



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 E. LAMAR BLVD  
ARLINGTON, TX 76011-4511

May 1, 2017

Mr. Michael R. Chisum  
Site Vice President  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70057-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 – NRC INTEGRATED  
INSPECTION REPORT 05000382/2017001

Dear Mr. Chisum:

On March 31, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Waterford Steam Electric Station, Unit 3. On April 13, 2017, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

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 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC resident inspector at the Waterford Steam Electric Station, Unit 3.

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

Sincerely,

**/RA/**

Geoffrey Miller, Branch Chief  
Projects Branch D  
Division of Reactor Projects

Docket No. 50-382  
License No. NPF-38

Enclosure:  
Inspection Report 05000382/2017001

w/ Attachments:

1. Supplemental Information
2. Request for Information

WATERFORD STEAM ELECTRIC STATION, UNIT 3 – NRC INTEGRATED INSPECTION  
 REPORT 05000382/2017001 DATED MAY 1, 2017

DISTRIBUTION:

KKennedy, RA  
 SMorris, DRA  
 TPruett, DRP  
 RLantz, DRP  
 AVegel, DRS  
 JClark, DRS  
 THipschman, IPAT  
 MHerrerra, DRMA  
 KFuller, RC  
 VDricks, ORA  
 EUribe, IPAT  
 JWeil, OCA  
 AMoreno, RIV/CAO  
 JBowen, RIV/OEDO  
 BMaier, RSLO  
 APulvirenti, NRR  
 RIV ACES  
 GMiller, DRP  
 JDixon, DRP  
 FRamirez, DRP  
 CSpeer, DRP  
 AElam, DRP  
 ROP Reports

ML17122A365

ADAMS ACCESSION NUMBER:

SUNSI Review      ADAMS:       Non-Publicly Available       Non-Sensitive  
 By: JDixon/dll       Yes     No       Publicly Available       Sensitive

OFFICE	SRI:DRP/D	RI:DRP/D	C:DRS/EB1	C:DRS/EB2	C:DRS/PSB2	C:DRS/OB
NAME	FRamirez	CSpeer	TFarnholtz	GWerner	HGepford	VGaddy
SIGNATURE	/RA/	/RA/	/RA/BLatta for	/RA/	/RA/	/RA/
4/28	5/1/17	04/25/2017	4/25/2017	04/24/2017	4/25/2017	4/28/17
OFFICE	TL:DRS/IPAT	SPE:DRP/D	BC:DRP/D			
NAME	THipschman	JDixon	GMiller			
SIGNATURE	/RA/	/RA/	/RA/			
DATE	4/27/17	4/11/17	5/1/17			

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 05000382  
License: NPF-38  
Report: 05000382/2017001  
Licensee: Entergy Operations, Inc.  
Facility: Waterford Steam Electric Station, Unit 3  
Location: 17265 River Road  
Killona, LA 70057  
Dates: January 1 through March 31, 2017  
Inspectors: F. Ramírez, Senior Resident Inspector  
P. Elkmann, Senior Emergency Preparedness Inspector  
C. Speer, Resident Inspector  
B. Parks, Resident Inspector, River Bend Station  
M. Tobin, Resident Inspector, Arkansas Nuclear One  
E. Uribe, Project Engineer  
C. Smith, Reactor Inspector  
C. Stott, Reactor Inspector  
Approved By: Geoffrey Miller  
Chief, Project Branch D  
Division of Reactor Projects

## SUMMARY

IR 05000382/2017001; 01/01/2017 – 03/31/2017; Waterford Steam Electric Station, Unit 3; Problem Identification and Resolution.

The inspection activities described in this report were performed between January 1 and March 31, 2017, by the resident inspectors at Waterford Steam Electric Station, Unit 3, and inspectors from the NRC's Region IV office. One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. The significance of inspection findings is indicated by their color (i.e., Green, greater than Green, White, Yellow, or Red), determined using Inspection Manual Chapter 0609, "Significance Determination Process," dated April 29, 2015. Their cross-cutting aspects are determined using Inspection Manual Chapter 0310, "Aspects within the Cross-Cutting Areas," dated December 4, 2014. Violations of NRC requirements are dispositioned in accordance with the NRC Enforcement Policy. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," dated July 2016.

### Cornerstone: Initiating Events

- Green. The inspectors reviewed a self-revealed, non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to perform field changes in accordance with design control measures. Specifically, following maintenance on reactor coolant pump 1B, the licensee performed unauthorized field changes by not reinstalling two design supports for the differential pressure instrument line. As a result, the instrument line developed a vibration-induced flaw, which caused an increase in reactor coolant system unidentified leakage, and consequently, an unplanned reactor shutdown. The licensee entered this condition into their corrective action program as Condition Report CR-WF3-2016-06698. The licensee's corrective actions included replacing the damaged instrument line and installing the missing supports.

The performance deficiency was more than minor, and therefore a finding, because it affected the equipment performance attribute of the Initiating Events Cornerstone and its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the licensee's failure to reinstall the required supports on the reactor coolant pump 1B instrumentation line resulted in plant operation with increased reactor coolant system unidentified leakage, requiring an unplanned reactor shutdown to perform repairs. The inspectors screened the finding in accordance with NRC Inspection Manual Chapter 0609, "Significance Determination Process." Using Inspection Manual Chapter 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined that the finding was of very low safety significance (Green) because the instrument line flaw, after a reasonable assessment of degradation, could not result in exceeding the reactor coolant system leak rate for a small loss-of-coolant accident, and could not likely affect other systems used to mitigate a loss-of-coolant accident, resulting in a total loss of their function. Because the licensee's review indicated that no work had been performed in this instrument line within the last three years, and a specific date for the performance deficiency was not identified, the inspectors concluded that the finding does not reflect current licensee performance, and therefore, did not assign a cross-cutting aspect. (Section 40A2)

## PLANT STATUS

The Waterford Steam Electric Station, Unit 3, began the inspection period at 100 percent power. On February 15, 2017, operations personnel reduced plant power to approximately 91 percent to perform emergent maintenance on the main condenser. Following repairs to the condenser, operations personnel increased power and achieved 100 percent power on February 18, 2017. The unit remained at full power for the remainder of the inspection period.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

#### 1R01 Adverse Weather Protection (71111.01)

##### Readiness for Impending Adverse Weather Conditions

##### a. Inspection Scope

On January 19, 2017, the inspectors completed an inspection of the station's readiness for impending adverse weather conditions. The inspectors reviewed plant design features, the licensee's procedures to respond to a flash flood watch, and the licensee's planned implementation of these procedures. The inspectors evaluated operator staffing and accessibility of controls and indications for those systems required to control the plant.

These activities constituted one sample of readiness for impending adverse weather conditions, as defined in Inspection Procedure 71111.01.

##### b. Findings

No findings were identified.

#### 1R04 Equipment Alignment (71111.04)

##### .1 Partial Walk-Down

##### a. Inspection Scope

The inspectors performed partial system walk-downs of the following risk-significant systems:

- January 17, 2017, auxiliary component cooling water, train A with train B out of service for maintenance
- February 5, 2017, emergency diesel generator, train A, following maintenance
- March 4, 2017, component cooling water, train AB, following realignment

- March 10, 2017, low pressure safety injection, train B, following inadvertent maintenance on the reactor coolant loop 1 shutdown cooling warm-up valve (SI-135B)

The inspectors reviewed the licensee's procedures and system design information to determine the correct lineup for the systems. They visually verified that critical portions of the systems or trains were correctly aligned for the existing plant configuration.

These activities constituted four partial system walk-down samples, as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

.2 Complete Walk-Down

a. Inspection Scope

On January 1, 2017, the inspectors performed a complete system walk-down inspection of the chemical and volume control system. The inspectors reviewed the licensee's procedures and system design information to determine the correct system lineup for the existing plant configuration. The inspectors also reviewed outstanding work orders, open condition reports, and other open items tracked by the licensee's operations and engineering departments. The inspectors then visually verified that the system was correctly aligned for the existing plant configuration.

These activities constituted one complete system walk-down sample, as defined in Inspection Procedure 71111.04.

b. Findings

No findings were identified.

**1R05 Fire Protection (71111.05)**

Quarterly Inspection

a. Inspection Scope

The inspectors evaluated the licensee's fire protection program for operational status and material condition. The inspectors focused their inspection on five plant areas important to safety:

- January 17, 2017, fire area RAB-33, shutdown cooling heat exchanger rooms A and B
- January 26, 2017, fire area RAB-7, relay room
- January 29, 2017, fire area RAB-3, heating, ventilation, and air conditioning corridor and equipment room and vestibule

- March 1, 2017, fire area CT-3, wet cooling tower A
- March 1, 2017, fire area CT-4, wet cooling tower B

For each area, the inspectors evaluated the fire plan against defined hazards and defense-in-depth features in the licensee's fire protection program. The inspectors evaluated control of transient combustibles and ignition sources, fire detection and suppression systems, manual firefighting equipment and capability, passive fire protection features, and compensatory measures for degraded conditions.

These activities constituted five quarterly inspection samples, as defined in Inspection Procedure 71111.05

b. Findings

No findings were identified.

**1R06 Flood Protection Measures (71111.06)**

a. Inspection Scope

On March 30, 2017, the inspectors completed an inspection of the station's ability to mitigate flooding due to internal causes. After reviewing the licensee's flooding analysis, the inspectors chose one plant area containing risk-significant structures, systems, and components that were susceptible to flooding:

- Flood Zone 31, charging pump rooms A, B, and AB

The inspectors reviewed plant design features and licensee procedures for coping with internal flooding. The inspectors walked down the selected areas to inspect the design features, including the material condition of seals, drains, and flood barriers. The inspectors evaluated whether operator actions credited for flood mitigation could be successfully accomplished.

These activities constituted completion of one flood protection measures sample, as defined in Inspection Procedure 71111.06.

b. Findings

No findings were identified.

**1R07 Heat Sink Performance (71111.07)**

a. Inspection Scope

The inspectors reviewed licensee programs to verify heat exchanger performance and operability for the following heat exchangers:

- Auxiliary component cooling water system, wet cooling tower, train B
- Component cooling water system, dry cooling tower, train B
- Containment cooling system, fan cooler 3, train A



The inspectors verified whether testing, inspection, maintenance, and chemistry control programs are adequate to ensure proper heat transfer. The inspectors verified that the periodic testing and monitoring methods, as outlined in commitments to NRC Generic Letter 89-13, utilized proper industry heat exchanger guidance. Additionally, the inspectors verified that the licensee's chemistry program ensured that biological fouling was properly controlled between tests. The inspectors reviewed previous maintenance records of the heat exchangers to verify that the licensee's heat exchanger inspections adequately addressed structural integrity and cleanliness of their tubes. Specific documents reviewed during this inspection are listed in the attachment.

These activities constituted completion of three triennial heat sink inspection samples, as defined in Inspection Procedure 71111.07-05.

b. Findings

No findings were identified.

**1R11 Licensed Operator Requalification Program and Licensed Operator Performance (71111.11)**

.1 Review of Licensed Operator Requalification

a. Inspection Scope

On January 23, 2017, the inspectors observed an evaluated simulator scenario performed by an operating crew. The inspectors assessed the performance of the operators and the evaluators' critique of their performance.

These activities constituted completion of one quarterly licensed operator requalification program sample, as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

.2 Review of Licensed Operator Performance

a. Inspection Scope

On January 30, 2017, the inspectors observed the performance of on-shift licensed operators in the plant's main control room. At the time of the observations, the plant was in a period of heightened activity due to heater drain pump C securing unexpectedly. The inspectors observed the operators' performance of the following activities:

- Briefs regarding plant conditions
- Communications with plant nonlicensed operators
- Troubleshooting activities
- Alarm response

In addition, the inspectors assessed the operators' adherence to plant procedures, including EN-OP-115, "Conduct of Operations," Revision 18 and other operations department policies.

These activities constituted completion of one quarterly licensed operator performance sample, as defined in Inspection Procedure 71111.11.

b. Findings

No findings were identified.

**1R12 Maintenance Effectiveness (71111.12)**

Routine Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed one instance of degraded performance or condition of safety-significant structures, systems, and components (SSCs):

- February 14, 2015, charging pumps

The inspectors reviewed the extent of condition of possible common cause SSC failures and evaluated the adequacy of the licensee's corrective actions. The inspectors reviewed the licensee's work practices to evaluate whether these may have played a role in the degradation of the SSCs. The inspectors assessed the licensee's characterization of the degradation in accordance with 10 CFR 50.65 (the Maintenance Rule), and verified that the licensee was appropriately tracking degraded performance and conditions in accordance with the Maintenance Rule.

These activities constituted completion of one maintenance effectiveness sample, as defined in Inspection Procedure 71111.12.

b. Findings

No findings were identified.

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

a. Inspection Scope

The inspectors reviewed two risk assessments performed by the licensee prior to changes in plant configuration and the risk management actions taken by the licensee in response to elevated risk:

- January 18, 2017, planned yellow risk due to switchgear ventilation system and auxiliary component cooling water pump B maintenance
- March 16, 2017, risk assessment associated with planned switchyard work

The inspectors verified that these risk assessments were performed timely and in accordance with the requirements of 10 CFR 50.65 (the Maintenance Rule) and plant

procedures. The inspectors reviewed the accuracy and completeness of the licensee's risk assessments and verified that the licensee implemented appropriate risk management actions based on the results of the assessments.

The inspectors also observed portions of three emergent work activities that had the potential to cause an initiating event or to affect the functional capability of mitigating systems:

- February 7, 2017, emergent yellow risk due to a tornado watch during an auxiliary component cooling water train A work window
- March 8, 2017, emergent entry into a 1-hour shutdown limiting condition for operation due to work on the reactor coolant loop 1 shutdown cooling warm-up valve (SI-135B) concurrent with a component outage on low pressure safety injection train A
- March 14, 2017, emergent yellow risk due to auxiliary feedwater pump unavailability

The inspectors verified that the licensee appropriately developed and followed a work plan for these activities. The inspectors verified that the licensee took precautions to minimize the impact of the work activities on unaffected structures, systems, and components (SSCs).

These activities constituted completion of five maintenance risk assessments and emergent work control inspection samples, as defined in Inspection Procedure 71111.13.

b. Findings

No findings were identified.

**1R15 Operability Determinations and Functionality Assessments (71111.15)**

a. Inspection Scope

The inspectors reviewed five operability determinations that the licensee performed for degraded or nonconforming structures, systems, or components (SSCs):

- January 9, 2017, operability determination of core protection calculator B
- February 15, 2017, operability determination of the ultimate heat sink
- February 23, 2017, operability determination of control element assembly 10
- March 2, 2017, operability determination of charging pump AB
- March 16, 2017, operability determination of the charging system pulsation dampeners

The inspectors reviewed the timeliness and technical adequacy of the licensee's evaluations. Where the licensee determined the degraded SSC to be operable, the inspectors verified that the licensee's compensatory measures were appropriate to

provide reasonable assurance of operability. The inspectors verified that the licensee had considered the effect of other degraded conditions on the operability of the degraded SSC.

These activities constituted completion of five operability review samples, as defined in Inspection Procedure 71111.15.

b. Findings

No findings were identified.

**1R18 Plant Modifications (71111.18)**

a. Inspection Scope

On January 24, 2017, the inspectors reviewed a permanent plant modification to the plant monitoring computer adding additional cabinets and relocating physical hardware that affected risk-significant structures, systems, and components (SSCs).

The inspectors reviewed the design and implementation of the modification. The inspectors verified that work activities involved in implementing the modification did not adversely impact operator actions that may be required in response to an emergency or other unplanned event. The inspectors verified that post-modification testing was adequate to establish the or functionality of the SSC as modified.

These activities constituted completion of one sample of permanent modifications, as defined in Inspection Procedure 71111.18.

b. Findings

No findings were identified.

**1R19 Post-Maintenance Testing (71111.19)**

a. Inspection Scope

The inspectors reviewed five post-maintenance testing activities that affected risk-significant structures, systems, or components (SSCs):

- January 18, 2017, auxiliary component cooling water pump B
- January 29, 2017, reactor coolant pump speed sensors
- February 1, 2017, charging pump AB
- February 16, 2017, auxiliary feedwater pump
- March 4, 2017, component cooling water pump AB

The inspectors reviewed licensing- and design-basis documents for the SSCs and the maintenance and post-maintenance test procedures. The inspectors observed the performance of the post-maintenance tests to verify that the licensee performed the tests in accordance with approved procedures, satisfied the established acceptance criteria, and restored the operability of the affected SSCs.

These activities constituted completion of five post-maintenance testing inspection samples, as defined in Inspection Procedure 71111.19.

b. Findings

No findings were identified.

**1R22 Surveillance Testing (71111.22)**

a. Inspection Scope

The inspectors observed six risk-significant surveillance tests and reviewed test results to verify that these tests adequately demonstrated that the structures, systems, and components (SSCs) were capable of performing their safety functions:

In-service tests:

- January 12, 2017, charging pump A
- January 31, 2017, component cooling water makeup pump A
- February 21, 2017, auxiliary component cooling water pump B

Other surveillance tests:

- January 26, 2017, emergency diesel generator B sequencer relay calibration
- February 24, 2017, main generator reactive load testing
- March 15, 2017, reactor auxiliary building and turbine building daily rounds

The inspectors verified that these tests met technical specification requirements, that the licensee performed the tests in accordance with their procedures, and that the results of the test satisfied appropriate acceptance criteria. The inspectors verified that the licensee restored the operability of the affected SSCs following testing.

These activities constituted completion of six surveillance testing inspection samples, as defined in Inspection Procedure 71111.22.

b. Findings

No findings were identified.

**Cornerstone: Emergency Preparedness**

**1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)**

a. Inspection Scope

The inspector performed an in-office review of the Waterford Steam Electric Station, Unit 3, Emergency Plan, Revision 47, effective December 19, 2016. This revision:

- Deleted the following emergency response organization positions: Radiological Assessment Coordinator Assistant, Radiological Coordinator Assistant, Technical Support Center (TSC) Chemistry Engineer, Licensing Coordinator, Emergency

Operations Facility (EOF) Status Board Keeper, Field Team Communicator, Audio-Visual Operator, Logistics Coordinator, Information Coordinator, Rumor Control Operator, Operations Support Center (OSC) Information Technology Representative

- Combined the Electrical Engineer and Instrument and Controls Engineer positions
- Deleted one Media Monitor emergency response organization position
- Revised the responsibilities of the following emergency response organization positions: Radiological Coordinator, EOF Administration/Logistics Coordinator, EOF Communicator, Offsite Team Coordinator, Operations Coordinator
- Revised the location of the Joint Information Center from Algiers, Louisiana, to co-located with the Louisiana State Emergency Operations Center, Baton Rouge, Louisiana
- Revised the location of the Alternate Emergency Operations Facility from Algiers, Louisiana, to Jefferson, Louisiana
- Changed the position reporting arrangements within the Joint Information Center
- Revised physical security requirements for the Joint Information Center
- Transferred the responsibility for the functions of the Audio-Visual Operator, Logistics Assistants, and Rumor Control Operators to the staff of Louisiana State Emergency Operations Center
- Removed a requirement to make some plant announcements during a security-related event
- Replaced the pager system used to activate the emergency response organization with an electronic callout system
- Replaced the backup method for notifications to offsite authorities from a dedicated facsimile machine to a computerized notification system
- Revised the 6-year exercise cycle to an 8-year exercise cycle for demonstrating periodic requirements associated with exercises
- Removed a requirement that scenarios for biennial emergency preparedness exercises be approved by the General Manager of Plant Operations, and the Vice President of Operations

This revision was compared to its previous revision, to the criteria of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, and to the standards in 10 CFR 50.47(b) to determine if the revision adequately implemented the requirements of 10 CFR 50.54(q)(3) and 50.54(q)(4). The inspector verified that the revision did not decrease the effectiveness of the emergency plan. This review was not documented in

a safety evaluation report and did not constitute approval of licensee-generated changes; therefore, this revision is subject to future inspection.

These activities constituted completion of one emergency action level and emergency plan changes sample, as defined in Inspection Procedure 71114.04.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Security**

**40A1 Performance Indicator Verification (71151)**

**.1 Unplanned Scrams per 7000 Critical Hours (IE01)**

a. Inspection Scope

The inspectors reviewed licensee event reports (LERs) for the period of January 1 through December 31, 2016, to determine the number of scrams that occurred. The inspectors compared the number of scrams reported in these LERs to the number reported for the performance indicator. Additionally, the inspectors sampled operating logs to verify the number of critical hours during the period. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported.

These activities constituted verification of the unplanned scrams per 7000 critical hours performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

**.2 Unplanned Power Changes per 7000 Critical Hours (IE03)**

a. Inspection Scope

The inspectors reviewed operating logs and corrective action program records for the period of January 1 through December 31, 2016, to determine the number of unplanned power changes that occurred. The inspectors compared the number of unplanned power changes documented to the number reported for the performance indicator. Additionally, the inspectors sampled operating logs to verify the number of critical hours during the period. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported.

These activities constituted verification of the unplanned power changes per 7000 critical hours performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

.3 Unplanned Scrams with Complications (IE04)

a. Inspection Scope

The inspectors reviewed the licensee's basis for including or excluding in this performance indicator each scram that occurred between January 1 and December 31, 2016. The inspectors used definitions and guidance contained in Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, to determine the accuracy of the data reported.

These activities constituted verification of the unplanned scrams with complications performance indicator, as defined in Inspection Procedure 71151.

b. Findings

No findings were identified.

**40A2 Problem Identification and Resolution (71152)**

.1 Routine Review

a. Inspection Scope

Throughout the inspection period, the inspectors performed daily reviews of items entered into the licensee's corrective action program and periodically attended the licensee's condition report screening meetings. The inspectors verified that licensee personnel were identifying problems at an appropriate threshold and entering these problems into the corrective action program for resolution. The inspectors verified that the licensee developed and implemented corrective actions commensurate with the significance of the problems identified. The inspectors also reviewed the licensee's problem identification and resolution activities during the performance of the other inspection activities documented in this report.

b. Findings

No findings were identified.

.2 Annual Follow-up of Selected Issues

a. Inspection Scope

The inspectors selected one issue for an in-depth follow-up:

- On October 24, 2016, after discovering that unidentified reactor coolant system leakage had increased from 0.04 to 0.44 gallons per minute (gpm), the licensee



shutdown the reactor to determine the leak location, isolate the leak and perform the necessary repairs. The leak location was in the differential pressure instrumentation line for reactor coolant pump 1B, and was caused by rubbing between the line and the pump's support platform. The licensee evaluated this issue through an adverse condition analysis entitled, "Reactor Coolant Pump 1B Instrument Tubing Failure," which was documented in Condition Report CR-WF3-2016-06698.

The inspectors assessed the licensee's problem identification threshold, cause analyses, extent of condition review, and compensatory actions. The inspectors verified that the licensee appropriately prioritized the planned corrective actions and that these actions were adequate to correct the condition.

These activities constituted completion of one annual follow-up sample, as defined in Inspection Procedure 71152.

b. Findings

Introduction. The inspectors reviewed a self-revealed, Green, non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," because the licensee failed to perform field changes in accordance with design control measures. Specifically, following maintenance on reactor coolant pump 1B, the licensee performed unauthorized field changes by not reinstalling two design supports for the differential pressure instrument line. As a result, the instrument line developed a vibration-induced flaw, which caused an increase in reactor coolant system unidentified leakage, and consequently, an unplanned reactor shutdown.

Description. On October 22, 2016, licensee operations personnel noted through the results of a reactor coolant system leak rate calculation that unidentified leakage had increased from 0.04 to 0.44 gpm. Following plant walkdowns that included the inside of the containment structure, a leakage investigation team concluded that the leak was originating from the reactor coolant pump 1B cell; specifically, the differential pressure instrumentation line for reactor coolant pump 1B. Since the leak could not be isolated while the plant was at power, on October 24, 2016, the licensee shutdown the reactor to Mode 3 (hot shutdown) to determine if they could isolate the flawed line and perform the necessary repairs.

Once the reactor was in hot shutdown, operations personnel investigated the general location of the leak and noted that the leak was located downstream of reactor coolant pump 1B high pressure root valve, RC-114. When operations personnel closed valve RC-114, the leak stopped. Following a visual inspection of the leak location, the licensee concluded that the reactor coolant pump differential pressure instrumentation line had come in contact with an I-beam for the pump's support platform. The contact between the instrument line and the support platform resulted in rubbing while the pump was in service, which, in turn, caused a longitudinal crack in the instrument line.

The licensee's adverse condition analysis concluded that the cause of the instrument line coming in contact with the pump's support platform, and therefore the cause of the leak, was the failure to reinstall two supports on the reactor coolant pump 1B instrument line downstream of valve RC-114 as required per Waterford isometric drawing V10.1-1001-23, "Reactor Coolant Pump 1B," Revision 8. The licensee could not identify

specific work orders where this instrument line was included as part of a work package within recent and extended history. Therefore, they could not conclusively determine when the maintenance job that failed to reinstall the supports occurred. The adverse condition analysis concluded that maintenance practices were not acceptable when they took place.

Analysis. The failure to reinstall two supports on the reactor coolant pump 1B instrument line in accordance with Waterford isometric design drawing V10.1-1001-23 was a performance deficiency which was reasonably within the licensee's ability to foresee and correct. The performance deficiency was more than minor, and therefore a finding, because it affected the equipment performance attribute of the Initiating Events Cornerstone and its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the licensee's failure to reinstall the required supports on the reactor coolant pump 1B instrumentation line resulted in plant operation with increased reactor coolant system (RCS) unidentified leakage, and caused an unplanned reactor shutdown to perform repairs.

The inspectors screened the finding in accordance with NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," dated April 29, 2015. Using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1 – "Initiating Events Screening Questions," the inspectors determined that the finding was of very low safety significance (Green) because after a reasonable assessment of degradation, the finding could not result in exceeding the RCS leak rate for a small loss-of-coolant accident (LOCA), and could not likely affect other systems used to mitigate a LOCA resulting in a total loss of their function.

Since the licensee's review indicated that no work had been performed in this instrument line within the last three years, and a specific date for the performance deficiency was not identified, the inspectors concluded that the finding does not reflect current licensee performance, and therefore, did not assign a cross-cutting aspect.

Enforcement. Title 10 CFR Part 50, Appendix B, Criterion III, "Design Control," states, in part, that design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design, and be approved by the organization that performed the original design, unless the applicant designated another responsible organization.

Contrary to the above, prior to October 2016, for the quality-related differential pressure instrument line supports, to which 10 CFR 50, Appendix B applies, the licensee failed to ensure that design changes, including field changes, were subject to design control measures commensurate with those applied to the original design, and were approved by the organization that performed the original design. Specifically, following maintenance on reactor coolant pump 1B, the licensee performed a field change that was not subject to the design control measures commensurate with those applied to the original design, by not reinstalling two design supports for the differential pressure instrument line. This resulted in an instrument line crack, an increase in unidentified RCS leakage, and an unplanned reactor shutdown. The licensee entered this issue into their corrective action program as Condition Report CR-WF3-2016-06698. Corrective actions completed by the licensee included replacing the damaged instrument line and installing the missing supports.

Because the licensee has entered the issue into their corrective action program and the finding is of very low safety significance (Green), this violation is being treated as a non-cited violation (NCV), consistent with Section 2.3.2.a of the NRC Enforcement Policy. (NCV 05000382/2017001-01, "Failure to Perform Field Changes in Accordance with Design Control Measures")

#### **40A5 Other Activities**

##### Temporary Instruction (TI) 2515/192, "Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems"

###### a. Inspection Scope

The objective of this performance based temporary instruction is to verify implementation of interim compensatory measures associated with an open phase condition design vulnerability in electric power system for operating reactors. The inspectors conducted an inspection to determine if the licensee had implemented the following interim compensatory measures. These compensatory measures are to remain in place until permanent automatic detection and protection schemes are installed and declared operable for open phase condition design vulnerability. The inspectors verified the following:

- The licensee identified and discussed with plant staff the lessons-learned from the open phase condition events at the United States operating plants including the Byron station open phase condition and its consequences. This includes conducting operator training for promptly diagnosing, recognizing consequences, and responding to an open phase condition.
- The licensee updated plant operating procedures to help operations personnel promptly diagnose and respond to open phase conditions on off-site power sources credited for safe shutdown of the plant.
- The licensee established and implemented periodic walkdown activities to inspect switchyard equipment such as insulators, disconnect switches, and transmission line and transformer connections associated with the offsite power circuits to detect a visible open phase condition.
- The licensee ensured that routine maintenance and testing activities on switchyard components have been implemented and maintained. As part of the maintenance and testing activities, the licensee assessed and managed plant risk in accordance with 10 CFR 50.65(a)(4) requirements.

###### b. Findings

No findings were identified.

## **40A6 Meetings, Including Exit**

### Exit Meeting Summary

On March 6, 2017, the inspectors presented the final inspection results for Temporary Instruction 2515/192 to Mr. M. Chisum, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. No proprietary information was identified.

On March 23, 2017, the inspectors presented the final inspection results for a triennial heat sink inspection to Mr. M. Chisum, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

On April 4, 2017, the inspector conducted a telephonic exit meeting to present the results of the in-office inspection of changes to the licensee's emergency plan to Mr. J. Signorelli, Manager, Emergency Preparedness, and other members of the licensee staff. The licensee acknowledged the issues presented.

On April 13, 2017, the resident inspectors presented the inspection results to Mr. M. Chisum, Site Vice President, and other members of the licensee staff. The licensee acknowledged the issues presented. The licensee confirmed that any proprietary information reviewed by the inspectors had been returned or destroyed.

**SUPPLEMENTAL INFORMATION**

**KEY POINTS OF CONTACT**

Licensee Personnel

D. Brenton, General Manager, Plant Operations  
M. Chisum, Site Vice President  
J. Clavelle, Manager, Systems and Components  
S. Fontenot, Manager, Performance Improvement  
R. Gilmore, Director, Regulatory and Performance Improvement  
M. Groome, Senior Systems Engineering  
A. Hall, Operations Instructor  
A. James, Manager, Security  
J. Jarrell, Manager, Regulatory Assurance  
B. Lanka, Director, Engineering  
R. Ledet, Manager, Operations Support  
B. Lindsey, Operations Manager  
W. McKinney, Manager, Training  
S. Meiklejohn, Senior Licensing Specialist  
L. Milster, Licensing Specialist  
B. Pellegrin, Manager, Production  
P. Rodrigue, Manager Operations  
D. Selig, Senior Manager, Maintenance  
J. Signorelli, Manager, Emergency Preparedness  
R. Simpson, Operations Training Superintendent  
A. Tojeiro, Design Engineering  
M. Zamber, Regulatory Assurance

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

Opened and Closed

05000382/2017001-01	NCV	Failure to Perform Field Changes in Accordance with Design Control Measures (Section 4OA2)
---------------------	-----	--

Closed

2515/192	TI	Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems (Section 4OA5)
----------	----	---

**LIST OF DOCUMENTS REVIEWED**

**Section 1R01: Adverse Weather Protection**

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-FAP-EP-010	Severe Weather Response	4

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
OP-901-521	Severe Weather and Flooding	322

Condition Reports (CRs)

CR-WF3-2017-00356

**Section 1R04: Equipment Alignment**

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
EC 68149	Discussion of CVCREL322A (LX1) Relay Failure on Charging System Ref CR-WF3-2016-6736	0
G-168	Flow Diagram Chemical & Volume Control System	January 24, 1983
G-167	Flow Diagram Safety Injection System	July 8, 1991

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
EN-MA-125	Troubleshooting control of Maintenance Activities	20
LOU-1564.747	Water Chillers	July 20, 1984
ME-004-180	Static Uninterruptible Power Supply 3014AB	7
ME-004-180	Static Uninterruptible Power Supply 3014AB	8
OP-002-001	Auxiliary Component Cooling Water	310
OP-002-004	Chilled Water System	314
OP-002-005	Chemical and Volume Control	56
OP-006-005	Inverters and Distribution	320
OP-009-002	Emergency Diesel Generator	336
OP-009-008	Safety Injection System	39
PE-004-024	CCW/ACCW System Flow Balance	305

Condition Reports (CRs)

CR-WF3-2016-06736 CR-WF3-2016-06775

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

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
CT 3-001	Wet Cooling Tower "A"	8
CT 4-001	Wet Cooling Tower "B"	6
RAB 3-001	HVAC Equipment Room	8
RAB 3-002	Corridor +35 RAB	10
RAB 7-001	Relay Room	12
RAB 33-001	Shutdown Cooling Heat Exchanger Rooms "A" and "B"	10

### Condition Reports (CRs)

CR-WF3-2017-01123

## **Section 1R06: Flood Protection Measures**

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
MNQ3-5	Flooding Analysis Outside Containment	5
PRA-W3-01-002	W3 Internal Flooding Analysis	3

### Condition Reports (CRs)

CR-WF3-2017-01974

## **Section 1R07: Heat Sink Performance**

### Calculations

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EC-M07-002	Design Basis Requirement for Wet Cooling Tower Basin Replenishment System	0
EC-M95-008	Ultimate Heat Sink Basis	3
EC-M97-022	Makeup Capability to WCT Basins	0
EC-M98-010	ACCW Supply to Emergency Feedwater System	0
EC-P96-036	ACCW System Water Hammer Analysis	0
ECS05-013	Ultimate Heat Sink Containment Heat Loads	1
MNQ9-3	Heat Removal Capacities of DCT and WCT After LOCA	4

### Calculations

<u>Number</u>	<u>Title</u>	<u>Revision</u>
MNQ9-9	Wet Cooling Tower Losses During LOCA	5
MNQ9-53	Ultimate Heat Sink Test	1
MN(Q)-9-17	Tornado Multiple Missile Protection of Cooling Towers	3
MN(Q)-9-1	Shutdown Heat Exchanger U-Value Calculation	0
MN(Q)-9-38	Capacity of Wet Cooling Tower Basins	4

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
	Time Critical Action Program Bases, Attachment 7.1	0
01-000-135	SMK Containment Spray Pump	A
1564.86	Component Cooling Water System Dry Cooling Towers	8
5817-14291	Dry Cooling Towers Plug Locations	0
EC 530	Ultimate Heat Sink Water Replenishment for Tornado Event	0
EC 53084	Dry Cooling Tower Tube Plug	0
EC 54159	DCT Missile Shield Covering	0
EC 55122	Input for CR-WF3-2015-0457 Dry Cooling Tower B	0
EC 56078	Dry Cooling Tower Tube Plugging Limits	0
EC 59101	Dry Cooling Tower Sleeving	0
ECS10-001	Waterford-3 Cycle 21 Reload Analysis Groundrules	4
G160	Flow Diagram Component Closed Cooling Water System	21
ISI-VT-12-005	Visual Examination System Leakage (VT-2)	0
ISI-VT-13-054	Visual Examination System Leakage (VT-2)	
LOU-1564G-204 SHT1	Circulating Water Iso Drawing	4
LOU-1564.086	Ebasco Specification – Component Cooling Water System Dry Cooling Towers	7
SEP-HX-WF3- 001	Generic Letter 89-13 Heat Exchanger Test Basis	1
P160 SH.2	I.S.I. Boundary Diagram Component Closed Cooling Water System	0
SD-CC	Component Cooling Water	22
SD-CCS	Containment Cooling and Ventilation System Description	7



### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
W3-DBD-002	Emergency Diesel Generator & Automatic Load Sequencer	304
W3-DBD-4	Component Cooling Water Auxiliary Component Cooling Water	303
W3-DBD-10	Containment Cooling HVAC and Related Systems Design Basis Document	2

### Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
CE-002-003	Maintaining Auxiliary Component Cooling water Chemistry	304
CE-002-007	Maintaining Component Cooling Water Chemistry	307
CEP-NDE-0902	VT-2 Examination	7
EN-DC-184	NRC Generic Letter 89-13 Service Water Program	3
EN-DC-316	Heat Exchanger Performance and Conditioning Monitoring	7
OP-002-003	Operating Procedure Component Cooling Water	317
OP-901-510	Component Cooling Water System Malfunction	303
OP-903-118	Primary Auxiliaries Quarterly IST Valve Tests	039
PE-004-021	CCW Heat Exchanger Performance Test	3
PE-004-033	Wet Cooling Tower Thermal Performance Test	306

### Vendor Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
1564.114A	Mechanical Draft Cooling Towers & Accessories	10
1564.745	Containment Fan Coolers	8
1564.86	Component Cooling Water System Dry Cooling Towers	8
TD H291.0025	Hudson Cooling Equipment, Hudson Tuf-Lite Fan Data, Installation and Operation Instruction	0
TD-Z010.0025	Zurn Industries Instruction Manual for Zurn Mechanical Draft Cooling Towers	2

### Condition Reports (CRs)

CR-WF3-2012-02332 CR-WF3-2012-02600 CR-WF3-2014-04930 CR-WF3-2017-01785  
CR-WF3-2017-01809

Work Orders (WOs)

234960	234967	387019	429070
429072	108105-03	52320900	52348919
52372443	52476425	52478965	52480812
52482830	52486190	52509424	52511420
52511421	52625317	52644946	52644947
52689012			

**Section 1R11: Licensed Operator Requalification Program and Licensed Operator Performance**

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
WSXM-LOR-171EXM	2017 Cycle 1 Simulator Exam	4

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-OP-115	Conduct of Operations	18
EP-001-001	Recognition & Classification of Emergency Conditions	32
OP-003-034	Feed Heater Vents and Drains	18
OP-010-004	Power Operations	326
OP-901-110	Pressurizer Level Control Malfunction	314
OP-901-221	Secondary System Transient	4
OP-901-501	PMC or Core Operating Limit Supervisory System	15
OP-902-000	Standard Post Trip Actions	16
OP-902-001	Reactor Trip Recovery	16
OP-902-002	Loss of Coolant Accident Recovery	20
OP-902-009	Standard Appendices	315

Condition Reports (CRs)

CR-WF3-2017-00545

## Section 1R12: Maintenance Effectiveness

### Miscellaneous Documents

<u>Title</u>	<u>Date</u>
System Health Report Chemical and Volume Control	Q1-2015
System Health Report Chemical and Volume Control	Q2-2015
System Health Report Chemical and Volume Control	Q3-2015
System Health Report Chemical and Volume Control	Q4-2015
System Health Report Chemical and Volume Control	Q2-2016
System Health Report Chemical and Volume Control	Q4-2016

### Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-DC-153	Preventative Maintenance Component Classification	14
EN-LI-102	Corrective Action Program	27

### Condition Reports (CRs)

CR-WF3-2016-05753 CR-WF3-2016-05818 CR-WF3-2016-05820

## Section 1R13: Maintenance Risk Assessments and Emergent Work Control

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Date</u>
EN-OP-119	Protected Equipment Posting Logsheet	March 16, 2017
EN-OP-115	Station Logs – March 8, 2017	March 8, 2017

### Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-FAP-OM-012	Prompt Investigation and Notifications	17
EN-NS-102	Fitness for Duty Program	17

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-OP-119	Protected Equipment Postings	8
EN-WM-104	On-Line Risk Assessment	15
OI-037-000	Operations' Risk Assessment Guideline	310

Condition Reports (CRs)

CR-WF3-2017-00799 CR-WF3-2017-01433 CR-WF3-2017-01509 CR-WF3-2017-01518  
CR-WF3-2017-01553

Work Orders (WOs)

52625597

**Section 1R15: Operability Determinations and Functionality Assessments**

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
Dwg. 1564-3885	Installation of Pulsation Dampener	April 1997
Dwg. 13235	Valves Instrument CVC	March 10, 1980
G-194	Chemical and Volume Control System – Sheet 1	2
SQ-MN-203	Seismic Qualification for Wet Cooling Towers	3
W3-DBD-007	Chemical and Volume Control System	301
WF3-SE-11-00001	Gas Accumulation and Intrusion Evaluation – Chemical Volume and Control System	0

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-DC-178	System Walkdowns	9
EN-LI-100	Process Applicability Determination Form	19
EN-OP-104	Operability Determination Process	11
OP-004-004	Control Element Drive	23
OP-100-014	Technical Specification and Technical Requirements Compliance	336
OP-100-014	Technical Specification and Technical Requirements Compliance	337

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
OP-903-003	Charging Pump Operability Check	310
OP-903-005	Control Element Assembly Operability Check	14

Condition Reports (CRs)

CR-WF3-2015-00070	CR-WF3-2015-05820	CR-WF3-2015-09183	CR-WF3-2016-01885
CR-WF3-2017-00034	CR-WF3-2017-00279	CR-WF3-2017-00780	CR-WF3-2017-00785
CR-WF3-2017-01106	CR-WF3-2017-01200	CR-WF3-2017-01232	CR-WF3-2017-01483
CR-WF3-2017-01699			

**Section 1R18: Plant Modifications**

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EC 57818	Install New PMC Server Cabinet in the RAB+46 Computer Room	0

Work Orders (WOs)

00415158

**Section 1R19: Post-Maintenance Testing**

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
MI-003-311	Reactor Coolant Pump Speed Sensor Calibration RC IS0113 A, B, C, or D or RC IS0123 A, B, C, or D or RC IS0133 A, B C, or D or RC IS0143 A, B, C, or D	308
OP-903-003	Charging Pump Operability Check	310
OP-903-050	Component Cooling Water and Auxiliary Component Cooling Water Pump and Valve Operability Test	36
OP-903-118	Primary Auxiliaries Quarterly IST Valve Tests	39
OP-903-131	AFW High Discharge Pressure Trip Test	1

Work Orders (WOs)

00430824	52186452	52630316	52645077
52646749	52646750	52677669	

## Section 1R22: Surveillance Testing

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Date</u>
OI-004-000	Turbine Building Watchstation Logs	March 15, 2017
OI-004-000	Controlled Access Area Watchstation Logs	March 15, 2017

### Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
ME-007-005	Time-Delay Relay Setting Check, Adjustment and Functional Test	22
OP-010-004	Power Operations	326
OP-901-211	Generator Malfucntion	8
OP-903-003	Charging Pump Operability Check	309
OP-903-050	Component Cooling Water and Auxiliary Component Cooling Water Pump and Valve Operability Check	36
OP-903-129	Compoent Cooling Water Makeup Pump Operablity Check	11

### Condition Reports (CRs)

CR-WF3-2017-00230 CR-WF3-2017-00252 CR-WF3-2017-01098 CR-WF3-2017-01137  
CR-WF3-2017-01920

### Work Orders (WOs)

52580305                      52721613                      52727107                      52732208

## Section 4OA1: Performance Indicator Verification

### Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Date</u>
W3F1-2016-0035	NRC Performance Indicator (PI) Data – 1 <sup>st</sup> Quarter 2016 January - March	April 20, 2016
W3F1-2016-0050	NRC Performance Indicator (PI) Data – 2 <sup>nd</sup> Quarter 2016	July 18, 2016
W3F1-2016-0052	NRC Performance Indicator (PI) Data – Change Report (CR) Emergency Preparedness	July 21, 2016

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Date</u>
W3F1-2016-0068	NRC Performance Indicator (PI) Data – 3 <sup>rd</sup> Quarter 2016 ROP Data	October 12, 2016
W3F1-2017-0007	NRC Performance Indicator (PI) Data – 4 <sup>th</sup> Quarter 2016 (October, November and December)	January 12, 2017

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

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision</u>
103272-25	Yarway Welbond Valve Fig. 5515B-F316S	C
V10.1-1001-23	Reactor Coolant Pump 1B	8
WO 50046881	Per PEIR TS-15A This Valve Has Been Identified as Containing Carbon Steel	

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
EN-LI-118	Cause Evaluation Process	23
EN-MA-100	Maintenance Fundamentals Program	1
EN-MA-101	Conduct of Maintenance	20

Condition Reports (CRs)

CR-WF3-2016-06698 CR-WF3-2016-06654 CR-WF3-2016-06704

**Section 4OA5: Other Activities**

Drawing

<u>Number</u>	<u>Title</u>	<u>Revision</u>
G285	Main One Line Diagram	22

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	ABB – Analysis of an Open Phase Condition at the Startup Transformer	

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
W3F1-2012-0091	90-Day Response to NRC Bulletin 2012-01, "Design Vulnerability in Electric Power System"	October 25, 2012
W3F1-2014-0008	Response to Request for Additional Information Regarding Response to Bulletin 2012-01, Design Vulnerability in Electric Power System	February 3, 2014
WLP-LOR-133PPO30	2013 Cycle 3 Loss of Safety Buses	0

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
OP-500-003	Control Room Cabinet C	26

Condition Reports (CRs)

CR-WF3-2012-00932



## **PAPERWORK REDUCTION ACT STATEMENT**

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, Control Number 31500011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

**Information Request  
January 5, 2017  
Notification of Inspection and Request for Information  
Waterford 3 Station  
NRC Inspection Report 05000382/2017001**

### INSPECTION DOCUMENT REQUEST

Inspection Dates: TBD  
Inspector: Eduardo Uribe

#### Documents Requested:

1. Response to NRC Bulletin 2012-01
2. Corrective action documents (in full detail) of the interim corrective actions
3. Corrective action documents (in summary) of the final corrective actions (for my awareness)
4. Any supporting documents for those interim corrective actions (e.g. Ops Procedures, Maintenance Procedures, Work Orders and/or Updated Training Modules).