



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

November 13, 2015

Benjamin C. Waldrep, Site Vice President  
Shearon Harris Nuclear Power Plant  
5413 Shearon Harris Rd  
New Hill, NC 27562-0165

**SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT – NRC PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000400/2015008**

Dear Mr. Waldrep:

On October 1, 2015, the U. S. Nuclear Regulatory Commission (NRC) completed a Problem Identification and Resolution inspection at your Shearon Harris Nuclear Power Plant Unit 1. The enclosed inspection report documents the inspection results, which were discussed on October 1, 2015, with Ms. Tanya Hamilton and other members of your staff.

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. Additionally, NRC inspectors documented one Severity Level (SL) IV under the traditional enforcement process. Both issues involved violations of NRC requirements. The NRC is treating these violations as NCVs. If you contest the violations or significance of these non-cited violation (NCVs), you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the Shearon Harris Nuclear Power Plant Unit 1.

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 Shearon Harris Nuclear Power Plant Unit 1.

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's 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/*

Kevin Ellis, Acting Chief  
Reactor Projects Branch 7  
Division of Reactor Projects

Docket No.: 50-400  
License No.: NPF-63

Enclosure:  
Inspection Report 05000400/2015008  
w/Attachment: Supplemental Information

cc: Distribution via Listserv

B. Waldrep

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ADAMS X Yes      ACCESSION NUMBER: ML15320A165      X SUNSI REVIEW      X FORM 665 ATTACHED

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B. Waldrep

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Letter to Benjamin C. Waldrep from Kevin Ellis dated November 13, 2015

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT – NRC PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000400/2015008

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**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket Nos.: 50-400

License Nos.: NPF-63

Report Nos.: 05000400/2015008

Licensee: Duke Power Company

Facility: Shearon Harris Nuclear Power Plant, Unit 1

Location: 5413 Shearon Harris Road  
New Hill, NC 27562

Dates: September 14 – 18, 2015  
September 28 – October 1, 2015

Inspectors: Necota Staples, Sr. Project Inspector (Team Leader)  
Wade Loo, Sr. Health Physicist  
Mark Riches, Resident Inspector (Only 1st onsite week)  
Matthew Endress, Resident Inspector

Approved by: K. Ellis, Acting Chief  
Reactor Projects Branch 7  
Division of Reactor Projects

Enclosure

## SUMMARY OF FINDINGS

IR 05000400/2015008: September 14, 2015 – October 01, 2015; Shearon Harris Nuclear Power Plant, Unit 1; Biennial Inspection of Problem Identification and Resolution Program.

The inspection was conducted by one senior project inspector, two resident inspectors, and a senior health physicist. Two findings were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4.

### Identification and Resolution of Problems

The inspectors concluded that, in general, problems were properly identified, evaluated, prioritized, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution, as evidenced by the relatively few number of deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. Generally, prioritization and evaluation of issues were adequate, formal root cause evaluations for significant problems were adequate, and corrective actions specified for problems were acceptable. Overall, corrective actions developed and implemented for issues were generally effective and implemented in a timely manner.

Operating experience usage was found to be generally acceptable and integrated into the licensee's processes for performing and managing work, and plant operations. 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.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors determined that personnel at the site felt free to raise safety concerns to management and use the CAP to resolve those concerns.

### NRC-Identified and Self-Revealing Findings

Cornerstone: Emergency Preparedness

- Green: An NRC-identified Green NCV of 10 CFR 50.54(q)(2) was identified, for the licensee's failure to follow and maintain, in effect, the Emergency Plan when performing monthly testing of the Technical Support Center (TSC). Specifically, the licensee failed to follow procedural steps when recorded values did not meet acceptance criteria as specified in EPM-410, Communication and Facility Performance Tests. The issue was placed in the licensee's corrective action program as CR's 01942073, 01940053.

The finding was more than minor because it was associated with the Emergency Response Organization (ERO) Performance attribute and it adversely affected the Emergency Preparedness Cornerstone objective of ensuring that the licensee was capable of implementing adequate measures to protect the health and safety of the public in the event

of a radiological emergency. Specifically, the failure to follow procedural steps when recorded values did not meet acceptance criteria resulted in a failure to comply with emergency plan. The finding was assessed for significance in accordance with NRC Manual Chapter 0609, Appendix B Emergency Preparedness Significance Determination Process. Attachment 2 of Appendix B, Failure to Comply Significance Logic is as follows: Failure to comply; Loss of Risk Significant Planning Standard Function (RSPS), NO; RSPS Degraded Function, NO; Loss of Planning Standard Function, No; results in a Green finding. The inspectors identified a cross-cutting aspect in the Problem Identification and Resolution area because the licensee did not take effective corrective actions to address issues in a timely manner commensurate with their safety significance (P.3). (Section 4OA2)

#### Cornerstone: Other Findings

- SLIV: An NRC-identified Severity Level IV violation of 10 CFR 50.73 was identified for the licensee's failure to provide a written report to the NRC within 60 days after discovery of a condition prohibited by Technical Specification (TS) Limited Condition for Operation (LCO) 3.6.3, "Containment Isolation Valves." The issue was placed in the licensee's corrective action program as CR 01958628.

The inspectors determined that the failure to provide a written report to the NRC within the time limits specified in regulations was a violation 10 CFR 50.73. The violation was evaluated using Section 6.9 of the NRC Enforcement Policy, because the failure to submit a required licensee event report may impact the ability of the NRC to perform its regulatory oversight function. As a result, this violation was evaluated using traditional enforcement. In accordance with Section 6.9.d.9 of the NRC Enforcement Policy, this violation was determined to be a Severity Level IV, non-cited violation. The inspectors determined that a cross-cutting aspect was not applicable because the issue involving untimely reports to the NRC was strictly associated with a traditional enforcement violation. (Section 4OA2)

## REPORT DETAILS

### 4. OTHER ACTIVITIES

#### 4OA2 Problem Identification and Resolution

##### a. Assessment of the Corrective Action Program

###### (1) Inspection Scope

The inspectors reviewed the licensee's corrective action program (CAP) procedures which described the administrative process for initiating and resolving problems primarily through the use of Nuclear Condition Reports (NCRs). To verify that problems were properly identified, appropriately characterized and entered into the CAP, the inspectors reviewed NCRs that were issued between July 2013 and October 2015, including a detailed review of selected NCRs associated with the following risk-significant systems: Auxiliary Feedwater (AFW), Residual Heat Removal (RHR) System, Low Head Safety Injection (LHSI), and Reactor Protection System (RPS). Where possible, the inspectors independently verified that the corrective actions were implemented. The inspectors also reviewed selected common causes and generic concerns associated with root cause evaluations to determine if they had been appropriately addressed. To help ensure that samples were reviewed across all cornerstones of safety identified in the NRC's Reactor Oversight Process, the inspectors selected a representative number of NCRs that were identified and assigned to the major plant departments, including operations, maintenance, engineering, health physics, chemistry, and security. The inspectors reviewed selected NCRs, verified corrective actions were implemented, and attended meetings where NCRs were screened for significance to determine whether the licensee was identifying, accurately characterizing, and entering problems into the CAP at an appropriate threshold.

The inspectors conducted plant walkdowns of equipment to assess the material condition and to identify any deficiencies that had not been previously entered into the CAP. The inspectors reviewed NCRs, maintenance history, completed work orders 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; however, in accordance with the inspection procedure, a five-year review was performed for selected systems for age-dependent issues.

Control room reviews were also performed to assess the Main Control Room deficiency list and to ascertain if deficiencies were entered into the CAP. The inspectors reviewed Operator Workarounds and Operator Burden screenings and verified compensatory measures were implemented for deficient equipment.



The inspectors conducted a detailed review of selected NCRs to assess the adequacy of the root-cause and apparent-cause evaluations of the problems identified. The inspectors reviewed these evaluations against the descriptions of the problem described in the NCRs and the guidance in licensee procedure AD-PI-ALL-0100, "Corrective Action Program." The inspectors assessed if the licensee had adequately determined the causes of identified problems, and had adequately 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 for significant conditions adverse to quality.

The inspectors attended various plant meetings to observe management oversight functions of the corrective action process. These included NCR screening meetings and Performance Improvement Oversight Committee (PIOC) meetings.

Documents reviewed are listed in the Attachment.

## (2) Assessment

### Identification of Issues

The inspectors 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 NCRs as described in licensee procedure AD-PI-ALL-0100, management's expectation that employees were encouraged to initiate NCRs for any reason, and the relatively few number of deficiencies, identified by inspectors 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.

### Findings

Introduction. The inspectors identified a Severity Level IV NCV of 10 CFR 50.73, "Licensee Event Reporting (LER) System," for the failure of the licensee to submit a written report to the NRC within 60 days after discovery of a condition prohibited by Technical Specification (TS) Limited Condition for Operation (LCO) 3.6.3, "Containment Isolation Valves."

Description. On February 23, 2011, during performance of maintenance on Turbine Driven Auxiliary Feedwater Containment Isolation Valves (CIV) 1AF-137, 1AF-143, 1AF-149, 1MS-70, and 1MS-72, the subject valves had their Motor Control Center (MCC) breakers opened, which rendered them inoperable. Upon opening of the CIV MCC breakers, TDAFW was declared inoperable per TS 3.7.1.2.a and 3.3.3.5.b, which resulted in Unit 1 entering 72 hour and 7 day shutdown LCO actions, respectively. The licensee never entered or declared the CIVs inoperable for Containment Isolation per the Limiting Condition of Operation (LCO) action statement for TS 3.6.3. The LCO action statement for TS 3.6.3 states that if a CIV can not be returned to operable status or have the affected penetration isolated within four hours, then the reactor must be placed in

Hot Standby within the next six hours. The period of inoperability for the subject CIVs began at 0718 on 2/23/2011 and the valves were returned to operable status at 0044 on 2/24/2011. The total documented out of service time for the CIVs was 17 hours and 26 minutes, which exceeded the total 10 hours required to be in Hot Standby per the Limiting Condition of Operation (LCO) action statement for TS 3.6.3.

The licensee identified the discrepancy of not entering TS 3.6.3 for inoperable CIVs on 8/2/2012 and documented the issue in AR 00552849. The licensee performed a reportability evaluation at this time and incorrectly determined that the issue was not reportable. The licensee also identified three other times (1/20/10, 2/23/11, and 6/5/11) where the same maintenance was performed on CIVs and the TS 3.6.3 LCO was not entered. In each of those instances, the CIVs were inoperable for greater than the 10 hours allowed by TS 3.6.3.

Analysis. Because the issue impacted the regulatory process, in that a condition that could have prevented fulfillment of a safety function was not reported to the NRC within the required timeframe, thereby delaying the NRC's opportunity to review the matter, the inspectors evaluated this performance deficiency in accordance with the traditional enforcement process. Using example 6.9.d.9 from the NRC Enforcement Policy, dated February 4, 2015, the inspectors determined that the violation was a SL IV (more than minor concern that resulted in no or relatively inappreciable potential safety or security consequence) violation, because licensee personnel failed to make a report required by 10 CFR 50.73 when information that the report was required had been reasonably within their ability to identify. In accordance with IMC 0612, "Power Reactor Inspection Reports," dated January 24, 2013, traditional enforcement issues are not assigned cross-cutting aspects.

Enforcement. 10CFR 50.73(a)(2)(i)(B) requires, in part, that licensees shall submit a LER within 60 days to the NRC after discovery of any operation or condition which was prohibited by the plant's Technical Specifications.

Contrary to the above, on August 2, 2012, the licensee determined that the TDAFW CIVs were inoperable for a period of approximately 17 hours and 26 minutes, which exceeded the allowed outage time of 10 hours to be in Hot Standby per TS 3.6.3. At that time, the licensee also determined that there were three previous occasions where the TDAFW CIVs were inoperable for a period greater than allowed by TS 3.6.3. This information was not reported to the NRC. This violation was placed in the licensee's CAP as CR 01958628. This violation is being treated as an NCV consistent with Section 2.3.2 of the NRC Enforcement Policy: (NCV 05000400/2015008-01, Untimely 10 CFR 50.73 Notification of an Inoperable CIV).

#### Prioritization and Evaluation of Issues

Based on the review of NCRs sampled by the inspection team during the onsite period, the inspectors concluded that problems were generally prioritized and evaluated in accordance with the licensee's CAP procedures as described in the NCR severity level determination guidance in AD-PI-ALL-0100. Each NCR was assigned a significance

level at the CAP screening meeting, subsequently reviewed at the PIOC, and adequate consideration was given to system or component operability and associated plant risk.

The inspectors determined that plant 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 on the type and complexity of the issue consistent with procedures AD-PI-ALL-0101, "Root Cause Evaluation," AD-PI-ALL-0102, "Apparent Cause Evaluation," and AD-PI-ALL-0103, "Quick Cause Evaluation."

### Effectiveness of Corrective Actions

The inspectors determined that, overall, 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. Effectiveness reviews for corrective actions to prevent recurrence were sufficient to ensure corrective actions were properly implemented and were effective.

### (3) Findings

Introduction. An NRC-identified Green NCV of 10 CFR 50.54(q)(2) was identified, for the licensee's failure to follow and maintain, in effect, the Emergency Plan when performing monthly testing of the Technical Support Center (TSC). Specifically, the licensee failed to follow procedural steps when recorded values did not meet acceptance criteria as specified in EPM-410, Communication and Facility Performance Tests.

Description. On August 4, 2015, EPM-410, Attachment 6, Monthly Performance Test of the TSC Emergency Ventilation System, was performed. EPM-410, Attachment 6 is a test of the TSC Emergency Ventilation System in the emergency mode. During the test, the acceptance criteria of greater than 0.125 inches water column (iwc) for facility differential pressure (DP) to outside, as read on gauge PDI-OITS-4011, was not met. The recorded value was 0.09 to 0.1 iwc. Attachment 6, Step 3.3 requires "...If any recorded value (step 3.3 or 3.4) does not meet Acceptance Criteria 2.1 or 2.2, THEN immediately Notify the CRS for procedure needed actions." The inspectors concluded that the facility remained functional, however the licensee failed to meet the performance tests acceptance criteria in procedure EPM-410 and the subsequent step to immediately notify the Control Room Supervisor (CRS) for procedure needed actions. On similar occasions in June, October and November 2014; March, April, May, June and July 2015; and August 4, 2015 until August 6, 2015; the positive pressure in the TSC was below the procedure acceptance criteria values to ensure habitability of the facility. Additionally, there were no compensatory measures in place during this time.

Analysis. Inspectors determined that the licensee's failure to follow procedural steps when recorded values did not meet acceptance criteria as specified in EPM-410 was a performance deficiency. The finding was more than minor because it was associated with the Emergency Response Organization (ERO) Performance attribute and it

adversely affected the Emergency Preparedness Cornerstone objective of ensuring that the licensee was capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the failure to follow procedural steps when recorded values did not meet acceptance criteria resulted in a failure to comply with emergency plan. The finding was assessed for significance in accordance with NRC Manual Chapter 0609, Appendix B Emergency Preparedness Significance Determination Process. Attachment 2 of Appendix B, Failure to Comply Significance Logic is as follows: Failure to comply; Loss of Risk Significant Planning Standard Function (RSPS), NO; RSPS Degraded Function, NO; Loss of Planning Standard Function, No; results in a Green finding. The inspectors identified a cross-cutting aspect in the Problem Identification and Resolution area because the licensee did not take effective corrective actions to address issues in a timely manner commensurate with their safety significance (P.3)

Enforcement: 10 CFR 50.54(q)(2) requires, in part, that a licensee authorized to operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards of 10 CFR 50.47(b). 10 CFR 50.47(b)(8) requires that adequate emergency facilities and equipment to support the emergency response are provided and maintained. The Harris Nuclear Plant Emergency Plan, PLP-201, Section 3.1, states in part that adequate emergency facilities, communications, and equipment to support emergency response are provided and maintained. EPM-410, Attachment 6, Monthly Performance Test of the TSC Emergency Ventilation System, Step 3.3 requires "...If any recorded value (step 3.3 or 3.4) does not meet Acceptance Criteria 2.1 or 2.2, THEN immediately Notify the CRS for PLP-717 needed actions."

Contrary to the above, the procedural requirements specified in the Monthly performance test, EPM-410, were not appropriately implemented for a 9 month period when the ventilation system did not meet the acceptance criteria and as a result, the TSC ventilation was improperly maintained. This violation is being treated as an NCV consistent with Section 2.3.2 of the NRC Enforcement Policy: (NCV 05000400/2015008-02, Failure to Follow Procedure EPM-410). The licensee documented this violation in their corrective action program as CR's 01942073, 01940053.

b. Assessment of the Use of Operating Experience (OE)

(1) Inspection Scope

The inspectors examined licensee programs for reviewing industry operating experience, reviewed licensee procedure AD-PI-ALL-0400, "Operating Experience Program," and reviewed the licensee's operating experience database to assess the effectiveness of how external and internal operating experience data was handled at the plant. In addition, the inspectors 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 July 2013 to verify whether the licensee had appropriately evaluated each notification for applicability to the Harris plant, and whether issues identified through these reviews were entered into the CAP. Documents reviewed are listed in the Attachment.

(2) Assessment

Based on a review of documentation related to the review of operating experience issues, the inspectors determined that the licensee was generally effective in screening operating experience for applicability to the plant. Industry OE was evaluated by the plant OE Coordinator and relevant information was then forwarded to the applicable department for further action or informational purposes. OE issues requiring action were entered into the CAP for tracking and closure. In addition, operating experience was included in all root cause evaluations in accordance with licensee procedure AD-PI-ALL-0400, "Operating Experience Program," and AD-PI-ALL-0101, "Root Cause Evaluation."

(3) Findings

No findings were identified.

c. Assessment of Self-Assessments and Audits

(1) Inspection Scope

The inspectors 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 Benchmarking Programs."

(2) Assessment

The inspectors 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 inspectors verified that NCRs were created to document all deficiencies 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. Site trend reports were thorough and a low threshold was established for evaluation of potential trends, as evidenced by the NCRs reviewed that were initiated as a result of adverse trends.

(3) Findings

No findings were identified.

c. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The inspectors randomly interviewed several on-site workers regarding their knowledge of the CAP and their willingness to write NCRs or raise safety concerns. During

technical discussions with members of the plant staff, the inspectors also conducted interviews to develop a general perspective of the safety-conscious work environment. The interviews were also conducted to determine if any conditions existed that would cause employees to be reluctant to raise safety concerns. The inspectors reviewed the licensee's Employee Concerns Program (ECP) and interviewed the ECP manager. Additionally, the inspectors reviewed a sample of ECP issues to verify that concerns were properly reviewed and identified deficiencies were resolved and entered into the CAP when appropriate.

(2) Assessment

The inspectors 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. The inspectors determined that employees felt free to raise issues, and that management encouraged employees to place issues into the CAP for resolution.

The inspectors did not identify any reluctance on the part of the licensee staff to report safety concerns.

(3) Findings

No findings were identified.

4OA3 Follow-up of Events

(Closed) Licensee Event Report (LER) 05000400/2015-004-00 and Supplement 01; Failure of 'A' Train Emergency Service Water (ESW) Pump

On May 4, 2015, with the unit shutdown, the site experienced a loss of ESW flow due to a failure of the 'A' ESW pump. An investigation revealed the pump failure was due to a separation of the shaft coupling halves at one of the line shaft joints. All twelve cap screw fasteners used to hold the coupling halves together had failed. This issue is discussed in more detail with an associated finding in NRC Integrated Inspection Report 05000400/2015003, Section 1R18. The inspectors reviewed the Licensee Event Report (LER) for accuracy and appropriateness of corrective actions. This LER is closed.

(Closed) LER 05000400/2013-02, EST-223 As-Found Test of 1MS-44 and 1MS-53 Outside Technical Specification

On October 23, 2013, during Main Steam Safety Valve (MSSV) testing per EST-223, 1MS-44 and 1MS-53 MSSVs failed to satisfy the +/- 1% as-found setpoint tolerance specified in Technical Specification 3/4.7.1.1 in Table 3.7-2. During the testing, valves 1MS-44 and 1MS-53 were adjusted back in range per EST-223 instructions and Work Order (WO) 01568929-01, and restored to an operable status. The LER was reviewed and no findings or violations of NRC requirements were identified. The inspectors

reviewed the Licensee Event Report (LER) for accuracy and appropriateness of corrective actions. This LER is closed.

4OA6 Meetings, Including Exit

On October 1, 2015, the inspectors presented the inspection results to Ms. T. Hamilton and other members of the site's staff. The inspectors confirmed that all proprietary information examined during the inspection had been returned to the licensee.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee personnel:

T. Hamilton, Plant General Manager  
D. Earp, Regulatory Affairs  
B. Thompson, CAP Coordinator  
P. Morales, ECP Coordinator  
B. McCabe, NOS Manager  
J. Caves, Regulator Affairs Manager  
S. Cahill, Maintenance Manager  
C. Jernigan, Operations  
K. King, PIC Coordinator  
I. Nordby, Regulatory Affairs

#### NRC personnel:

M. Riches, Resident Inspector

### LIST OF ITEMS OPEN, CLOSED AND DISCUSSED

#### Open and Closed

05000400/2015008-01	SLIV	Untimely 10 CFR 50.73 Notification of an Inoperable CIV (Section 4OA2)
05000400/2015008-02	NCV	Failure to Follow EPM-410 Procedure (Section 4OA2)

#### Closed

05000400/2013-002-00	LER	EST-223 As-found Test of 1MS-44 and 1MS-53 Outside Technical Specification Criteria (Section 4OA3)
05000400/2015-004-00,-01	LER	Failure of 'A' Train Emergency Service Water Pump (Section 4OA3)

#### Discussed

None



## LIST OF DOCUMENTS REVIEWED

### Procedures

AD-EG-ALL-1202, Preventive Maintenance and Surveillance Testing Administration, Rev. 2  
 AD-EG-ALL-1207, Plant Health Process, Rev. 2  
 AD-EG-ALL-1211, System Performance Monitoring and Trending, Rev. 3  
 AD-EG-ALL-1213, System Walkdowns, Rev. 2  
 AD-LS-ALL-0006, Notification/Reportability Evaluation, Rev. 0  
 AD-MN-ALL-001, Rework Reduction Program, Rev. 02  
 AD-NO-ALL-0202, Employee Concerns Program, Rev. 0  
 AD-PI-ALL-0100, Corrective Action Program, Rev. 3  
 AD-PI-ALL-0101, Root Cause Evaluation, Rev. 1  
 AD-PI-ALL-0102, Apparent Cause Evaluation, Rev. 1  
 AD-PI-ALL-0103, Quick Cause Evaluation, Rev. 1  
 AD-PI-ALL-0300, Self-Assessment and Benchmark Programs, Rev. 2  
 AD-PI-ALL-0400, Operating Experience Program, Rev. 2  
 OP-120.07, Waste Gas Processing, Rev. 64  
 OPS-NGGC-1305, Operability Determinations, Rev. 12  
 OST-1092, 1B-SB RHR Pump Operability Quarterly Interval Modes 1-2-3  
 OWP-ERFIS, ERFIS Computer, Rev. 17

### Nuclear Condition Reports (CRs)

00684907	00475953	459859	698652
00671296	00747036	505333	720272
00650718	00664812	621620	726649
00738469	00680768	621653	727595
00749052	00704672	627493	733536
00676011	00709092	632974	735110
00753735	00756739	632975	742421
00652226	00699233	633822	742947
00651055	00747036	635422	745512
00443882	00679984	635626	745544
00648704	00754721	639100	745960
00707112	00598302	640027	751194
00672222	00738497	643195	751280
00707288	00651055	643201	754721
00687542	00596297	644627	755224
00751200	00531811	648299	671296
00637606	00648903	648249	741705
00687543	00759724	650766	696331
00664301	00759726	651188	526951
00752031	00759728	637670	
00666187	00715002	654695	
01938323	00666753	663071	
00621690	00670032	663073	
00687106	00757503	669494	
00748567	01940053	673913	
00715437	01942073	690098	

Work Orders Reviewed

20007040  
 01568929  
 02127902  
 02262938  
 11765353  
 11765353  
 13304292  
 13316550  
 13415878  
 13514761

System / Program Health Reports

System Health Reports, Reactor Protection, April 2013 through June 2015

Assessment Reports Reviewed

H-PI-14-01, Nuclear Oversight – Audit, Harris Performance Improvement Audit, 11/12/14  
 Quick Hitter Self-Assessment Report, Self-Assessment No. 641265, Self-Assessment Title:  
     Condition Report Generation Rate at HNP, 02/03/14  
 Quick Hitter Self-Assessment Report, Self-Assessment No. 723457, Self-Assessment Title:  
     Backlog of CRs with Limit Closure, Undated  
 Quick Hitter Self-Assessment Report, Self-Assessment No. 725491, Self-Assessment Title:  
     Corrective Action Closure Quality – Quick Hitter, Undated

ARs Written

01958628, Need to Re-Evaluate REW 552849  
 01915384, CAQ CRs Cross-referenced and limited closure to NCAQ CRs  
 01954817, 2015 PI&R AD-OP-ALL-0105 Templates should be Evaluated  
 01951384, CAQ CRs cross-referenced and limited closure to NCAQ CRs  
 01954217, Walkdowns did not identify need for WR  
 01954182, Rework CR not generated for MET Tower concerns  
 01954176, Loose paper labels in MUX cabinet  
 01954526, Actions to address Violations hard to follow  
 01954817, AD-OP-ALL-0105 template should be evaluated  
 01958628, Need to re-evaluate REW 552849  
 01960099, Rework determination incorrect

Other

Duke Energy, Harris Nuclear Plant, Design Basis Document (DBD), Reactor Control and  
 Protection System, DBD-301, Rev. 7  
 OPT-1537, Emergency Safeguards Sequencer System Test – Train A Quarterly Interval  
 Modes 1-6, Rev. 4, 05/27/15  
 OST-1824, 1B-SB Emergency Diesel Generator Operability Test 18 Month Interval Modes 1  
 Through 6 and Defueled, Rev. 55, 11/30/13