pumps. Specifically, the inspectors identified that the licensee failed to meet the procedural requirements of MP/0/A/7700/120 Rev 4, Machine Guarding Fabrication and Installation, which requires guards to be attached to the machine frame using clamps, bolts, screws or other approved devices to ensure the safety function of the machine is not adversely impacted. The inspectors observed that the licensee had used hook and loop fabric to secure machine guards. The licensee initiated PIP M-14-05689 to address the condition. This performance deficiency was determined to be a minor violation and not subject to enforcement in accordance with the NRC's Enforcement Policy, because further evaluation concluded that it did not adversely affect the safety function of the MDAFW pumps.

(3) Findings

i. Introduction: An NRC identified Green NCV of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Action, was identified when the licensee failed to promptly identify a condition adverse to quality associated with the inadequate sealing for safety related cabinet 1FWPNRWLP (Unit 1 RWST Channel 4 Level Instrumentation loop). Specifically, on June 11, 2014, inspectors identified that the seal around a cable bundle entering the top of 1FWPNRWLP had visibly degraded to the point where it would no longer protect against water intrusion into the cabinet.

Description: While performing an RHR system walkdown on June 11, 2014, the team identified that safety related cabinet 1FWPNRWLP was not properly sealed. Specifically, the existing seal had degraded and was not capable of preventing water intrusion where a cable bundle entered the top of the cabinet. Upon further evaluation, the licensee determined that 1FWPNRWLP was located in a potential spray zone. As a result, this condition created the potential for water to enter the cabinet in the event of a pipe burst which could cause a failure of channel 4 of the Unit 1 RWST level instrumentation. Inspectors also determined that channel 4 has a safety function of providing coincidence logic (two out of three) for automatic swap over from the RWST to the emergency recirculation sump. After inspectors identified this issue, the licensee initiated PIP M-14-05643, declared this instrument inoperable, and replaced the seal.

The licensee's Engineering Directives Manual (EDM) 203, Equipment Reliability Health Monitoring, outlined the process for system engineers to perform system walkdowns. EDM-203, Section 203.6.4 provided guidance for the scope of the walkdowns to include observation of material condition, structural degradation, and component problems or discrepancies. RHR system walkdowns were performed quarterly as an input into the system health report process. Based upon the seal appearing to have degraded over time, the inspectors concluded that these walkdowns gave the licensee multiple opportunities to promptly identify and correct the degradation. However, this issue had not been identified until the inspectors found it during the walkdown on June 11, 2014.

Analysis: The inspectors determined that the failure to promptly identify a condition adverse to quality associated with the inadequate sealing of 1FWPNRWLP was a performance deficiency. This performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective of ensuring the capability of the automatic RWST swap over function to respond to initiating events to prevent undesirable consequences. Using IMC 0609, Significance Determination Process, Appendix A, Exhibit 2 - Mitigating Systems Screening Questions, dated June 19, 2012, the inspectors determined this finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification and did not represent an actual loss of system and/or function. The finding had a cross-cutting aspect of Procedure Adherence, as described in the Human Performance cross-cutting area because the licensee failed to adequately implement the walkdown process outlined in EDM-203 and promptly identify this degradation (H.8).

Enforcement: 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and non-conformances are promptly identified. Contrary to the above, the licensee failed to promptly identify a condition adverse to quality associated with the inadequate sealing of 1FWPNRWLP. Because this finding is of very low safety significance and has been entered into the CAP as PIP M-14-05643, this violation is being treated as an NCV consistent with Section 2.3.2.a of the NRC Enforcement Policy. (NCV 05000369/2014-007-01, Inadequately Sealed Safety Related Electrical Cabinet)

b. Use of Operating Experience

(1) Inspection Scope

The team examined the licensee's use of industry operating experience (OE) to assess the effectiveness of how external and internal operating experience information was used to prevent similar or recurring problems at the plant. In addition, the team selected operating experience documents (e.g., NRC generic communications, 10 CFR Part 21 reports, licensee event reports, vendor notifications, and plant internal operating experience items, etc.), which had been issued since August 2012 to verify whether the licensee had appropriately evaluated each notification for applicability to the McGuire Nuclear Station, and whether issues identified through these reviews were entered into the CAP.

(2) Assessment

Based on a review of documentation related to operating experience issues, the team determined that the licensee was generally effective in screening operating experience for applicability to the plant. Industry OE was screened by the corporate OE coordinator and relevant information was then forwarded to the site's OE coordinator. OE issues requiring action were entered into the CAP for tracking and closure. In addition, operating experience was included in root cause evaluations and apparent cause evaluations in accordance with licensee procedure NSD-212, Cause Analysis.

(3) Findings

No findings were identified.

c. Self-Assessments and Audits

(1) Inspection Scope

The team reviewed audit reports and self-assessment reports, including those which focused on problem identification and resolution, to assess the thoroughness and self-criticism of the licensee's audits and self-assessments, and to verify that problems identified through those activities were appropriately prioritized and entered into the CAP for resolution in accordance with licensee procedure AD-PI-ALL-0300, Self-Assessment and Benchmark Programs.

(2) Assessment

The team determined that the scopes of assessments and audits were adequate. Self-assessments were generally detailed and critical, as evidenced by findings consistent with the inspector's independent review. The team verified that PIPs were created to document areas for improvement and findings resulting from the self-assessments, and verified that actions had been completed consistent with those recommendations. Generally, the licensee performed evaluations that were technically accurate.

(3) Findings

No findings were identified.

d. Safety-Conscious Work Environment

(1) Inspection Scope

During the course of the inspection, the team assessed the station's safety-conscious work environment (SCWE) through review of the stations Employee Concerns Program (ECP) and interviews with various departmental personnel. The team reviewed a sample of ECP issues to verify that concerns were being properly reviewed and identified deficiencies were being resolved and entered into the CAP when appropriate.

(2) Assessment

Based on the interviews conducted and the PIPs reviewed, the team determined that licensee management emphasized the need for all employees to identify and report problems using the appropriate methods established within the administrative programs, including the CAP and ECP. These methods were readily accessible to all employees. Based upon interviews conducted with a sample of 28 plant employees from various departments, the team determined that employees felt free to raise issues, and that management encouraged employees to place issues into the CAP for resolution. The team did not identify any reluctance on the part of the licensee staff to report safety concerns.

(3) Findings

No findings were identified.

4OA6 Meetings, Including Exit

On June 26, 2014, the inspectors presented the inspection results to Mr. Morris and other members of the site staff. The inspectors confirmed that all proprietary information examined during the inspection had been returned to the licensee.

An additional exit meeting was held on August 7, 2014 with Mr. Robertson, to discuss the final characterization of the NCV after the original exit meeting.

ATTACHMENT: SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:
S. Andrews, Senior Engineer
R. Appleby, Senior Nuclear Security Specialist
N. Austin, Manager Nuclear Engineering
S. Berthrong, Employee Concerns Consultant
D. Black, Director, McGuire Nuclear Station Security
S. Capps, Site Vice President
K. Crane, Senior Nuclear Licensing Specialist
R. Djali, Director Nuclear Engineering
J. Gabbert, Chemistry Manager
J. Glenn, Director Nuclear Org Effectiveness
J. Heffner, Lead Engineer
P. Jackson, Operations Shift Manager
S. Karriker, Manager Nuclear Engineering, Fleet Program Engineering
K. Kinard, Security Training Supervisor
S. Lapointe, System Engineer
S. Lipe, Operator Work Process Manager
T. Luoy, Reactor Operator
D. Miller, Balance of Plant System Engineer
C. Morris, Plant General Manager
S. Moser, Assistant Operations Manager
K. Murray, Emergency Preparedness Manager
W. Osburn, Radiation Protection Supervisor
B. Poole, Reactor Operator
J. Pring, Senior Technical Specialist
P. Roberson, Lead Engineer
J. Robertson, Manager Nuclear Regulatory Affairs
J. Rogers, Site Operating Experience Coordinator
M. Schell, Lead Engineer
S. Snider, Manager Nuclear Engineering

NRC personnel:
J. Zeiler, Senior Resident Inspector
P. Cooper, Resident Inspector
S. Rose, Chief, Branch 7, Division of Reactor Projects

LIST OF REPORT ITEMS

Opened and Closed

05000369/2014-007-01	NCV	Inadequately Sealed Safety Related Electrical Cabinet (Section 4OA2.a(3)(i))

Attachment

LIST OF DOCUMENTS REVIEWED

Procedures:
AD-WC-ALL-0210, Work Request Initiation, Screening and Classification, Rev. 0
AD-WC-ALL-0200, On-Line Work Management, Rev. 1
AD-PI-ALL-0400, Operating Experience Program, Rev. 0
AD-NO-ALL-0201, Responding to Allegations and Comprehensive Employee Concerns, Rev. 0
AD-NO-ALL-0202, Employee Concerns Program, Rev.0
AD-PI-ALL-0300, Self-Assessment and Benchmark Programs, Rev. 0
AP/1/A/5500/019, Loss of RHR or RHR System Leakage, Rev. 28
EDM-210, Engineering Responsibilities for the Maintenance Rule, Rev. 0
EDM-229, License Renewal Aging Management Programs and Activities, Rev. 6
EDM-203, Equipment Monitoring, Assessing/Reporting and Action Planning Process, Rev. 5
EDM-204, Long Term Asset Management, Rev. 0
EXAT-01, Testing of the Intrusion Detection Systems, Rev. 50
EXAT-02, CCTV System Testing and Maintenance, Rev. 30
HP/0/B/1003/063, Routine Surveillance, Rev. 38
IP/0/A/3090/010, Sealing Safety Related Equipment outside Containment, Rev. 31
McGuire Physical Security Contingency Training and Qualification Plan, Rev. 20
McGuire Physical Security Plan (PSP), Rev. 18
McGuire Physical Security Training and Qualification Plan (PSP), Rev. 7
MP/0/A/7700/120, Machine Guarding Fabrication and Installation, Rev. 4
NSD-130, Job Briefs, Rev. 9
NSD-500, Red Tags/Configuration Control Tags, Rev. 33
NSD-120, Equipment Reliability Process, Rev. 8
NSD-203, Operability/Functionality, Rev. 26
NSD-312, Service Water System Program, Rev. 2
NSD-506, Operator Workarounds and Control Room Deficiencies, Rev. 5
NSD-208, Problem Investigation Program, Rev.41
NSD-212, Cause Analysis, Rev. 27
NSD-219, Instrument and Electrical Device Calibration Out of Tolerance, Rev. 3
NSD-203, Operability/Functionality, Rev. 26
NSD-411, Preventive Maintenance Program, Rev. 9
NSD 506, Operator Workarounds and Control Room Deficiencies
OP/1/A/6200/004, Periodic Venting of RHR System, Rev. 130
OP/1/A/6100/SD-4, Cooldown to 240 Degrees F, Rev. 64
OP-MC-PSS-RN, Nuclear Service Water System (RN) Lesson Plan, Rev. 48
PT/1/A/4200/019, ECCS Pumps and Piping Vent, Rev. 74
PT/0/B/4700/058A, Safety Tag Verification for Compliance with Maintenance Rule, Rev. 5
PY-NO-ALL-0200, Safety Conscious Work Environment, Rev. 0
PT/0/1/4350/040, 125 VDC Vital I and C Battery Modified Performance Test, Rev 11
PT/0/A/4400/004 A, Fire Protection System High Velocity Flush and Chlorination, Rev. 031
RP/0/A/5700/010, NRC Immediate Notification Requirements, Rev. 21
RPMP 7-11, Contamination Controls, Rev. 13
SI-12, Maintenance and Testing of Security Systems, Rev. 52
SP/A/1111-M, Security Training and Qualification Process, Rev. 15
SP/T-1403-M, Perimeter Intrusion Detection System and CCTV Operational Testing, Rev. 6
SP/T/1408-M, Full Function and General Surveillance CCTV Operability Check, Rev. 2
WPM-601, Online Management Support Instructions, Rev. 37

PIPs:

M-03-05992	M-12-07320	M-13-01544	M-13-05070	M-13-07007	M-13-10440	M-14-03530
M-08-05394	M-12-07392	M-13-01630	M-13-05093	M-13-07046	M-13-10484	M-14-03615
M-09-02373	M-12-07469	M-13-01728	M-13-05103	M-13-07068	M-13-10509	M-14-03709
M-09-02844	M-12-07488	M-13-01738	M-13-05111	M-13-07409	M-13-10512	M-14-03830
M-09-02994	M-12-07530	M-13-01806	M-13-05139	M-13-07519	M-13-10697	M-14-03846
M-09-03721	M-12-07707	M-13-01837	M-13-05373	M-13-07550	M-13-10761	M-14-03885
M-09-03957	M-12-07798	M-13-01837	M-13-05374	M-13-07586	M-13-10844	M-14-03898
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M-12-06309	M-13-01161	M-13-04877	M-13-06878	M-13-09874	M-14-03041	M-14-05952
M-12-06773	M-13-01296	M-13-04881	M-13-06883	M-13-09886	M-14-03109	
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M-12-06837	M-13-01443	M-13-04935	M-13-06945	M-13-10059	M-14-03168	
M-12-06843	M-13-01454	M-13-04954	M-13-06955	M-13-10070	M-14-03169	

Attachment

M-12-06899	M-13-01515	M-13-04974	M-13-06987	M-13-10084	M-14-03232
M-12-06918	M-13-01518	M-13-04983	M-13-06988	M-13-10196	M-14-03329

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1112597	1112600	1112603	1112744	2059631	2149697
1112597	1112601	1112603	1112796	2059642	2149741
1112597	1112601	1112605	1112796	2059925	2149845
1112599	1112601	1112605	2057756	2059933	
1112599	1112602	1112605	2057848	2098012	
1112599	1112602	1112704	2058358	2115440	
1112600	1112602	1112704	2058653	2128463	

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369/2012-002-00, Inadequacy in Surveillance Testing of Solid State Protection System
370/2012-001-00, Containment Isolation Valve Inoperable Longer than allowed by Technical Specifications
370/2012-002-00, Automatic Actuation of the AFW and NSW Systems
369/2013-001-01, Valid Actuation of Unit 1 Reactor Protection and Auxiliary Feedwater Systems
369/2013-002-00, Inoperable Auxiliary Feedwater components resulting in Technical Specification Prohibited Operation or Condition
369/2013-003-01, Manual Reactor Trip and AFW Start due to Dropped Control Rods

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MCS-1154.00-00-0004, Design Basis Specification for the WN System, Rev. 6
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SOMP 02-01, Safety Tagging and Configuration Control, Rev. 18
EC 0000106279, Engineering Change Install Machine Guards on CA, NI, NV Pumps
EC 0000108761, Engineering Change Install Strainer in Cooling Water Supply Line to Turbine Driven CA (Unit 2)
EC 0000108760, Engineering Change Install Strainer in Cooling Water Supply Line to Turbine Driven CA (Unit 1)
EC Request 5684, Install Strainer in Cooling Water Supply Line to TDCA Pump Lube (Unit 2)
EC Request 5680, Install Strainer in Cooling Water Supply Line to TDCA Pump Lube (Unit 1)
MetalTek Energy Products letter dated 6/5/14 regarding requirements for certifying spec MCS-1218.02-00-0003 purchase order (strainers for TDCA Pump lube oil cooling)
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