



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

November 13, 2021

Mr. John Ferrick, Site Vice President
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057

**SUBJECT: WATERFORD STEAM ELECTRICAL STATION, UNIT 3 – INTEGRATED
INSPECTION REPORT 05000382/2021003**

Dear Mr. Ferrick:

On September 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Waterford Steam Electrical Station, Unit 3. On November 1, 2021, 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.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. One Severity Level IV violation without an associated finding is documented in this report. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

A licensee-identified violation which was determined to be of very low safety significance is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violations or the significance or severity of the violations documented in this inspection report, 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 Waterford Steam Electrical Station, Unit 3.

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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at Waterford Steam Electrical 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 Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Ami N. Agrawal, Chief
Reactor Projects Branch D
Division of Reactor Projects

Docket No. 05000382
License No. NPF-38

Enclosure:
As stated

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WATERFORD STEAM ELECTRICAL STATION, UNIT 3 – INTEGRATED INSPECTION
REPORT 05000382/2021003 – DATED NOVEMBER 13, 2021

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number: 05000382

License Number: NPF-38

Report Number: 05000382/2021003

Enterprise Identifier: I-2021-003-0112

Licensee: Entergy Operations, Inc.

Facility: Waterford Steam Electrical Station, Unit 3

Location: Killona, LA

Inspection Dates: July 1, 2021 to September 30, 2021

Inspectors: R. Alexander, Senior Emergency Preparedness Inspect
B. Bergeon, Operations Engineer
R. Bywater, Senior Resident Inspector
D. Childs, Resident Inspector
K. Diederich, Nuclear Systems Engineer
M. Doyle, Operations Engineer
R. Fanner, Operations Engineer
M. Garza, Emergency Preparedness Inspector
G. George, Senior Reactor Inspector
S. Hedger, Emergency Preparedness Inspector
J. Melfi, Project Engineer
A. Meyen, Physical Security Inspector
N. Okonkwo, Reactor Inspector
A. Patz, Senior Resident Inspector
W. Sifre, Senior Reactor Inspector
C. Stott, Resident Inspector

Approved By: Ami N. Agrawal, Chief
Reactor Projects Branch D
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Waterford Steam Electrical Station, Unit 3, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. A licensee-identified non-cited violation is documented in report section: 71114.04.

List of Findings and Violations

Failure to Maintain Effectiveness of the Emergency Plan upon Loss of Reactor Vessel Level Monitoring System			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Emergency Preparedness	Green NCV 05000382/2021003-01 Open/Closed	[P.3] - Resolution	71114.04
<p>The inspectors identified a Green, non-cited violation of 10 CFR 50.54(q)(2) which requires that operating nuclear power plant licensees follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E of 10 CFR 50, and the planning standards of 10 CFR 50.47(b), including 10 CFR 50.47(b)(4) relative to maintaining an emergency classification/action level scheme. Specifically, from May 26 to May 30, 2021, and again May 31 to June 4, 2021, Waterford's response to the loss of Level 8 indications on both channels of the Reactor Vessel Level Monitoring System (RVLMS) failed to restore capability to classify emergency action levels (EALs) for a range of accidents which would rely on monitoring reactor vessel water level with RVLMS consistent with the approved EAL scheme. In response to this issue, the licensee established compensatory measures to be able to declare the potential loss of the fuel cladding and/or containment fission product barriers, such that up to a General Emergency could be declared for the given conditions. While the compensatory measures employed during the period provided some mitigation as to the significance of the performance deficiency, they did not restore compliance with the approved EAL scheme until one channel of the RVLMS Level 8 was restored.</p>			

Failure to Provide Complete and Accurate Information in a License Amendment Request to Change Emergency Action Level Requirements			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000382/2021003-02 Open/Closed	Not Applicable	71114.04
<p>The inspectors identified a Severity Level IV, non-cited violation of 10 CFR 50.9, in that the licensee provided inaccurate information to the NRC in a license amendment request for an emergency action level scheme change in 2011. Specifically, the licensee provided information about the detector capability of two liquid effluent radiation monitors, that was material to the licensing decision, but was determined to be not accurate.</p>			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000382/2021-001-00	Control Room Air Filtration Equipment Failure Resulting in a Condition Prohibited by Technical Specification 3.7.6.1	71153	Closed

PLANT STATUS

Waterford, Unit 3, began the inspection period at full power and remained at full power until August 29, 2021, when the licensee shutdown the plant and placed in Mode 5 due to expected hurricane force winds onsite from Hurricane Ida. The unit lost all sources of offsite power on August 29, 2021 and regained a source on August 31, 2021. After evaluation, the licensee restarted the unit on September 7, 2021 and returned to full power on September 14, 2021. The unit stayed at full power for the remainder of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week, increasing the amount of time on-site as local COVID-19 conditions permitted. As part of their on-site activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution," observed risk significant activities; and completed on-site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on-site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the adequacy of the overall preparations to protect risk-significant systems from impending severe weather due to Hurricane Ida on August 29, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Shield building ventilation train A while shield building ventilation train B was out of service for planned maintenance on July 20, 2021
- (2) Emergency diesel generator (EDG) B, and temporary EDG while EDG A was out of service for planned maintenance on August 3, 2021
- (3) Emergency diesel generator B after work was performed on the jacket water make-up valve and with limited offsite power sources available following Hurricane Ida impact on September 3, 2021
- (4) Component cooling water train A after Hurricane Ida impact on September 4, 2021

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the 125 VDC system on July 22, 2021.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (7 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Fire Areas CT2-001 and CT4-001, dry cooling tower B and wet cooling tower B on July 14, 2021
- (2) Fire Areas RAB 11-001, 12-001, and 13-001, 125 VDC safety-related battery rooms on July 29, 2021
- (3) Fire Areas RAB 8A-001 and RAB 8C-001, switchgear room A and switchgear room A/B on August 19, 2021
- (4) Fire Area FWPH-001, fire water pump house on September 8, 2021
- (5) Fire Areas RAB 37-001 and RAB 38-001, motor driven emergency feed pump rooms A and B on September 15, 2021
- (6) Fire Area RAB 31-001, Elevation -4.00' (RCA) general area on September 22, 2021
- (7) Fire Areas CT1-001 and CT3-001, dry cooling tower A and wet cooling tower A on September 29, 2021

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Switch gear rooms A and AB on September 10, 2021

71111.07T - Heat Sink Performance

Heat Exchanger (Closed Loop) (IP Section 03.03) (2 Samples)

- (1) Containment Cooling HVAC AH-1(3D-SB) Cooler 1D
- (2) Essential Chiller B

Ultimate Heat Sink (IP Section 03.04) (1 Sample)

- (1) Dry Cooling Tower A

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered on 8/18/2021.

71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

- (1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered on July 21, 2021.

Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the facility licensee's annual requalification operating test.

Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the facility licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the facility licensee is effectively evaluating their licensed operators for mastery of training objectives.

Requalification Examination Security

The inspectors evaluated the ability of the facility licensee to safeguard examination material, such that the examination is not compromised.

Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses.

Control Room Simulator

The inspectors evaluated the adequacy of the facility licensee's control room simulator in modeling the actual plant, and for meeting the requirements contained in 10 CFR 55.46.

Problem Identification and Resolution

The inspectors evaluated the licensee's ability to identify and resolve problems associated with licensed operator performance.

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during control element assembly operability testing on July 16, 2021.

Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated a simulator-based training scenario that involved a steam generator tube rupture accident on September 20, 2021.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (1 Sample)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Control room emergency air filtration system due to hydramotor actuator failures (Completion of partial sample documented in Waterford Inspection Report 05000382/2021002, Section 71111.12)

Quality Control (IP Section 03.02) (1 Sample)

The inspectors evaluated the effectiveness of maintenance and quality control activities to ensure the following SSC remains capable of performing its intended function:

- (1) Emergency diesel generator A, during the associated outage on the week of August 1, 2021

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Planned yellow risk for component cooling water train A and essential services chilled water outage during the week of July 12, 2021
- (2) Unplanned elevated risk for shield building ventilation train B outage during the week of August 16, 2021
- (3) Planned yellow risk for outage of emergency diesel generator B and emergency feedwater pump B on August 23, 2021
- (4) Unplanned elevated risk due to loss of offsite power and power restoration following damage from Hurricane Ida from August 29 to September 3, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (2 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Essential services chilled water chiller A operability following a fallen electrical conduit for a temperature sensor on August 10, 2021
- (2) Condensate storage pool operability following the identification of a leak in the component cooling water system on September 13, 2021

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Temporary modification for reactor coolant pump 2A cold leg temperature failure on September 14, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (5 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Essential service chilled water train A following planned maintenance on July 15, 2021
- (2) Shield building ventilation train B following corrective maintenance on July 22, 2021
- (3) Emergency diesel generator A following planned maintenance on August 6, 2021

- (4) Main feedwater pump A following flow differential pressure transmitter replacement on September 9, 2021
- (5) Component cooling water system following repair of reactor coolant pump seal cooler leak on September 22, 2021

71111.20 - Refueling and Other Outage Activities

Refueling/Other Outage Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated a forced outage to Mode 5 due to Hurricane Ida from August 29 to September 7, 2021.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (4 Samples)

- (1) Control room air handling unit and switchgear air handling unit flow control valves test for essential chilled water train B on September 22, 2021
- (2) Reactor coolant system leakage evaluation on September 24, 2021
- (3) Emergency feed water pump AB surveillance test on September 28, 2021
- (4) Reactor trip circuit breaker testing on channel A on September 30, 2021

Inservice Testing (IP Section 03.01) (2 Samples)

- (1) Steam generator 1 atmospheric dump valve stroke time testing on August 4, 2021
- (2) Emergency feed water pump B in service test on September 15, 2021

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the following recently submitted Emergency Action Level and Emergency Plan changes.
 - Emergency Action Levels EP-001-001, Revision 34, submitted to the NRC on March 11, 2021

Additionally, the inspectors evaluated the impact on the station's emergency action levels, the licensee's compensatory measures, and a subsequent change to the emergency plan implementing procedure, EN-EP-202, Equipment Important to Emergency Response, following failure of both channels of input (Level 8) to the reactor vessel level monitoring system (RVLMS) in late May 2021.

71114.08 - Exercise Evaluation Scenario Review

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed the licensee's preliminary exercise scenario that was submitted to the NRC on August 24, 2021 (ADAMS Accession No. ML21236A348) for

the exercise scheduled at the time to occur on October 26, 2021. The inspectors discussed the preliminary scenario with Mr. J. Overly, Manager, Emergency Preparedness, and other members of the emergency preparedness staff on September 22, 2021. The inspectors' review does not constitute NRC approval of the scenario.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS08: Heat Removal Systems (IP Section 02.07) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

MS09: Residual Heat Removal Systems (IP Section 02.08) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

MS10: Cooling Water Support Systems (IP Section 02.09) (1 Sample)

- (1) July 1, 2020, through June 30, 2021

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (IP Section 02.03) (1 Sample)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) Effectiveness of corrective actions related to the full implementation cyber security inspection findings as discussed in NRC Inspection Report 05000382/2018410 (ML19029B332)

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

- (1) LER 05000382/2021-001-00, Control Room Air Filtration Equipment Failure Resulting in a Condition Prohibited by Technical Specification 3.7.6.1 (ADAMS Accession No. ML21053A128). The inspectors determined that it was not reasonable to foresee or correct the cause discussed in the LER; therefore, no performance deficiency was identified. The inspectors did not identify a violation of NRC requirements.

INSPECTION RESULTS

Failure to Maintain Effectiveness of the Emergency Plan upon Loss of Reactor Vessel Level Monitoring System			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Emergency Preparedness	Green NCV 05000382/2021003-01 Open/Closed	[P.3] - Resolution	71114.04
<p>The inspectors identified a Green, non-cited violation of 10 CFR 50.54(q)(2) which requires that operating nuclear power plant licensees follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E of 10 CFR 50, and the planning standards of 10 CFR 50.47(b), including 10 CFR 50.47(b)(4) relative to maintaining an emergency classification/action level scheme. Specifically, from May 26 to May 30, 2021, and again May 31 to June 4, 2021, Waterford's response to the loss of Level 8 indications on both channels of the Reactor Vessel Level Monitoring System (RVLMS) failed to restore capability to classify emergency action levels (EALs) for a range of accidents which would rely on monitoring reactor vessel water level with RVLMS consistent with the approved EAL scheme. In response to this issue, the licensee established compensatory measures to be able to declare the potential loss of the fuel cladding and/or containment fission product barriers, such that up to a General Emergency could be declared for the given conditions. While the compensatory measures employed during the period provided some mitigation as to the significance of the performance deficiency, they did not restore compliance with the approved EAL scheme until one channel of the RVLMS Level 8 was restored.</p>			
<p><u>Description:</u> The Waterford Unit 3 emergency action level (EAL) scheme associated with the Emergency Plan was based on the standard scheme in NEI 99-01, "Methodology for Development of Emergency Action Levels," Revision 5, and was approved by the NRC for use on July 18, 2011 (ADAMS Accession No. ML111380558). The approved Waterford EAL scheme includes the use of the Fission Product Barrier matrix which evaluates the loss or potential loss of the fuel clad, reactor coolant system (RCS), and/or containment barriers by way of various system parameters and thresholds, when the reactor is in Operating Modes 1 - 4 (Power Operations to Hot Shutdown). The severity of the emergency using the Fission Product Barrier matrix information increases (up to a General Emergency) based on which barrier is lost or potentially lost, and if in combination with the loss or potential loss of one or both of the other barriers. One measure of a Potential Loss of the Fuel Clad fission product barrier (FCB4) at Waterford used the criteria of "RVLMS upper level plenum 0 percent" - which equates to the lowest level measured by the RVLMS (Level 8) corresponding to the closest monitored level to the top of active fuel. (This level is 12.6 inches above the fuel alignment plate, which is further located an additional 12 inches above the top of the fuel bundles in the reactor core). Additionally, one measure of a Potential Loss of the Containment fission product barrier (CNB3) also used the RVLMS Level 8 input in the combined criteria of "(1) Core exit thermocouples (CETs) [greater than] 700 degrees F; AND (2) RVLMS upper level plenum 0 percent or lower; AND (3) Restoration procedures not effective within 15 minutes." The most likely accident scenario in which the RVLMS criteria could be employed would be during a loss of coolant accident in which the RCS barrier would be lost as part of the event; thus, the potential loss of the fuel clad and/or containment using</p>			

the RVLMS criteria as reactor vessel water level continued to decrease could result in a Site Area Emergency (loss/potential loss of two barriers) and eventually a General Emergency (loss/potential loss of all three barriers). Additionally, in Cold Shutdown (Mode 5) or Refueling (Mode 6), the RVLMS provided input for a Site Area Emergency EAL (CS1) with the following criteria: "[w]ith containment closure not established RVLMS upper plenum level 0 percent [Level 8]." At Waterford, RVLMS employs two channels of instruments of which each provide relative reactor vessel water levels (8 distinct levels per channel) to the Qualified Safety Parameter Display System (QSPDS) with indications available in the control room.

In approximately March 2019, RVLMS Channel 2, Levels 4 and 8 were found inoperable during a refueling outage, but at the time the licensee took no actions to restore those instruments to an operable status before the conclusion of the refueling outage. Because of the location of the RVLMS level instruments, repairs to the individual instrument inputs could not be made while the reactor was operating. At that point, this condition reduced the station's ability to declare FCB4, CNB3, or CS1 using the RVLMS instrumentation to only RVLMS Channel 1 [Level 8]. As revealed during the inspection, no further corrective actions were pursued by the licensee to restore RVLMS Channel 2, Level 8 to operable status during a subsequent refueling outage in the Fall 2020.

On May 26, 2021, the entire QSPDS Channel 1 (including the level inputs from RVLMS Channel 1) became inoperable. While operators noted that RVLMS Channel 1 was not available and they initiated procedural actions to use alternate instruments for general reactor vessel water level monitoring (including monitoring CETs available in QSPDS Channel 2 and RCS Hot Leg thermocouple temperatures), the operators did not fully recognize that the loss of QSPDS/RVLMS Channel 1, in conjunction with the previous loss of RVLMS Channel 2, Level 8, resulted in their inability to declare FCB4, CNB3, or CS1. In part, after engagement by the NRC Resident Inspectors on this point, while they pursued repair strategies for QSPDS/RVLMS Channel 1, the licensee implemented a standing order on May 28, to use RVLMS Channel 2, Level 7 in conjunction with other RCS Hot Leg temperature indications (and CET temperatures, as appropriate) as an alternate method to declare a Potential Loss of the Fuel Clad and/or Containment barriers, and for the CS1 Site Area Emergency (if in Modes 5 or 6). On the morning of May 30, 2021, the licensee restored QSPDS/RVLMS Channel 1 to an operable status, and suspended use of the standing order. However, less than 24 hours later (on the morning of May 31), QSPDS/RVLMS Channel 1 failed again. After additional engagement by the Resident Inspectors regarding technical aspects of the original standing order, the licensee implemented a revision to the standing order that same day (May 31), as further repairs to QSPDS/RVLMS Channel 1 continued. Subsequently on June 4, 2021, the licensee restored QSPDS Channel 1 to an operable status, and thus RVLMS Channel 1, Level 8 indications became available again to support potential declaration of FCB4, CNB3, or CS1.

On June 24, 2021, based on additional questions relative to the licensee's ability to declare FCB4, CNB3, or CS1, and continuing licensee analyses and corrective actions given that the station continued to only have one channel of RVLMS available, the licensee completed an evaluation for changes to one of the emergency plan supporting procedures (EN-EP-202, Equipment Important to Emergency Response) to formally integrate compensatory measures (based in part on the standing orders) into the procedure should both channels of RVLMS Level 8 become inoperable again. The licensee's analysis included evaluating the use of available alternate level (e.g., RVLMS Level 7) and temperature indications in the Waterford reactor simulator for the most limiting accident scenario - a small break loss of coolant

accident. The analysis provided information which showed that using the standing order or compensatory measure alternate methods to declare FCB4, CNB3, or CS1, could result in indications to support declaration of a Site Area Emergency or General Emergency no more than 15 minutes after of the "expected" time of available indications had the RVLMS Level 8 indications been available. Additionally, for some of the scenarios, when alternate instruments were used, the indications could result in available information to declare up to a General Emergency no more than 15 minutes earlier than the "expected" time had RVLMS Level 8 indications been available.

The Region-based Emergency Preparedness (EP) inspectors supported the resident inspectors in the evaluation of the licensee's standing orders/compensatory measures and 10 CFR 50.54(q) evaluation for the changes to assess the impact on the effectiveness of the licensee's emergency plan when both channels of RVLMS Level 8 indications were lost during the two, multi-day periods. The EP inspectors concluded that with the loss of both channels of RVLMS Level 8 for the period of May 26 - June 4, 2021, the associated initiating conditions/fission product barrier matrix criteria, which support up to a General Emergency classification, were ineffective. Specifically, during the period, the EAL scheme (using the approved RVLMS Level 8 indications) would not have been effective in implementing the approved Emergency Plan. However, the EP inspectors determined, in consultation with staff from the Office of Nuclear Security and Incident Response, that during the period when alternate methods/indications would have been used and resulted in later or earlier than "expected" indications of the conditions, those alternate methods would have still provided timely indications to support declaration of up to a General Emergency, and would have resulted in the licensee providing the same required Protective Action Recommendations to the offsite response authorities.

Corrective Actions: In addition to establishing the standing orders and change to the emergency plan implementing procedure relative to the permanent compensatory measure (both previously described), the licensee initiated several additional corrective actions for this issue, including (1) conducting a cause evaluation to determine why RVLMS Channel 2, Level 8 was not scoped into the Fall 2020 refueling outage for repair, and (2) validating that the appropriate equipment and planning were on-hand and complete to support repair of RVLMS Channel 2, Levels 8 (and 4) during the Spring 2022 refueling outage.

Corrective Action References: CR-WF3-2021-03065, CR-WF3-2021-03671, CR-WF3-2021-03677, CR-WF3-2021-03683

Performance Assessment:

Performance Deficiency: The licensee failed to maintain the effectiveness of its emergency plan that meets the risk significant planning standard 10 CFR 50.47(b)(4) relative to maintaining an emergency classification/action level scheme. Specifically, upon loss of Level 8 indications on both channels of the Reactor Vessel Level Monitoring System (RVLMS), the licensee failed to ensure the capability to classify emergency action levels for a range of accidents which would rely on monitoring reactor vessel water level with RVLMS consistent with the approved EAL scheme.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Facilities and Equipment attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective to ensure that the licensee is 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 maintain

equipment and processes to ensure the effectiveness of the EAL scheme and emergency plan adversely affected the ERO capability to implement adequate measures to protect the health and safety of the public in the event of a radiological emergency.

Significance: The inspectors assessed the significance of the finding using Appendix B, "Emergency Preparedness SDP." The inspectors determined the finding to be of very low safety significance (Green) because it did not result in the loss or degradation of a risk significant planning standard. Specifically, while the loss of both channels of RVLMS Level 8 resulted in EALs rendered ineffective such that up to a General Emergency would not be declared for a particular off-normal event, because of other EALs, an appropriate declaration could be made in an accurate and timely manner. Further, the EAL classification process, using other EALs and/or compensatory measures employed by the licensee for a particular off-normal event, would not result in an over-classification that would lead the offsite response organizations to implement unnecessary protective actions for the public.

Cross-Cutting Aspect: P.3 - Resolution: The organization takes effective corrective actions to address issues in a timely manner commensurate with their safety significance. Specifically, in failing to ensure timely corrective action to repair RVLMS Channel 2, Level 8 to an operable status after it failed in March 2019, the licensee created a single point vulnerability such that operators only had one channel of RVLMS Level 8 available for over a two-year period to support appropriate declaration of up to a General Emergency had the need arisen. There was an opportunity to affect corrective actions and restore RVLMS Channel 2 during the Fall 2020 refueling outage, but that work was not planned nor completed. Further, the licensee failed to develop any additional, predefined compensatory measures to support timely and accurate classification of the associated emergencies should neither channel of RVLMS Level 8 be operable.

Enforcement:

Violation: Title 10 CFR 50.54(q)(2) requires that a holder of a nuclear power plant operating license follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E of this part and the planning standards of 10 CFR 50.47(b). Further, 10 CFR 50.47(b)(4) requires that a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee. Contrary to the above, from May 26 to May 30, 2021, and again from May 31 to June 4, 2021, upon loss of both channels of the Reactor Vessel Level Monitoring System (RVLMS) Level 8 indications, Waterford failed to ensure that the standard emergency classification and action level scheme, as approved by the NRC for the use by the licensee, was in use and maintained the effectiveness of the emergency plan.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Failure to Provide Complete and Accurate Information in a License Amendment Request to Change Emergency Action Level Requirements

Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000382/2021003-02 Open/Closed	Not Applicable	71114.04

The inspectors identified a Severity Level IV, non-cited violation of 10 CFR 50.9, in that the licensee provided inaccurate information to the NRC in a license amendment request for an emergency action level scheme change in 2011. Specifically, the licensee provided information about the detector capability of two liquid effluent radiation monitors, that was material to the licensing decision, but was determined to be not accurate.

Description: The NRC approved an emergency action level scheme change on July 18, 2011 (ADAMS Accession No. ML111380558), to allow Waterford 3 (the licensee) to adopt the Nuclear Energy Institute (NEI) 99-01, Revision 5, emergency action level (EAL) scheme. Subsequently, the licensee identified that EAL thresholds for the Alert and Unusual Event Abnormal Radiation EALs AU1 and AA1 could not be implemented in accordance with their emergency classification procedure for six liquid effluent radiation monitors and one gaseous radiation effluent monitor. Specifically, based on the results of an internal self-assessment, the licensee documented in Condition Report (CR) CR-WF3-2019-07175, that it appeared that EAL thresholds for several effluent radiation monitors were above the maximum range of the individual monitors. Specifically, CR-WF3-2019-07175 noted that other CRs written in 2010 and 2013 appeared to acknowledge that the monitors' capabilities relative to the EAL thresholds may have been in question, and while an engineering analysis was completed in those prior years, the contemporary licensee staff could not validate the assumptions to support conclusions in the prior analysis..

In the subsequently completed vendor-supported, Engineering Calculation (WF3-EC-88621) and CR-WR3-2020-06312, the licensee validated that seven effluent monitors had maximum detection capabilities which would be incapable of indicating the applicable EAL threshold value (i.e., typically, 200 times the established alarm setpoint for the release path and permit consistent with the Offsite Dose Calculation Manual limits), and recommended changes to the EAL thresholds to support the detectors' capabilities.

The inspectors reviewed the licensee's license amendment request (LAR), dated September 16, 2010 (ADAMS Accession No. ML102630124), "Proposed Emergency Action Levels Using NEI 99-01, Revision 5, Scheme, Waterford Steam Electric Station Unit 3, Docket No. 50-382, License No. NPF-38," and the licensee's supplemental responses relative to NRC's requests for additional information related to the LAR dated March 28, 2011 (ADAMS Accession No. ML110900290), and May 4, 2011 (ADAMS Accession No. ML111250102), to determine whether the conditions identified in the corrective action program existed at the time the licensee requested the license amendment and whether the request correctly described the instruments and their capabilities. The inspectors identified that the licensee's initial LAR and first supplemental response (dated September 16, 2010, and March 28, 2011, respectively) did not include specific setpoint values for any of the seven effluent radiation monitors which were subsequently determined to have maximum detection ranges which did not support their EAL thresholds. However, the inspectors found that the second supplemental response (dated May 4, 2011), the description for the proposed Waterford 3 Abnormal Radiation Alert EAL AA1, Item 2.a included the criteria: "For Table A2 monitors: EITHER a VALID reading [greater than] 200 times the alarm setpoint established by a current radioactivity discharge permit for > 15 minutes OR a VALID reading [greater than] the Table A2 value for [greater than] 15 minutes."

Further in the May 4, 2011, response, the licensee included Table A2 with the following liquid effluent radiation monitors and associated thresholds:

- Boron Management Discharge (PRM-IRE-0627) - Concentration: 5.38E-01 microcurie/mL
- Liquid Waste Management Discharge (PRM-IRE-0647) - Concentration: 5.38E-01 microcurie/mL

In reviewing the contemporary reevaluated setpoint calculation (WF-EC-88621) and the corrected EAL Classification procedure (EP-001-001, Revision 34) which uses the appropriate maximum detector range, the inspectors found that Table A2 correctly included the following for the same two effluent monitors:

- Boron Management Discharge (PRM-IRE-0627) - Concentration: 8.55E-02 microcurie/mL
- Liquid Waste Management Discharge (PRM-IRE-0647) - Concentration: 8.55E-02 microcurie/mL

Both of these setpoint values were significantly less than the concentration values provided by the licensee in its May 4, 2011, supplemental response for the LAR, and demonstrated that the thresholds previously provided would have been incapable of detection by the instruments.

This issue was NRC-identified because when the licensee identified the potential emergency action level errors earlier in 2010, they missed the opportunity to identify and ensure that technical information provided to the NRC in support of the license amendment request (initiated in September 2010 and supplemented with additional information in May 2011) was complete and accurate in all material respects.

Corrective Actions: Consistent with the change process described in 10 CFR 50.54(q), the licensee changed the emergency plan implementing procedure, EP-001-001, Recognition and Classification of Emergency Conditions, Revision 34, effective March 11, 2021, to correct the EAL thresholds consistent with the seven effluent radiation detectors' capabilities.

[Additional details on these corrective actions are included in the associated licensee-identified, Green NCV, documented elsewhere in this report]. Additionally, the licensee issued Condition Report CR-WF3-2021-04614 for the incomplete and inaccurate emergency action level submission examples to address the completeness and accuracy issues identified by the inspectors.

Corrective Action References: Condition Reports CR-WF3-2019-07175, CR-WF3-2020-06312, and CR-WF3-2021-04614

Performance Assessment: The NRC determined that this violation was associated with a previously documented finding assessed using the significance determination process. Specifically, the inspectors' review of a licensee-identified Green, non-cited violation, for the licensee's failure to maintain the emergency plan consistent with the planning standard 10 CFR 50.47(b)(4), which requires that an effective emergency classification/action level scheme be maintained, is documented elsewhere in this report.

Enforcement: The ROP's significance determination process does not specifically consider the regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which impedes the NRC's ability to regulate using traditional enforcement to adequately deter non-compliance. This issue was determined to be a Severity Level IV violation using the NRC Enforcement Policy, dated January 20, 2020, Section 2.3.11, "Inaccurate and Incomplete Information," and Section 6.9, "Inaccurate and Incomplete Information or Failure to Make a Required Report."

Severity: This issue was determined to be more than minor because by providing inaccurate information in support of a license amendment request, the licensee impeded the regulatory process of reviewing and approving the license amendment request. The Enforcement Policy, Section 6.9(c)(1), provides that a violation is characterized as Severity Level III if the accurate information would have caused the NRC to reconsider a regulatory position or

undertake further inquiry. There are no corresponding Severity Level IV examples. Through discussion with the Office of Nuclear Security and Incident Response (NSIR), it was determined that had accurate information been provided (or had the NRC known the information was inaccurate), the NRC license reviewer would have used the request for additional information process to address these problems with the license amendment request. Specifically, the licensee would have been required to revise their proposed emergency action levels so they could be implemented before the emergency action scheme change was approved. Because the request for additional information is a routine NRC process, the inspectors concluded that the failure to provide accurate information to the NRC would not have caused the NRC to undertake substantial further inquiry (a threshold for Severity Level III), and therefore the violation was appropriately characterized as Severity Level IV.

Violation: Section 50.9(a) of 10 CFR states, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material respects.

Contrary to the above, on May 4, 2011, information was provided to the Commission by the licensee that was not complete and accurate in all material respects. Specifically, the licensee's emergency action level scheme change submittal documents contained emergency action level declaration threshold values (i.e., setpoints) that could not be indicated by the specified plant equipment. The information was material to the NRC's decision whether to approve a license amendment request. The NRC approved a license amendment for an emergency action level scheme on July 18, 2011, which included emergency action levels which could not be implemented; the information submitted was material to the NRC because the approval of those emergency action levels in the licensing action was based on the incorrect information submitted by the licensee.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Licensee-Identified Non-Cited Violation	71114.04
This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.	
Violation: The inspectors reviewed a licensee identified violation of 10 CFR 50.54(q)(2) for the failure to maintain the effectiveness of an emergency plan that meets, in part, the planning standards of § 50.47(b), including 10 CFR 50.47(b)(4), which requires that a standard emergency classification/action level (EAL) scheme is in use by nuclear facility licensees. Contrary to the above, from September 14, 2011, through February 24, 2021, the licensee failed to maintain an appropriate EAL scheme such that Unusual Event and Alert EALs associated with some effluent releases could be accurately identified and declared consistent with the NEI 99-01, Revision 5-based EAL scheme approved by the NRC for the licensee's use on July 18, 2011. Six liquid effluent radiation monitors and one gaseous effluent radiation monitor had detection ranges which were incapable of detecting the threshold values in the Abnormal Radiation EALs AU1 and AA1 as implemented in the Emergency Plan implementing procedure EP-001-001, Recognition and Classification of Emergencies, Revisions 29 through 33.	
Significance/Severity: Green. The finding was evaluated using Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," issued September 22, 2015, and determined to be of very low safety significance (Green), because it	

was a failure to comply with NRC requirements, was associated with a risk-significant planning standard, and was not a lost or degraded planning standard function. Specifically, the finding was associated with EALs which had been rendered ineffective such that any Alert or NOUE would not be declared or declared in a degraded manner for a particular off-normal event.

Corrective Action References: The licensee identified this issue and entered it into its corrective action program for resolution in CR-WF3-2020-06312. The thresholds for the impacted effluent monitors for EALs AU1 and AA1 were corrected consistent with the individual monitor capabilities and the approved EAL scheme, and implemented in EP-001-001, Revision 34, effective March 24, 2021.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On August 27, 2021, the inspectors presented the Heat Sink Performance Exit inspection results to John Ferrick, Site Vice President, and other members of the licensee staff.
- On September 22, 2021, the inspectors presented the emergency exercise preliminary scenario review inspection results to Mr. J. Overly, Manager, Emergency Preparedness, and other members of the licensee staff.
- On September 23, 2021, the inspectors presented the Cyber Security Full Implementation Problem Identification and Resolution Inspection inspection results to Brian Lindsey, Acting Site Vice President, and other members of the licensee staff.
- On September 27, 2021, the inspectors presented the emergency preparedness plan/EAL change review inspection results to Mr. M. Lewis, General Manager - Plant Operations, and other members of the licensee staff.
- On September 29, 2021, the inspectors presented the Exit Meeting inspection results to Brian Lindsey, Director of Regulatory Assurance, and other members of the licensee staff.
- On November 1, 2021, the inspectors presented the integrated inspection results to John Ferrick and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents Resulting from Inspection	CR-WF3-YYYY-NNNN	2021-04186	
		EN-FAP-EP-010	Severe Weather Response	8
	Procedures	OP-901-521	Severe Weather and Flooding	337
71111.04	Procedures	OP-002-003	Component Cooling Water	321
		OP-006-003	125V DC Electrical Distribution	307
		OP-008-008	System Operating Procedure Shield Building Ventilation	11
		OP-009-002	System Operating Procedure Emergency Diesel Generator	358
71111.05	Corrective Action Documents Resulting from Inspection	CR-WF3-YYYY-NNNN	2021-04899	
	Fire Plans	CT1-001	Dry Cooling Tower "A"	7
		CT2-001	Dry Cooling Tower "B"	6
		CT3-001	Wet Cooling Tower "A"	9
		CT4-001	Wet Cooling Tower "B"	7
		FWPH-001	Fire Water Pump House	3
		RAB 11-001	Battery Room 3B	7
		RAB 12-001	Battery Room 3AB	7
		RAB 13-001	Battery Room 3A	7
		RAB 31-001	Elev. -4.00' RAB (RCA) General Area	9
		RAB 37-001	Motor Driven Emergency Feedwater Pump Room "A"	7
		RAB 38-001	Motor Driven Emergency Feed Pump Room "B"	7
		RAB 8A-001	Switchgear Room "A"	12
		RAB 8C-001	Switchgear Room "A/B"	11
71111.06	Engineering Evaluations	MNQ3-5	Flooding Analysis Outside Containment	6
71111.07T	Calculations	9C2-5Y	Chiller Heat Rejection	1
		EC43927	Essential Chilled Water Cooling Loads & Coil Performance	5

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Determination	
		EC52043	Ebasco Specification - Containment Fan Coolers	8
		EC52043	Ebasco Specification - Mechanical Draft Cooling Towers and Acceptance	10
		EC74123	Essential Chilled Water Cooling Loads & Coil Performance Determination	7
		EC74123	Essential Chilled Water Cooling Loads & Coil Performance Determination	7
		EC78595	Essential Chilled Water Cooling Loads & Coil Performance Determination	8
		EC8458	Containment Fan Cooler Sizing	6
		ECM95-008	Ultimate Heat Sink Design Basis	3
	Corrective Action Documents	CR-WF3-YYYY-XXXXX	2019-07849, 2017-06885, 2017-08311, 2017-08747, 2017-08776, 2017-09240, 2017-09748, 2019-04041, 2019-06009, 2020-01201, 2020-00449	
	Procedures	CE-002-003	Maintaining Auxiliary Component Cooling Water Chemistry	308
		CE-002-007	Maintaining Component Cooling Water Chemistry	310
		EN-DC-184	NRC Generic Letter 89-13 Service Water Program	6
		EN-DC-316	Heat Exchanger Performance and Condition Monitoring	12
		OP-002-003	Component Cooling Water	321
		OP-901-510	Component Cooling Water System Malfunction	305
		OP-901-521	Severe Weather and Flooding	337
		OP-903-118	Primary Auxiliaries Quarterly 1ST Valve Tests	39
		PE-004-021	CCW Heat Exchanger Performance Test	9
		PE-004-022	Essential Chilled Water Train "A" Flow Balance	7
		PE-004-023	Essential Chilled Water Train "B" Flow Balance	6
		PE-004-024	ACCW & CCW System Flow Balance	308
		PE-004-033	Wet Cooling Tower A (B) Thermal Performance Test	310
		UNT-006-032	Coating and Corrosion Program	1
	Self-Assessments	LO-WLO-2021-00015	WF3 Triennial Heat Sink Pre NRC Inspection Assessment	05/20/2021
	Work Orders	WO-WF3-XXXXXXXXX	52779163, 52822986, 52895941, 52653016, 00397170, 00449030, 00539093, 00560797, 52350007, 52461382,	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			52461726, 52482430, 52625597, 52755090, 52805863, 52825338, 52900070, 52903674, 52870455, 52691822, 52819086, 00430016, 00449848, 00537626, 52817572, 52894848, 00537626, 52817572, 52894848, 00522711, 52696304, 00023547, 00248135, 51083575, 52928657, 52928657, 52920889	
71111.11B	Miscellaneous		WF3 Simulator Closed Discrepancy List (July 2019 – July 2021)	06/24/2021
			WF3 Simulator Open Discrepancy List	06/24/2021
			2020 Loss of RCP 2B Transient Test	
			2020 Max Excess Steam Demand Transient Test	
			Post-Event Scenario Testing, Comparison PEST MG Set Failure, DR 20-0153	11/02/2020
			2021 Simultaneous Closure of All MSIVs Transient Test	
			2020 Slow RCS Depressurization to Saturation with PZR Relief Stuck Open Transient Test	
		DR 18-0147	Simulator Discrepancy Report	
		DR 19-0735	Simulator Discrepancy Report	
		DR 20-0150	Simulator Discrepancy Report	
		DR 20-0153	Simulator Discrepancy Report	
		DR 21-0064	Simulator Discrepancy Report	
		DR 21-0089	Simulator Discrepancy Report	
		TQF-202-SBT	Scenario-Based Testing, 2020 NRC Initial Exam Scenario 3	05/22/2020
		TQF-202-SBT	Scenario-Based Testing, 2021 LOR Cycle 4 Annual Simulator Exam Week 1	06/14/2021
		WSIM-DIR-002-CORERELOAD	Simulator Core Reload Acceptance Test	06
		WSIM-DIR-003	Simulator Operability Testing	15
		WSIM-DIR-004-Normal Evolutions	Normal Evolutions Testing	03
		WWEX-LOR-214	2021 LOR Biennial Written Exam Week 5	
	Procedures	EN-NS-112	Medical Program	22
		EN-TQ-202	Simulator Configuration Control	11

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EN-TQ-217	Examination Security	10
		OI-024-000	Maintaining Active SRO/RO Status	314
		TQF-201-IM05	Remedial Training Plan	12
71111.11Q	Procedures	EN-OP-115	Conduct of Operations	30
		OP-903-005	Control Element Assembly Operability Check	17
	Work Orders		52969823	
71111.13	Procedures	EN-FAP-EP-010	Severe Weather Response	8
		EN-MA-133	Control of Scaffolding	24
		EN-WM-104	On Line Risk Assessment	22
		MI-005-410	Generator Condition Monitor Functional Test and Calibration	304
		OP-901-521	Severe Weather and Flooding	337
	Work Orders		00536274, 52715847, 52799225, 52921902, 52980457	
71111.15	Calculations	ECM97-006	Design Basis for CCW Makeup	1
		ECM97-006	Design Basis for CCW Makeup	2
		ER-W3-98-0642-02-00	Calculation Change Sheet for EC-M97-006	A
	Corrective Action Documents	CR-WF3-YYYY-NNNN	2021-04979	
	Miscellaneous	W3-DBD-003	Emergency Feedwater System	302
71111.19	Drawings	B426D2210AM	FW-Steam Gen Feedwater Pump A Suction Flow & Recirc Control	4
	Miscellaneous	Vendor Procedure (Foxboro)	MI-20-210, "E110 M Series Differential Pressure Transmitter"	November 1982
	Procedures	MI-05-490	Emergency Diesel Generator Control System Calibration and Maintenance	21
		OP-008-008	System Operating Procedure Shield Building Ventilation	11
		OP-903-068	Emergency Diesel Generator and Subgroup Relay Operability Verification	326
		OP-903-118	Primary Auxiliaries Quarterly Inservice Valve Tests	60
	Work Orders		5677577-06, 5286931, 52927522, 00555802	
	Procedures	OP-903-046	Emergency Feed Pump Operability Check	323
		OP-903-107	Plant Protection System Channel A B C D Functional Test	317

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		OP-903-120	Containment and Miscellaneous Systems Quarterly Inservice Valve Tests	35
	Work Orders		52975993, 52959840	
			52970786	
71114.04	Corrective Action Documents	CR-WF3-YYYY-NNNN	2019-03153, 2019-07175, 2020-06312, 2021-03065	
		WT-WTWF3-	2018-00166-CA43	
	Corrective Action Documents Resulting from Inspection	CR-WF3-YYYY-NNNN	2021-02016, 2021-03683, 2021-04614	
	Engineering Changes	WF3-EC-88621	Radiation Monitoring Calculations for Monitor Spans to Support EALs and Plant Operations	02/15/2021
	Miscellaneous		10 CFR 50.54(Q)(3) Screening - EP-001-001, Rev. 34	02/18/2021
			10 CFR 50.54(Q)(3) Evaluation - EP-001-001, Rev. 34	02/18/2021
			10 CFR 50.54(q)(3) Evaluation - EN-EP-202, Rev. 3	06/24/2021
			10 CFR 50.54(q)(3) Evaluation - EN-EP-202, Rev. 3	06/24/2021
			Standing Instruction on EAL Classification with Both Channels of RVLMS Inoperable	05/28/2021
			Standing Instruction on EAL Classification with Both Channels of RVLMS Inoperable (Rev. 1)	05/31/2021
			WF3 Control Room Log Entries relative to QSPDS Channel 1 (05/30/2021 - 06/04/2021)	06/04/2021
			10 CFR 50.54(q)(3) Screening - EN-EP-202, Rev. 3	06/24/2021
		FLEXI-Quiz 2020-08	FLEXI-Quiz Results based on EP-001-001 Rev 34	2020
		SD-QSP	Training Material: Qualified Safety Parameter Display System	5
		W3F1-2021-001	Special Report SR-21-001-00, Reactor Vessel Level Monitoring System (RVLMS) Channel Inoperable for Greater than 30 Days	01/8/2021
		WLP-EP-EAL	Training Material: Emergency Action Levels (EALs)	7
		WLP-OPS-EP02	Emergency Plan Training for Control Room Personnel, Training Personnel, and Operations Coordinators	37

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	EN-EP-202	Equipment Important to Emergency Response (EITER)	2
		EP-001-001	Recognition and Classification of Emergency Conditions	33, 34
		OP-903-013	Monthly Channel Checks	20
71114.08	Miscellaneous	W3F1-2021-0062	Emergency Preparedness Full Participation Exercise Scenario, Waterford Steam Electric Station, Unit 3 (Waterford 3); Docket No. 50-382, Renewed Facility Operating License No. NPF-38	08/24/2021
		EP-001-001	Recognition and Classification of Emergency Conditions	36
		EP-002-052	Protective Action Guidelines	26
71152	Corrective Action Documents	CR-HQN-	2021-00574, 2020-02966, 2020-04294, 2020-04517, 2020-06702, 2021-01678, 2018-06117, WT-WTWF3-2021-00079	
	Corrective Action Documents Resulting from Inspection	CR-WF3-YYYY-NNNN	2021-05266	
		CR-WF3-YYYY-NNNN	2021-04076	
	Drawings	N/A	SECURITY NETWORK OVERVIEW	0
	Engineering Changes	EC- 000075628	Permanent TEDG for Emergency Power (Parent EC to Childs 75629, 75630 & 75631)	0
		EC-0000075315	Fire Detection System Upgrade (Parent)	0
	Miscellaneous	CSWI No. 1236	Cyber Security Provider Machine & Kiosk Update	3/30/2021
		N/A	CSS Vulnerability assessment for L2, L3, L4 OS (Kiosks)	06/15/2021
		N/A	CSS Vulnerability assessment for L2 Application (Non-EP)	06/15/2021
		N/A	Copy of Periodic Activities Tracker	N/A
		N/A	CSS Vulnerability assessment for L4 OS (Security)	06/15/2021
		N/A	CSS Vulnerability assessment for L2, L3, L4 OS (Kiosks)	06/15/2021
		N/A	CSS Vulnerability assessment for L3-L4 Application (PMC)	06/15/2021
		N/A	CSS Vulnerability assessment for L2 Application (EP)	06/15/2021
		WT-WTHQN-2021-00051 CA 35	Cyber Security Pre-NRC Cyber PI&R Inspection Assessment	05/13/2021
	Procedures	EN-IT-103	Nuclear Cyber Security Program	15
		EN-IT-103-02	Cyber Security Periodic Activities	07

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EN-IT-103-11	Administration of Cyber Security Portable Digital Media Program	03
		EN-IT-103-14	Vulnerability Management	02