



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

February 7, 2020

Mr. Peter Dietrich, Senior VP  
and Chief Nuclear Officer  
DTE Energy Company  
Fermi 2 – 260 TAC  
6400 North Dixie Highway  
Newport, MI 48166

SUBJECT: FERMI POWER PLANT, UNIT 2 – INTEGRATED INSPECTION REPORT  
05000341/2019004

Dear Mr. Dietrich:

On December 31, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Fermi Power Plant, Unit 2. On January 7, 2020, the NRC inspectors discussed the results of this inspection with you and members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. One of these findings involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

A licensee-identified violation which was determined to be Severity Level IV 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 violation or the significance or severity of the violation 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 III; the Director, Office of Enforcement; and the NRC Resident Inspector at Fermi Power Plant, Unit 2.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement 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 III; and the NRC Resident Inspector at Fermi Power Plant, Unit 2.

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,

***/RA by Michael Kunowski Acting for/***

Richard A. Skokowski, Chief  
Branch 4  
Division of Reactor Projects

Docket No. 05000341  
License No. NPF-43

Enclosure:  
As stated

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Letter to Peter Dietrich from Richard Skokowski dated February 7, 2020.

SUBJECT: FERMIL POWER PLANT, UNIT 2 – INTEGRATED INSPECTION REPORT  
05000341/2019004

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000341

License Number: NPF-43

Report Number: 05000341/2019004

Enterprise Identifier: I-2019-004-0057

Licensee: DTE Electric Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, MI

Inspection Dates: September 30, 2019 to December 31, 2019

Inspectors: R. Baker, Senior Operations Engineer  
T. Briley, Senior Resident Inspector  
G. Hansen, Sr. Emergency Preparedness Inspector  
D. Mills, Senior Resident Inspector  
V. Myers, Senior Health Physicist  
V. Petrella, Resident Inspector  
E. Sanchez Santiago, Senior Reactor Inspector  
T. Taylor, Resident Inspector  
C. Zoia, Senior Operations Engineer

Approved By: Richard A. Skokowski, Chief  
Branch 4  
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 Fermi Power Plant, Unit 2, 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: 71111.11B.

### List of Findings and Violations

Failure to Have Appropriate Instructions for Determining the Average Sediment Depth in the Residual Heat Removal Complex Reservoir			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000341/2019004-01 Open/Closed	[H.13] - Consistent Process	71111.07T
A finding of very low safety significance (Green) and an associated Non-Cited Violation of Title 10 of the Code of Federal Regulation (CFR), Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings”, was identified by the inspectors due to the licensee’s failure to have appropriate instructions for determining the average sediment depth in the Residual Heat Removal Complex Reservoir.			
Inadequate Relay Replacement Frequency Causes Momentary Loss of Secondary Containment Vacuum			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green FIN 05000341/2019004-02 Open/Closed	None (NPP)	71111.12
A self-revealed Green finding was identified when the licensee failed to follow site procedure MES51, "Preventative Maintenance Program." Specifically, the licensee failed to replace a relay within the vendor recommended interval due to an inappropriate application of grace period. As a result, the relay failed and prevented a Reactor Building Heating and Ventilation System (RBHVAC) damper from closing during normal operation of the system, which caused pressure to increase in secondary containment beyond Technical Specification (TS) operability limits.			

### Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000341/2019-004-00	LER 2019-004-00 for Fermi, Unit 2, Division 2 Mechanical Draft Cooling Tower Fan "D" Tripped when Placed in High Speed due to a Blown Fuse	71153	Closed
LER	05000341/2019-005-00	LER 2019-005-00 for Fermi, Unit 2, Secondary Containment Pressure Exceeded Technical Specification due to Reactor Building HVAC Damper Malfunction	71153	Closed
LER	05000341/2019-003-00	LER 2019-003-00 for Fermi, Unit 2, Secondary Containment Declared Inoperable due to Opening Both Airlock Doors	71153	Closed

## **PLANT STATUS**

Unit 2 operated at or near rated thermal power during the entire inspection period with the exception of power changes to perform planned control rod pattern adjustments and/or required Technical Specification surveillance testing.

## **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 performed plant status activities described in IMC 2515, Appendix D, "Plant Status," and conducted routine reviews using IP 71152, "Problem Identification and Resolution." 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.

## **REACTOR SAFETY**

### 71111.01 - Adverse Weather Protection

#### Seasonal Extreme Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold weather preparations for the following systems:
  - Condensate Storage and Transfer System
  - Ultimate Heat Sink

### 71111.04Q - Equipment Alignment

#### Partial Walkdown Sample (IP Section 03.01) (2 Samples)

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

- (1) Reactor Core Isolation Cooling (RCIC) while Division 2 Switchgear Room Cooler was out of service for planned maintenance during the week ending November 30, 2019
- (2) Division 2 Emergency Equipment Service Water (EESW) while Division 1 EESW was out of service for planned maintenance during the week ending December 7, 2019

### 71111.05Q - Fire Protection

#### Quarterly Inspection (IP Section 03.01) (3 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

- (1) Reactor Building Second Floor, North and Division 1 Emergency Equipment Cooling Water (EECW) area during the week ending October 5, 2019
- (2) Residual Heat Removal (RHR) Complex First Floor, Emergency Diesel Generator (EDG) 14 room during the week ending October 12, 2019
- (3) Reactor Building First Floor, South Control Rod Drive and Railroad Bay area during the week ending December 31, 2019

### 71111.06 - Flood Protection Measures

#### Inspection Activities - Internal Flooding (IP Section 02.02a.) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Auxiliary Building Third Floor, Direct Current Motor Control Center Area

### 71111.07A - Heat Sink Performance

#### Annual Review (IP Section 02.01) (1 Sample)

The inspectors evaluated readiness and performance of:

- (1) Division 1 and 2 EECW Heat Exchangers

### 71111.07T - Heat Sink Performance

#### Triennial Review (IP Section 02.02) (4 Samples)

The inspectors evaluated heat exchanger/sink performance on the following:

- (1) RHR North Heat Exchanger Division 1 (E1101B001A)
- (2) EDG 13 Jacket Coolant Heat Exchanger (R3001B018)
- (3) EDG 13 Air Coolant Heat Exchanger (R3001B026)
- (4) Section 02.02d, Specifically Sections 02.02d3 and 02.02d5 were completed

### 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 from September 23, 2019 through October 25, 2019.



## 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 October 3, 2019.

#### 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 Requalification 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 an abnormal operating procedure entry for an unplanned non-functionality of steam jet air ejector 3 on October 23, 2019, and secondary containment pressure control following a reactor building heating ventilation and air conditioning system damper failure on December 19, 2019

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

- (1) The inspectors observed and evaluated a licensed operator training lesson on emergency action levels (EALs) during the week ending October 19, 2019

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness Inspection (IP Section 02.01) (2 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Reactor Building Heating Ventilation and Air Conditioning (RBHVAC) system dampers during the week ending November 30, 2019
- (2) Reference Leg Backfill System during the week ending December 21, 2019

Quality Control (IP Section 02.02) (1 Sample)

The inspectors evaluated maintenance and quality control activities associated with the following equipment performance activities:

- (1) Control of grease used for motor operated valve preventative maintenance during the week ending December 28, 2019

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) Emergent maintenance on EDG 14 starting air system, emergent maintenance on Division 2 EECW temperature control valve, and planned maintenance on Reactor Water Cleanup system during the week ending October 5, 2019
- (2) Emergent maintenance on the outer railroad door secondary containment barrier during the week ending October 12, 2019
- (3) Planned heavy lift of a Main Generator Stator during the week ending October 19, 2019
- (4) Planned Division 1 Battery Charger Room Cooler maintenance during the week ending November 16, 2019

- (5) Emergent maintenance on the Electric Fire Pump during the week ending November 23, 2019
- (6) Emergent maintenance on the RBHVAC system and planned maintenance on the Non-Interruptible Instrument Air System during the week ending November 30, 2019

#### 71111.15 - Operability Determinations and Functionality Assessments

##### Operability Determination or Functionality Assessment (IP Section 02.02) (8 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Operability and functionality of Division 1 Control Complex Heating Ventilation and Air Conditioning (CCHVAC) system following identification of abnormal 480 volt supply breaker thermography readings, as documented in Condition Assessment Resolution Document (CARD) 19-27694
- (2) Technical Specification 3.3.5.1, Emergency Core Cooling System (ECCS) Instrumentation, and Technical Specification 3.3.2.2, Feedwater and Main Turbine High Water Level Trip Instrumentation, implementation following wrong panel electrical contact checks during ECCS Reactor Vessel Water Level Automatic Depressurization System (ADS) Level 3 and Feedwater / Main Turbine Level 8, Division 1, Channel A Functional Test, as documented in CARD 19-28721
- (3) Operability and functionality of EDG 14 following surging at idle speed and identification of a broken starting air system pipe, as documented in CARDS 19-27462 and 19-24737
- (4) Operability and functionality of the RCIC system following failure of the RCIC Barometric Condenser Pump, as documented in CARD 19-28481
- (5) Operability and functionality of Division 2 EESW and EECW systems following failure of the Division 2 EECW temperature control valve to fully open during a simulated loss of power surveillance test, as documented in CARD 19-27229
- (6) Operability and functionality of the Division 2 EESW and EECW systems following identification of a failed fuse in Mechanical Draft Cooling Tower Fan D high speed circuitry, as documented in CARD 19-25713
- (7) Operability and functionality of the Division 1 Core Spray system following identification of an out of tolerance pipe support spring can assembly, as documented in CARD 19-27115
- (8) Operability and functionality of the fire suppression system following identification of Alternate Diesel Fire Pump battery low electrolyte level while the Electric Fire Pump and permanently installed Diesel Fire Pumps were out of service for corrective maintenance, as documented in CARD 19-28912

### 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) Lifting and rigging equipment changes to the new fuel receipt inspection stand and fuel uprighting stand to support a change in reactor fuel design (Permanent Modification)

### 71111.19 - Post-Maintenance Testing

#### Post-Maintenance Test Sample (IP Section 03.01) (8 Samples)

The inspectors evaluated the following post-maintenance tests:

- (1) Reactor Water Clean Up (RWCU) flow transmitter calibration during the week ending October 5, 2019
- (2) EDG 14 following starting air pipe repair during the week ending October 5, 2019
- (3) Secondary Containment following repair of reactor building railroad doors during the week ending October 12, 2019
- (4) Standby Feedwater following relief valve and discharge valve breaker preventative maintenance during the week ending October 12, 2019
- (5) Division 2 EECW temperature control valve following corrective maintenance during the week ending October 19, 2019
- (6) Division 2 EECW equipment sump heat exchanger check valve following planned replacement during the week ending October 26, 2019
- (7) Gland Seal Exhaust Trip Logic after Modification Installation in refueling outage 19 during the week ending November 23, 2019
- (8) Electric Fire Pump following corrective pump replacement during the week ending November 23, 2019

### 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

#### Surveillance Tests (other) (IP Section 03.01) (2 Samples)

- (1) EDG 14 slow start surveillance test on December 23, 2019
- (2) Control Room technical specification shiftily channel checks on December 30, 2019

#### FLEX Testing (IP Section 03.02) (1 Sample)

- (1) N and N+1 Flex Diesel Generator load testing on October 12, 2019 and November 7, 2019

#### 71114.02 - Alert and Notification System Testing

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

- (1) The inspectors evaluated the following maintenance and testing of the alert and notification system:
  - Annual siren inspection and maintenance records for the period from September 2017 to September 2019
  - Monthly alert notification system (siren) tests for the period from September 2017 to September 2019

#### 71114.03 - Emergency Response Organization Staffing and Augmentation System

##### Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the Emergency Preparedness Organization.

#### 71114.04 - Emergency Action Level and Emergency Plan Changes

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

- (1) The inspectors completed an evaluation of submitted Emergency Action Level and Emergency Plan changes on November 21, 2019. This evaluation does not constitute NRC approval.

#### 71114.05 - Maintenance of Emergency Preparedness

##### Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program.

#### 71114.06 - Drill Evaluation

##### Select Emergency Preparedness Drills and/or Training for Observation (IP Section 03.01) (2 Samples)

- (1) Observation of emergency action level training evolution on October 18, 2019
- (2) Emergency Preparedness Drill conducted on October 31, 2019

### **RADIATION SAFETY**

#### 71124.01 - Radiological Hazard Assessment and Exposure Controls

##### Radiological Hazard Assessment (IP Section 02.01) (1 Sample)

The inspectors evaluated radiological hazards assessments and controls.

- (1) The inspectors reviewed the following:

#### Radiological Surveys

- RWCU pump room
- Steam tunnel
- RWCU phase separator room
- RCIC room

#### Risk Significant Radiological Work Activities

- Investigation and isolation of steam leak under high pressure turbine
- RWCU pump seal repair/replacement
- Limit switch work on reactor water clean up phase separator tank
- RCIC surveillance

#### Air Sample Survey Records

- 00252-A19, Turbine deck to steam tunnel
- 00305-A19, RWCU pump room
- 00116-A19, RCIC pump room

#### Instructions to Workers (IP Section 02.02) (1 Sample)

The inspectors evaluated instructions to workers including radiation work permits used to access high radiation areas.

- (1) The inspectors reviewed the following:

#### Radiation Work Packages

- 191020, Emergent Issues Tasks
- 191050, RWCU Pump Seal Repair/Replacement
- 191051, RWCU Phase Separator Room Entry and Component Repair
- 191027, E41 and E51 System Maintenance, Inspections, Surveillance and Test Runs

#### Electronic Alarming Dosimeter Alarms

- CARD 19-21358
- CARD 19-21994
- CARD 19-24234

#### Labeling of Containers

- Tri Nuclear filter in spent fuel pool
- Low power range monitor quiver
- Tool cabinet on refuel floor

#### Contamination and Radioactive Material Control (IP Section 02.03) (1 Sample)

The inspectors evaluated licensee processes for monitoring and controlling contamination and radioactive material.

- (1) The inspectors verified the following sealed sources are accounted for and are intact:
- L07-0063
  - L92-0016

Radiological Hazards Control and Work Coverage (IP Section 02.04) (1 Sample)

The inspectors evaluated in-plant radiological conditions during facility walkdowns and observation of radiological work activities.

- (1) The inspectors also reviewed the following radiological work package for areas with airborne radioactivity:
  - No work packages were available for review during this inspection

High Radiation Area and Very High Radiation Area Controls (IP Section 02.05) (1 Sample)

- (1) The inspectors evaluated risk-significant high radiation area and very high radiation area controls.

Radiation Worker Performance and Radiation Protection Technician Proficiency (IP Section 02.06) (1 Sample)

- (1) The inspectors evaluated radiation worker performance and radiation protection technician proficiency.

**OTHER ACTIVITIES – BASELINE**

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (IP Section 02.12) (1 Sample)

- (1) 07/01/2018 - 06/30/2019

EP02: ERO Drill Participation (IP Section 02.13) (1 Sample)

- (1) 07/01/2018 - 06/30/2019

EP03: Alert & Notification System Reliability (IP Section 02.14) (1 Sample)

- (1) 07/01/2018 - 06/30/2019

71152 - Problem Identification and Resolution

Semiannual Trend Review (IP Section 02.02) (1 Sample)

- (1) Adverse trend in plant configuration control events

71153 - Follow-up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (3 Samples)

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

- (1) LER 05000341/2019-003-00, Secondary Containment Declared Inoperable due to Opening Both Airlock Doors, ADAMS accession: ML19210B833. The circumstances surrounding this LER are documented in report Section 71153.
- (2) LER 05000341/2019-004-00, Division 2 Mechanical Draft Cooling Tower Fan "D" Tripped when Placed in High Speed due to a Blown Fuse, ADAMS accession: ML19273A053. 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 also concluded that no violation of NRC requirements occurred.
- (3) LER 05000341/2019-005-00, Secondary Containment Pressure Exceeded Technical Specification due to Reactor Building HVAC Damper Malfunction, ADAMS accession: ML19329C825. The circumstances surrounding this LER are documented in report Section 71111.12.

**INSPECTION RESULTS**

Failure to have Appropriate Instructions for Determining the Average Sediment Depth in the Residual Heat Removal Complex Reservoir			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000341/2019004-01 Open/Closed	[H.13] - Consistent Process	71111.07T
A finding of very low safety significance (Green) and an associated Non-Cited Violation of Title 10 of the Code of Federal Regulation (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings", was identified by the inspectors due to the licensee's failure to have appropriate instructions for determining the average sediment depth in the Residual Heat Removal Complex Reservoir.			
<u>Description:</u>			
<p>The Residual Heat Removal Complex Reservoir performs the ultimate heat sink function at Fermi. Periodically, the licensee performs a preventive maintenance activity to remove debris and sediment from the reservoir to ensure a sufficient volume of water remained available within the ultimate heat sink.</p> <p>During this inspection, the inspectors reviewed completed Work Order 47534163. This work order (WO) was performed to remove debris and sediment from the Division 2 side of the Residual Heat Removal Complex Reservoir. Step 150.1.a.1 of the work order stated, "DETERMINE AND DOCUMENT the average depth of sediment." The inspectors noted the licensee had recorded an average sediment depth of approximately ¼ inches. The inspectors used the sediment depths recorded within the WO to calculate an average sediment depth but were unable to replicate the licensee's results. However, the inspectors results were less than the acceptance criteria contained in the WO. The inspectors discussed their calculation with the licensee, and the licensee was also unable to replicate</p>			



the average sediment depth result recorded in the WO. As a result, the inspectors determined the WO instructions were not appropriate to the circumstance because they allowed the WO performer to determine the method used when determining the average sediment depth. This led to documenting an average sediment depth which could not be replicated using actual plant data and a consistent, repeatable process.

Corrective Actions: The licensee planned to revise preventive maintenance activities PM244 and PM245 to require the average sediment depth be determined by adding all of the individual sediment depth data points contained in the associated WO and dividing by the total number of data points. The final average calculation will be checked by the Strategic Engineer or Component Engineer.

Corrective Action References: CARD 19-28324, "2019 NRC Triennial UHS Inspection: Average Silt Accumulation in UHS Reservoir was not Calculated in WO 47534163"

Performance Assessment:

Performance Deficiency: The inspectors determined the failure to have appropriate instructions for activities affecting quality was a violation of 10 CFR Part 50, Appendix B, Criterion V and was a performance deficiency. Specifically, the licensee failed to have instructions appropriate to the circumstance for determining the average sediment depth in the Residual Heat Removal Complex Reservoir.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Procedure Quality attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the failure to have appropriate instructions for determining the average sediment depth in the Residual Heat Removal Complex Reservoir adversely affected the cornerstone objective because it resulted in an incorrect and non-conservative sediment depth level being recorded as part of a preventive maintenance activity.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Specifically, the inspectors determined the finding was of very low safety significance (Green) because all of the mitigating systems screening questions were answered no.

Cross-Cutting Aspect: H.13 - Consistent Process: Individuals use a consistent, systematic approach to make decisions. Risk insights are incorporated as appropriate. The finding had a cross-cutting aspect in the Consistent Process (H.13) component of the Human Performance cross-cutting area, because individuals did not use a consistent, systematic approach to make decisions. Specifically, the licensee did not have a consistent and systematic approach to determine the average sediment depth in the Residual Heat Removal Complex Reservoir.

Enforcement:

Violation: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires in part, that activities affecting quality be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, on September 25, 2018, an activity affecting quality was not prescribed by documented instructions appropriate to the circumstances. Specifically, the licensee did not prescribe instructions appropriate to the circumstance for determining the average sediment depth in the Residual Heat Removal Complex Reservoir. This led to an incorrect and non-conservative sediment depth level being recorded within Work Order 47534163.

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	71111.11B
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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: Title 10 of the *Code of Federal Regulations* (CFR) § 50.74(c) requires, in part, that each licensee notify the appropriate Regional Administrator as listed in appendix D to part 20 of this chapter within 30 days of the following in regard to licensed operator or senior operator of a permanent disability or illness as described in § 55.25. Section 55.25 requires that if, during the term of the license, the licensee develops a permanent physical or mental condition that causes the licensee to fail to meet the requirements of § 55.21, the facility licensee shall notify the Commission, within 30 days of learning of the diagnosis, in accordance with § 50.74(c). For conditions for which a conditional license (as described 10 CFR 55.33(b)) is requested, the facility licensee shall provide medical certification on Form NRC 396 to the Commission (as described in 10 CFR 55.23).

Contrary to the above, as of April 24, 2019, the facility licensee did not notify the NRC within 30 days of learning of a permanent condition for a licensed operator which caused the licensed operator to fail to meet the requirements § 55.21. Specifically, the Medical Review Officer and site nurse became aware on approximately March 12, 2018, of a medical condition that changed the operator's ability to meet the requirements of § 55.21 and for which a license condition was required. However, the facility did not notify the NRC of this medical change until May 22, 2019, a period greater than 30 days.

Significance/Severity: Severity Level IV. This issue is similar to the violation example 6.9.d.1 in the NRC Enforcement Policy, dated May 28, 2019, for a Severity Level IV violation because it involved a facility licensee's failure to make a required report that, had it been submitted, would have resulted in a licensing decision to amend a condition to the operator's license prescribing required action to maintain medical qualification while performing functions authorized by the license.

Corrective Action References: CARD 19-23136; License Operator Medical - Missed 30-day Notification as Required by 10 CFR 50.74

Inadequate Relay Replacement Frequency Causes Momentary Loss of Secondary Containment Vacuum			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green FIN 05000341/2019004-02 Open/Closed	None (NPP)	71111.12
<p>A self-revealed Green finding was identified when the licensee failed to follow site procedure MES51, "Preventative Maintenance Program." Specifically, the licensee failed to replace a relay within the vendor recommended interval due to an inappropriate application of grace period. As a result, the relay failed and prevented a Reactor Building Heating and Ventilation System (RBHVAC) damper from closing during normal operation of the system, which caused pressure to increase in secondary containment beyond Technical Specification (TS) operability limits.</p>			
<p><u>Description:</u></p> <p>On September 29, 2019, operators performed a routine swap of running RBHVAC trains. RBHVAC is a system that provides normal ventilation to the reactor and auxiliary buildings, and is designed to maintain secondary containment at a lower pressure than the surrounding environs. With secondary containment at a lower pressure, any unplanned radioactive releases to secondary containment would be contained within the reactor building, limiting release of radioactivity outside the building. A safety-related standby gas treatment (SBGT) system is also available and is credited for use during emergencies. During the shutdown of the west RBHVAC train, the west exhaust fan discharge shutoff damper failed to close. With the damper still open and the east train in operation, some exhaust flow returned back into the reactor building, which caused secondary containment pressure to increase. The pressure increase continued until operators responded to the resultant reactor building pressure alarms in the plant's main control room by restoring the west RBHVAC train to service. The maximum positive pressure observed was 0.1" water column. The TS 3.6.4.1 pressure limit for secondary containment operability is negative 0.125" water column, and was restored approximately eight minutes later. Therefore, no TS Allowable Outage Time Requirements were exceeded.</p> <p>The damper is controlled by a time delay relay, which delays opening the damper for approximately 20 seconds when starting the fan. This allows the fan to reach full speed before providing air flow for that train, so as to maintain secondary containment at the required pressure. The shutoff damper failed to close because electrical contacts on the Agastat time delay relay associated with the west RBHVAC train exhaust fan stuck closed when the fan was secured, which allowed a solenoid associated with the damper positioner to remain energized, which kept the damper open. Once operators restored the west RBHVAC train to service in accordance with the alarm response procedures, the relay reset, causing the damper to shut and then open again after the time delay expired.</p> <p>Investigation by the licensee revealed that the vendor recommended replacement interval for the relay was 10 years. While the licensee had established a replacement frequency of 10 years for the relay, the relay in question had been installed for over 11 years. Per the licensee's preventative maintenance and work management procedures, there is a 25 percent grace period that is typically allowed for most components. So, for a 10-year interval, the replacement would have to be made within 12.5 years, utilizing grace. However, MES51, "Preventative Maintenance Program," section 5.1.6.8, specifically states that grace</p>			

does not apply to Agastat relays unless there is an evaluation that approves of the use of grace. In this case there was no evaluation supporting an extended replacement interval, therefore, the relay was past due for replacement. Following their investigation, the licensee changed the replacement interval in the preventative maintenance program for this and other affected relays in the RBHVAC system, such that the relays would be replaced before 10 years following installation.

As a result of the secondary containment pressure increase beyond the TS 3.6.4.1 allowed limit, the licensee declared secondary containment inoperable. The licensee also submitted an eight-hour event notification (EN 54299) and LER (05000341/2019-005) for a loss of safety function based on this inoperability. The LER was evaluated under Section 71153 of this report.

Corrective Actions: To restore operability of secondary containment, the licensee restored the west train of RBHVAC to operation. As a result of their investigation, the licensee changed the replacement interval of the affected relays from 10 years to 8 years.

Corrective Action References: CARD 19-27379

Performance Assessment:

Performance Deficiency: Licensee procedure MES51, "Preventative Maintenance Program," section 5.1.6.8 precludes use of a grace period for PM Records that have a desired completion period established via an engineering evaluation (i.e., Agastat relays). Contrary to this requirement, the licensee utilized a grace period for an Agastat relay. As a result, the relay was not replaced within the vendor recommended interval, and no evaluation had been performed to use the grace period.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the SSC and Barrier Performance attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, failure of the relay caused secondary containment to be inoperable.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." Specifically, the inspectors answered 'yes' to exhibit 3, question D.1., since the finding only affected secondary containment.

Cross-Cutting Aspect: Not Present Performance. No cross cutting aspect was assigned to this finding because the inspectors determined the finding did not reflect present licensee performance.

Enforcement:

Inspectors did not identify a violation of regulatory requirements associated with this finding, because the Preventative Maintenance Program procedure was not subject to the requirements of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," or TS 5.4, "Procedures."

Observation: Adverse Trend in Configuration Control Events	71152
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Controlling plant configuration of structures, systems, and components (SSCs) is an important aspect to maintaining plant design functions and defense-in-depth (e.g., multiple trains or divisions of SSCs or multiple SSCs to perform the same design function). A mispositioned structure, system, or component has the potential to adversely impact plant systems and equipment resulting in problems that could cause initiating events or impact the availability and functional capability of mitigating systems or barriers. During the course of calendar year 2019, the licensee identified an adverse trend of configuration control issues, often referred to as plant status control or component mispositionings. The licensee entered the trend on multiple occasions into the corrective action program along with the various individual configuration control issues (approximately ten). Some notable configuration control event examples included, but were not limited to:

- On January 16, 2019, Average Power Range Monitor (APRM) 3 was not bypassed as required by procedure prior to planned data collection on three local power range monitors that were replaced during the previous refueling outage. Although the specified procedure step directing APRM 3 to be placed in bypass mode was marked as complete, the instrumentation and control technician performing the procedure misinterpreted the step and did not ensure the APRM switch was placed in bypass. The condition was recognized by a control room licensed senior reactor operator during the maintenance evolution. There were no impacts to the plant as the three local power range monitors had each been individually bypassed per procedure and APRM 3 had already been declared inoperable the same day at the start of the planned maintenance evolution. [CARD 19-20353]
- On March 13, 2019, a non-licensed equipment operator did not perform a procedure step to open a closed discharge valve on nonsafety-related condensate filter demineralizer (CFD) C during system restoration following planned maintenance. As a result, when the system was attempted to be returned to service no condensate flow was observed through CFD C. The equipment operator had manipulated the same component earlier in the procedure and thought it was already open without re-verifying the valve position. There were no adverse effects on the condensate system as multiple other CFDs were in service at the time. [CARD 19-21941]
- On March 22, 2019, a high-pressure coolant injection (HPCI) pump discharge isolation valve was found closed while attempting to return the system to service following planned maintenance. A licensed operator did not verify the HPCI pump discharge valve was open as required by procedure, in part due to six other valves listed in the same procedure verification step. The condition was identified during a fill and vent of the system to ensure it was appropriately water solid. Specifically, no water flow was noted when an attempt was made to vent the discharge piping. There were no adverse system effects on the HPCI system as it was already out of service for planned maintenance. [CARD 19-22208]
- On August 2, 2019, a piece of test equipment was not removed from a Division 2 reactor protection system (RPS) trip unit prior to returning the system to service following planned maintenance on a RPS reactor steam dome pressure instrument channel. The procedure step to remove the test equipment (calibration unit readout assembly) was not performed and inadvertently marked as completed. On August 5, 2019, instrumentation and control technicians identified the installed test equipment in the field while preparing for an unrelated surveillance test. The test equipment was determined to have no adverse impact on system operation while connected and was subsequently removed. [CARD 19-25901]

- On October 10, 2019, a non-licensed equipment operator installed a gagging device (restraint) on an incorrect relief valve while performing planned relief valve testing on the nonsafety-related Auxiliary Boiler system. The physical procedure indicating which relief valve should have been secured and which relief valve should have been tested was not in hand during the gagging evolution. The condition was recognized when the tested relief valve lift set point was lower than expected. There were no adverse impacts on the Auxiliary Boiler system. [CARD 19-27742]

The majority of configuration control issues were associated with not performing a procedure or work order step as written due to a less-than-thorough pre-job briefing prior to starting the activity, poor place-keeping of in-progress and/or completed procedural steps, or inadequate verification practices. In multiple instances, another individual was present as a peer checker during the evolution to validate the correct actions were taken and also did not identify the error.

The licensee performed several configuration control causal evaluations over the course of calendar year 2019 in an effort to address the adverse trend. In general, those causal evaluations determined that 1) high standards were not well established, internalized, and followed; 2) station leadership did not align the workforce to station priorities and goals; and 3) inadequate oversight to enforce standards. In addition, there was a perceived lack of urgency in quickly addressing the adverse trend due to the perception that the various events were low-level and/or non-consequential.

In general, individual coaching, human performance briefings, and training were not effective in mitigating the adverse trend based on a continuation of configuration control events throughout calendar year 2019 in multiple departments. Corrective actions taken or planned to address the adverse trend include, but are not limited to: 1) routine communications to all departments of configuration control standards and current status of configuration control performance; 2) increased oversight through focused configuration control observations; and 3) as part of pre-job briefings prior to performing work in the plant a series of configuration control questions must be answered by individual workers focused on appropriate recognition and mitigation of mispositioning vulnerabilities.

The inspectors did not identify any violations of regulatory requirements or performance deficiencies of more than minor significance based on the circumstances stated above.

Minor Violation	71153
<p>Minor Violation: Licensee event report 2019-003 described that during security drills on May 29, 2019, both doors in the secondary containment airlock on the reactor building first floor were opened at the same time for approximately two seconds due to a failure to adequately control the drill. Technical Specification (TS) surveillance requirement 3.6.4.1.3 required at least one door in each secondary containment access opening to be closed during the Mode 1 (power operation) conditions at the time. With both doors open, secondary containment was rendered inoperable. Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with those instructions, procedures, or drawings. Fermi Procedure 23.428, "Secondary Containment Airlocks and Penetrations," was a procedure affecting quality and required the first door opened of a secondary containment access to be closed and latched prior to opening the second door.</p>	

Screening: The inspectors determined the performance deficiency was minor. The issue was minor because it did not adversely affect the barrier integrity cornerstone. At least one door was able to be closed within two seconds upon discovery of both doors being open, secondary containment pressure was not affected, and there were no other known deficiencies with the secondary containment access doors.

Enforcement: This failure to comply with Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," constitutes a minor violation that is not subject to enforcement action in accordance with the NRC's Enforcement Policy. The licensee closed at least one door in the secondary containment access and entered the issue in their CAP as CARD 19-24107.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors confirmed that proprietary information was controlled to protect from public disclosure.

- On January 7, 2020, the inspectors presented the integrated inspection results to Mr. P. Dietrich, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff.
- On October 3, 2019, the inspectors presented the Emergency Preparedness Baseline Inspection inspection results to Mr. A. Mann, Radiological Emergency Preparedness Manager, and other members of the licensee staff.
- On October 4, 2019, the inspectors presented the licensed operator requalification program inspection results inspection results to Mr. P. Fessler, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff.
- On November 1, 2019, the inspectors presented the heat sink inspection results to Mr. M. Caragher, Plant Manager and Executive Director, and other members of the licensee staff.
- On November 8, 2019, the inspectors presented the radiation protection program inspection results to Mr. R. LaBurn, Radiation Protection Manager, and other members of the licensee staff.
- On November 21, 2019, the inspectors presented the Emergency Action Level and Emergency Plan Changes Inspection inspection results to Mr. A. Mann, Emergency Preparedness Manager, and other members of the licensee staff.

## **THIRD PARTY REVIEWS**

Inspectors reviewed Institute of Nuclear Power Operations reports that were issued during the inspection period.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents	17-24586	NQA - Seasonal Readiness Program Issues	05/18/2017
		19-27989	Notice of First Level Issue Escalation - Repeat Deficiencies with Non-Compliance to Seasonal Preparedness Procedures, Ineffective Cross Functional Team Coordination and Inadequate Oversight of Seasonal Readiness Activities	10/21/2019
		19-28315	Follow-Up Monitoring Plan for Escalation - Repeat Deficiencies with Non-Compliance to Seasonal Preparedness Procedures (NAQA-19-0047) Initiated This AIM to Track Progress	10/31/2019
	Procedures	23.104	Condensate Storage and Transfer System Standby Valve Lineup, Attachment 1, Page 9 of 46	
		23.208	RHR Complex Service Water Systems	127
		MWC16-100	Seasonal Readiness	0A
71111.04Q	Drawings	6M721-5357	Emergency Equipment Cooling Water System Division II	BU
		6M721-5709	Reactor Core Isolation Cooling System Sketch	AO
		6M721N-2053	RHR Service Water System Division 2 RHR Complex	AH
	Procedures	23.208	RHR Complex Service Water Systems	127
		ODE-20	Protected Equipment	25
71111.05Q	Calculations	DC-4921 Vol 1	Appendix R Calculations	E
	Corrective Action Documents	19-27427	NRC Identified Transient Combustible Without Permit	10/01/2019
	Drawings	6A721-2405	Fire Protection Evaluation Reactor and Auxiliary Buildings Second Floor Plan El. 613'-6"	Y
	Fire Plans	FP-RB-1-7B	Reactor Building South Control Rod Drive (CRD) and Railroad Bay Area, Zone 7	5
		FP-RB-2-10A	Reactor Building Emergency Equipment Cooling Water North, Zone 10, El. 613' 6"	4
		FP-RHR-1-14-EDG	RHR Complex EDG 14 Room El 590' 60"	6
71111.06	Miscellaneous	EF2-PRA012	Fermi 2 Internal Flood Analysis Notebook	3
71111.07A	Calculations	DC-6286 Volume 1	EECW HX Performance Requirements with Plugging	A
	Corrective Action	19-24051	Recommend Scheduling Swap of the Division 1 EECW	05/28/2019



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents		Heat Exchangers	
		19-27521	Unexpected Increase in Div 1 EECW Heat Exchanger Differential Pressure After Recent Swap	10/03/2019
	Work Orders	49005284	Perform 24.208.03 Division 2 EESW and EECW Makeup Pump and Valve Operability Test (Section 5.1)	03/27/2019
		49538124	Perform 24.208.02 Division 1 EESW and EECW Makeup Pump and Valve Operability Test (Section 5.1)	06/06/2019
		49725438	Perform 24.208.03 Division 2 EESW and EECW Makeup Pump and Valve Operability Test (Section 5.1)	06/25/2019
	50361462	Perform 24.208.02 Division 1 EESW and EECW Makeup Pump and Valve Operability Test (Section 5.1)	09/05/2019	
71111.07T	Calculations	DC-0182 Volume I	RHRSW Mechanical Draft Cooling Towers - Post LOCA Analysis of UHS	G
		DC-0182 Volume VI	RHRSW Mechanical Draft Cooling Towers - Heat Load After A Design Basis Tornado	C
		DC-5474	Waterhammer Analysis for the RHR Service Water System	0
		DC-5804	DGSW Design Basis Requirements	E
		DC-6121	Design Basis for RHR Heat Exchanger Thermal Performance Test Criteria	B
	Calibration Records	Calibration Specification Sheet R30A23C-S	Emergency Diesel Generator (EDG) 12 Air Temperature Thermometer	0
		Calibration Specification Sheet R30N569B-S	Emergency Diesel Generator (EDG) No. 13 Service Water Pump 'B' Water Flow Low	0
	Corrective Action Documents	14-22832	Acceptance Criteria not met for 47.205.01 during RFO-16	03/26/2014
		15-28706	Ultrasonic Flow Meter Calibration Required for 47.205.01	11/06/2015
		15-28710	Low Decay Heat Load for 47.205.01 in RFO-17	11/06/2015
		15-28719	Actual Test Uncertainty Exceeds the Acceptable Test Uncertainty of 47.205.01 from RFO-17 for Case 2 Evaluation	11/06/2015
		16-21036	Increase in EDG 13 Heat Exchanger Tubes Blocked	02/04/2016
		16-24183	2016 NRC UHS Inspection - Inconsistent Work	05/19/2016

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Documentation of RHR Reservoir Inspections	
		16-26238	2016 Generic Letter (GL) 89-13 Program Health Report Tracking	08/08/2016
		16-27634	NRC Violation - Inadequate Test Procedure Used for Measuring and Determining Average Silt Levels in the Service Water Reservoir	09/26/2016
		17-00221	EDG 13 DGSW Flow Transmitter Reading High	01/21/2017
		17-21233	Operations Shift 4 Crew Learning Opportunity - Identified EDG 13 DGSW Flow High but Didn't Write a CARD	02/12/2017
		18-20572	Excessive Build-up of Grime, and Sludge on Outside of the Tube Bundle	01/22/2018
	Corrective Action Documents Resulting from Inspection	19-28289	2019 NRC Triennial UHS Inspection: Evaluate Effect of Failed Post-Calibration Check of Ultrasonic Flow Meter on 47.205.01 Performed 11/11/2015	10/30/2019
		19-28291	2019 NRC Triennial UHS Inspection: Typographical Error in DC-0182 Vol I	10/30/2019
		19-28324	2019 NRC Triennial UHS Inspection: Average Silt Accumulation in UHS Reservoir was not Calculated in WO 47534163	10/31/2019
		19-28350	2019 NRC Triennial UHS Inspection: RHR Heat Exchanger Data Sheet Enhancements	11/01/2019
		19-28351	2019 NRC Triennial UHS Inspection: Heat Exchanger Shell Side Cleanliness Impacts	11/01/2019
		19-28353	EDG Air Coolant Temperature - DC-5804 Vol I Discrepancy	11/01/2019
		19-28482	2019 NRC Triennial UHS Inspection: Proto-HX Mass Flow Calculation	11/06/2019
	Drawings	6M721-2084	Diagram Residual Heat Removal (R.H.R) Division I	BP
		6M721N-2053	RHR Service Water System Division 2 RHR Complex	AH
	Miscellaneous		IST Components	
			Heat Exchanger Specification Sheet	01/17/1995
		Results of the 2014 MMR14 Structures Monitoring Walkdown	10/08/2014	
NDE Reports	27138	Eddy Current Preliminary Report	10/04/2018	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	23.208	RHR Complex Service Water Systems	126
		23.307	Emergency Diesel Generator System	128
		24.307.36	DGSW, DFOT and Starting Air Operability Test EDG 13	56
		MES54	Heat Exchanger Component Monitoring Program	7A
	Work Orders	18-20990	Replace EDG 13 SW Pump	02/05/2018
		25976827	Eddy Current Testing of Heat Exchanger	10/19/2018
		32416088	Calibrate EDG 13 DGSW Pump 'B' Low Flow Switch	08/03/2015
		34438905	Perform 47.205.01 RHR Division 1 HX Performance Test	04/25/2014
		38203843	Perform 47.205.01 RHR Division 1 HX Performance Test	11/11/2015
		42286065	Perform 24.205.05 Division 1 RHRSW Pump & Valve Operability	04/23/2016
		42610300	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	07/26/2016
		43114139	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	10/26/2016
		44307098	Perform 24.205.05 Division 1 RHRSW Pump & Valve Operability	05/09/2017
		44348532	Calibrate EDG 13 Service Water Flow Loop	07/26/2017
		44813323	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	07/26/2017
		45376325	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	11/06/2017
		46513309	Perform 24.205.05 Division 1 RHRSW Pump & Valve Operability	05/09/2018
		47053547	Perform 24.205.05 Division 1 RHRSW Pump & Valve Operability	07/17/2018
		47534163	License Renewal REQ'D Perform Div 2 RHR Reservoir Zebra Mussel and Ball Valve Inspection Dive	01/15/2019
		47788625	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	10/31/2018
		48505873	Perform 24.307.36 DGSW, DFOT & Starting Air Operability Test EDG 13	01/27/2019
48913263	Inspect and Replace EDG 13 Exchanger Tube Bundles	01/22/2018		
49242378	Perform 24.307.36 DGSW, DFOT, & Starting Air	04/24/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Operability Test EDG 13	
		49272520	Perform 24.307.37 DGSW, DFOT & Starting Air Operability Test-EDG 14	05/01/2019
		50014288	Perform 24.307.37 DGSW, DFOT & Starting Air Operability Test-EDG 14	07/30/2019
		50480923	Perform 24.307.32 EDG No. 13 24 Hour Run Followed by Hot Fast Restart	10/23/2019
71111.11B	Corrective Action Documents	CARD 17-29439	Significant Arcing in A RRMG Set Exciter Brushes	11/27/2017
		CARD 18-26702	NRC Concern - Potential Lack of Timeliness for Reportability Assessment with Seismic Recorder Inoperable	09/05/2018
		CARD 18-30363	Mispositioned Control Rod while in Mode 4	12/24/2018
		CARD 19-22208	Mispositioned Component: Ops Shift 5 CLO - Valve Found Out of Position During System Fill and Vent	03/22/2019
		CARD 19-23136	License Operator Medical-Missed 30-day Notification as Required by 10 CFR 50.74	04/24/2019
		CARD 19-25407	Operator Licenses Not Terminated	07/17/2019
		CARD 19-25407	NRC not Notified within 30 Days of Operator License Termination	08/21/2019
		CARD 19-25588	Instructor Presented Modified Training Material in NOR [Nuclear Operator Requalification]	07/24/2019
		CARD 19-26372	NRC Exam Security Compromise for 2019 License Operator Biennial Exam during Validation	08/23/2019
		CARD 19-27233	Missed Emergency Classification During a Simulator Exam	09/25/2019
		Root Cause Evaluation (RCE) for CARD 17-29439	RCE for CARD Regarding A RRMG Set Arcing	0
	Engineering Evaluations	NTWI [Nuclear Training Work Instruction] 1.22	Cycle 20 Simulator Core Model Performance Testing	11/20/2018
		SM 5	2018 Simulator Operating Limit and Real Time Test	12/15/2018
SM 6		2018 Simulator Steady State Operations Performance Test	12/17/2018	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		SM 7	2018 Simulator Operations Procedures Performance Test	12/17/2018
		SM 8	2018 Simulator Malfunction Performance Test	12/17/2018
		SM 9	2018 Simulator Initial Conditions Performance Test	12/14/2018
	Miscellaneous	CR 6330	Malfunction MFE062 - Loss of 4160 V ESF Bus 65F was Stopped	01/04/2019
		CR 6331	24.404.03 rev. 47 - During Performance of SGTS Oper. test, valves T4600-F410 and T4600-F407 were Outside the New Stroke Time Requirements	11/26/2018
		CR 6334	24.138.02 Stroke Time for B3100-F014A not Withing IST Limits	11/28/2018
		CR 6336	24.202.01 HPCI Pump and Valve operability Test at 1025 psi. Valve stroke times outside of acceptable limits for E4100-F029/F054/F053. Stroke time requirements changes since previous surveillance.	12/07/2018
		CR 6458	N6100 Condenser and Auxiliaries - Comparator for MTG Trip Set at 1425 rpm; included 75 rpm Internal Hysteresis that was not Appropriate	080/02/2019
		JP-OP-315-0105-181	Manually Initiate Low-Low Set - Alt Path	0
		JP-OP-315-0158-402	Loss 64C and EDG 12 Fails to Start	6
		JP-OP-802-4101-192	Obtain and Interpret Electrical Drawings	0
		JP-OP-802-4101-531	Thermal Limit Verification (MAPRAT) - SRO	1
		NANT-18-0239	Effectiveness Report on Operator Proficiency Training	12/21/2018
		Training Program Description - Licensed Operator Requalification Attachments 3A-D	Licensed Operator Requalification Evaluation Forms for Simulator Exams Conducted on 10/1/2019	10/01/2019
	Procedures	MGA13	Fermi Medical Requirements	18
		MGA25	Inprocessing, Outprocessing, and Change of Vendor	13
		MNT18	Conduct of Operations Training Manual	1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		NTWI 1.16	Examination Safeguards and Controls	45
		NTWI 1.20	Simulator Fidelity	4
		NTWI 1.23	Licensed Operator Requalification Exams	14
		NTWI 1.25	Licensed Operator Medical Work Processes	5
		Nuclear Licensing Work Instruction 0053	Requirements for NRC Operator License Letters to the NRC	3
		ODE [Operations Department Expectation]-5	Operations Roles and Responsibilities	26
	ODE-8	Administrative Guidelines and Desk Instructions	17	
	Self-Assessments	NANT-19-0114	Formal Self-Assessment Report (Licensed Operator Requalification Program)	08/28/2019
71111.11Q	Corrective Action Documents	19-28403	Loss of SJAE #3 Followed by Degrading Condenser Vacuum	10/23/2019
	Miscellaneous	LP-OP-202-1891	Emergency Action Levels for Operations	1
	Procedures	20.125.01	Loss of Condenser Vacuum	26
		23.125	Condenser Vacuum System	65
		ARP 6D1	SJAE System Trouble	16
EP-101		Classification of Emergencies	42C	
71111.12	Corrective Action Documents	18-26173	Decreasing Trend in Both Div 1 and Div 2 Reference Leg Backfill Flow	08/15/2018
		18-26786	Operator Red Reading for Div 1 Reference Leg Backfill	09/09/2018
		18-30374	Request Engineering to Evaluate the Upper Limit of the Reference Leg Backfill System and Remove Limit if Appropriate	12/26/2018
		19-20916	B21P408A Nuclear Boiler Div 1 RPV Water Level Reference Leg Backfill Trending Low	02/07/2019
		19-25752	Adjustment of Div 2 Reference Leg Backfill Based on Current Flow Trend	07/31/2019
		19-26302	Div 2 Reference Leg Backfill Current Flow Trend	08/21/2019
		19-27379	T4100-F014 Exhaust Damper Failed to Close when Exhaust Fan was Shutdown	09/29/2019
		19-27726	Damper Linkage Bushings Show Indications of Wear	10/10/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
		19-27741	Inconsistent Work Order Instruction Results in Incorrect Torque Values Being Applied	10/10/2019	
		19-29033	T4100F025 RB Center Supply Fan Shutoff Damper Failure / Delayed Closure	11/25/2019	
		19-29081	RBHVAC not Maintaining RB Pressure	11/25/2019	
		19-29395	Div 1 Reference Leg Backfill is High Out of Specification for Operator Rounds	12/08/2019	
		19-29705	RBHVAC Exhaust Fan Modulating Damper Failure	12/18/2019	
		19-29708	RBHVAC Center Supply Fan Shutoff Damper Failed to Close	12/18/2019	
	Drawings	5I721-2615-04	Auto Temp Control System Control Panel H21P527, P527A, P528, and P529 Control Diagram Ventilation	0	
		6M721-2707	Flow Diagram Reactor and Auxiliary Building Ventilation System	P	
		6M721-2707-1	Flow Diagram Reactor and Auxiliary Building Ventilation System	D	
		6M721-2709	Diagram Standby Gas Treatment and Primary Containment Purge System Reactor Building	AI	
	Miscellaneous	Design Basis T41-00	Reactor Auxiliary Building Ventilation System	04/23/2019	
		MES51	Chaper 51 - Preventive Maintenance Program	19	
		MMM08	Material Shipping, Handling, and Storage	21	
		MMR Appendix E	Maintenance Rule SSC Specific Functions	25	
		O & WMI-014	Outage and Work Management Instruction	9	
	Procedures	46.000.046	Operation of the Reactor Reference Leg Backfill System	41	
	Work Orders	46727448	Replace Filter Cartridges in Div 1 RPV Water Level Instrumentation Backfill	09/30/2018	
		WO 51297761	Perform Mini Periodic MOV Inspection (E2150-F036B)	12/17/2019	
	71111.13	Corrective Action Documents	19-28364	Generator Stator Lift NRC Question	11/01/2019
			19-28371	NRC Question Concerning Presence of 32.RIG.18 Communication Plan	11/01/2019
19-28797			During Electric Fire Pump Run Pump Displayed Excessive Vibrations	11/15/2019	
19-28805			Request Evaluation to Determine if a Proper Risk	11/16/2019	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Assessment was Performed During the Work Planning Process for WO 50976710	
	Miscellaneous	50.59 Screen 19-0037	MTG Replacement	A
		Black and Veatch Calculation 193823 51 1001	Turbine Building Structural Evaluation [Confidential]	1
		Black and Veatch Evaluation 193823 51 1000	Fermi 2 Evaluation of Heavy Loads Impacts during Main Generator Replacement [Proprietary]	0
		Design Information Transmittal U21-190813-001	Barnhart Structural and Rigging Design Parameters	0
		Enterprise Risk Plan 80000	Risk Associated with Replacement of the Main Turbine Generator	2
		Fermi 2	Shift Manager Daily Alignment Meeting	11/26/2019
		Infrequently Performed Test or Evolution Briefing Sheet	Main Generator Stator Lift	
		LCO 2019-0415	Replace Divison 2 NIAS Control Air Dryer Relay	11/22/2019
		LCO 2019-0429	Division 2 Switchgear Room Cooler Power Supply Inspection	11/25/2019
		LCO 2019-0483	P5002 Inspect and Adjust D2 CAC Room Cooler Belts	11/25/2019
		MES56	Engineering Risk Assessment, Job Briefing, and Product Quality Review	7
		MMA26	Troubleshooting	7A
		MMR Appendix H	On-Line Core Damage Risk Management Guidelines	15
		MMR12	Equipment Out of Service Risk Management	20A
		MWC18	Emergent Issues Response	3A
		ODE-16	Risk Assessment and Operation of Phoenix	3
		ODE-20	Protected Equipment	25
		Stator Offload Lift Plan/Communication	Per Procedure 32.RIG.18, Guidelines and Practices for the use of Hoisting and Rigging Equipment	3



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Plan		
		TE-ANL-19-043	PSA Risk Associated with the Lift of Generator Stator per WO 54150509	0
		TE-N30-19-028	Generator Stator Haul Path Evaluation	B
	Procedures	20.000.03	Turbine Building Flooding	12
		32.716.01	Turbine Building Crane Operation	6
		32.RIG.18	Guidelines and Practices for the Use of Hoisting and Rigging Equipment	15A
	Work Orders	53495247	Lift Plan per Procedure 32.RIG.18 [Proprietary]	
71111.15	Corrective Action Documents	19-24737	EDG 14 Surging in Idle During Surveillance Run	06/24/2019
		19-25713	E1156-C001D, Div 2 RHRSW MDCT Fan D, Tripped when Placed in High Speed	07/30/2019
		19-25722	Blown Fuse on 'D' RHR MDCT Fan High Speed Breaker	07/30/2019
		19-27115	NRC Identified - Support E21-3144-G04 Spring Can Setting Out of Tolerance	09/20/2019
		19-27144	Adverse Trend with EDG 14 Fast Start Time	09/23/2019
		19-27229	P44-F400B Did Not Fail in the Full Open Direction During 24.208.03 Step 5.1.28	09/25/2019
		19-27462	Severed Tubing on EDG 14	10/02/2019
		19-27694	Hot Spot on 'A' Phase of 72C-2A Pos. 2AR	10/09/2019
		19-27741	Inconsistent Work Order Instruction Results in Incorrect Torque Values Being Applied	10/10/2019
		19-27743	Failed PMT: As Left Thermography Following Hot Spot Repair	10/10/2019
		19-27748	Revise Tech Spec Bases for LCO 3.7.4	10/11/2019
		19-28481	Acrid Odor RCIC Barometric Condenser Vacuum Pump Motor	11/05/2019
		19-28721	Human Performance Error While Performing Surveillance 44.030.263 ECCS ADS L3 and L8 Div 1 Ch A Functional	11/13/2019
		19-28910	SPF Inaccuracies	11/20/2019
		19-28912	Temp Diesel Fire Pump Low Battery Water	11/20/2019
19-29282	NRC Identified - Operations did not Declare Alternate Diesel Fire Pump Inoperable when Battery Low Level Identified	12/04/2019		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		19-29325	Temp Diesel Fire Pump	12/05/2019
	Drawings	6M721-5709-1	Reactor Core Isolation Cooling (RCIC) System Sketch	AO
		6M721-5734	Emergency Diesel Generator System	BI
		6M721N-2047	Diesel Generator System Division II RHR Complex	AL
	Engineering Changes	Temporary Modification 19-0018	Winterization of Temporary Alternate Diesel Fire Pump	A
	Engineering Evaluations	TMSA-06-0067	Evaluation of the No. of MDCT Fans Required for Decay Heat Removal Success (CARD 06-26273)	12/18/2006
	Miscellaneous	Design Basis R30-00	Emergency Diesel Generator	I
		E51-00	Reactor Core Isolation Cooling System Design Basis Document [proprietary]	
		Risk Management Plan (Rev 0)	Electric Fire Pump/Diesel Fire Pump Diving	11/18/2019
	Procedures	34.307.001	Emergency Diesel Generators - Inspection and Preventive Maintenance	81
		44.030.263	ECCS - Reactor Vessel Water Level (ADS Level 3 and Feedwater / Main Turbine Level 8), Division 1, Channel A Functional Test	37
71111.18	Corrective Action Documents	18-26318	New Fuel Transfer Crane Cable and Sheave Damaged	08/21/2018
		18-27722	New Fuel Transfer Crane Cable and Sheave Damaged	10/10/2019
		19-27473	Impact of Padding Installed New Fuel Inspection Stand may not have been Evaluated	10/02/2019
		19-27990	Evaluate New Fuel Inspection Stand Testing and Inspection Requirements	10/21/2019
		19-28020	Safety Concern with Channel Handling Winch Inspection	10/22/2019
	Miscellaneous	Design Change Package 80128	Fuel Uprighting Stand Modification	0
Work Orders	55442826	Modify Fuel Uprighting Machine 19-27432	11/04/2019	
71111.19	Corrective Action Documents	19-27229	P44-F400B Did Not Fail in the Full Open Direction During 24.208.03 Step 5.1.28	09/25/2019
		19-27403	AFCC4 for RWCU B Flow Control Loop	09/30/2019
		19-27498	Wrong Fuse Found in Bag for Restoration of EDG 14	10/03/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		19-27567	Inner Railroad Airlock Door Rail Plugs are Degraded	10/05/2019
		19-27588	Suspected Hydraulic Lock on East Outer Railroad Airlock Door	10/07/2019
	Drawings	6I721-2125-06	Control System (DCS-FW) External Connections	H
		6M721-2023	Feedwater System	BO
		6M721-5711-2	Reactor Water Clean-Up Filter Demineralizers	U
		6M721-5715-3	Standby Feedwater System Functional Operating Sketch	N
		6M721-5729-2	Emergency Equipment Cooling Water (Division II)	BB
		6M721-5733-1	Fire Protectin Functional Operating Sketch	BY
		I-2331-07	Schematic Diagram Gland Sealing Steam Exhauster (E & W)	G
	Engineering Changes	EDP 37673	Elimination of Main Steamline Isolation Valve Closure and Scram Functions of Main Steamline Radiation Monitor	0
	Miscellaneous	MMA11	Valve Testing, Enclosure B	25
		VMC2-105	CCI Drag Valve Vendor Manual	B
	Procedures	24.107.03	SBFW Pump and Valve Operability and Lineup Verification Test	46
		24.207.09	Division 2 EECW Pump and Valve Operability Test	44
		34.307.001	Emergency Diesel Generators - Inspection and Preventive Maintenance	81
		35.139.006	CCI Drag Valve and Actuator Maintenance	3
		43.000.010	IST Check Valve Inspection Procedure	40
		ARP 2D13	Fuel Pool Cooling Trouble	23
		Work Orders	48449374	Perform Non-ASME As-Found and As-Left Relief
	49062676		Inspect/Test 260 VDC MCC 2PC-1 Pos 5A	10/10/2019
	49705777		Disassemble/Inspect Check Valve Internals for Degradation	10/21/2019
	51059456		Perform 28.504.09 Electric Fire Pump Monthly Operability Test	11/22/2019
	51441579		Calibrate RWCU Filter Demin 'B' Effluent Flow Loop	09/30/2019
	52071933		EDP 37673 Elimination of Main Steamline Isolation Valve Closure and Scram Function of Main Steamline Radiation Monitor Post Maintenance Test for 4D32	10/25/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		52208989	44.080.605 East and West Gland Seal Exhauster / Mechanical Vacuum Pump Logic System Functional Test	10/23/2018
		55304662	EECW Div 2 HX B001B/B001D SW Outlet Temp Control AOV	10/05/2019
		55304788	Adverse Trend with EDG 14 Fast Start Time	09/30/2019
		55372321	Perform 24.307.17 Sec-5.2 EDG 14 Start and Load Test - Fast Start	10/02/2019
		55419277	Blow Down Pneumatic Locking Bar Lines on Exterior RR Air Lock Doors	10/07/2019
		55799429	Troubleshoot/Repair Electric Fire Pump	11/16/2019
71111.22	Procedures	24.000.02	Shiftly, Daily, and Weekly Required Surveillances	157
		24.307.17	Emergency Diesel Generator 14 - Start and Load Test	59
	Work Orders	50698481	Perform 550 kW N Diesel S001A Functional Test 887200	10/12/2019
		50943437	Perform 550kW N+1 Diesel S001B Functional Test 887201	11/07/2019
		51363396	Perform 24.307.17 Sec-5.1 EDG 14 Start and Load Test - Slow Start	12/23/2019
71114.02	Corrective Action Documents	18-23507	18-23507 Explore Alternate Siren Testing for NRC PI data	05/02/2018
	Miscellaneous		FEMA Approval Letter for Fermi 2 ANS Design Report, Revision 1	11/30/2015
			Alert Notification System Siren Test Results	09/01/2017 - 09/01/2019
			ANS Sirens Corrective Maintenance Records	09/01/2017 - 09/01/2019
			ANS Siren Annual Preventative Maintenance Records	09/01/2017 - 09/01/2019
			2019 Monthly Siren Test Schedule	
			DTE Energy Emergency Preparedness for Monroe and Wayne Counties 2019 (Handbook)	
			Fermi 2 Alert and Notification System (ANS) Design Report	6
	255232R	Federal Signal Corporation 2001SRNB Electro-	09/28/2004	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Mechanical Siren	
		SS2000D - 255318G1	SS2000D Controller/Encoder Installation and Operation Instructions	10/07/2003
	Procedures		Fermi 2 Radiological Emergency Response Preparedness Plan	48
		EP-560	Alert and Notification System Operation and Maintenance	6
71114.03	Corrective Action Documents	18-21396	RERP Callout Automated System has Limited Functionality	02/19/2018
		18-24950	ECOS Test Results TSC/EOF Personnel	06/26/2018
		18-26311	Red Team ECOS Response was not 100%	08/21/2018
		18-29646	Potential Trend in ECOS Non-Response for Acknowledgement of On-Call ERO Duty	11/30/2018
		19-24138	Failure to Respond to ECOS Callout	05/30/2019
	Miscellaneous		ERO Quarterly Augmentation Drill Records	09/01/2017 - 09/01/2019
			Fermi 2 On-shift Staffing Analysis	12/20/2012
			Fermi 2 ERO Team List	08/31/2019
			ERO Team Training and Qualification Records (Sample - 10)	10/03/2019
	Procedures		Fermi 2 Radiological Emergency Response Preparedness Plan; Section B, Emergency Response Organization	48
		EP-290	Emergency Notifications	61
		EP-540	Drills and Exercises	39
		EP-550	RERP Training Program	58
		EP-570	Emergency Call Out System - Testing and Maintenance	6A
		EP-570, Attachment 1	ECOS Test Reviews (Quarterly)	09/01/2017 - 09/01/2019
		QP-ER-670	Radiological Emergency Response Preparedness Selection, Training and Qualification Program Description	8
		10 CFR 50.54Q Compliance Review Personnel Qualifications Spreadsheet	06/24/2019	
71114.04	Miscellaneous	2018-04E	10 CFR50.54(q) Evaluation - RERP Plan Change, Plant Radio System Upgrade	08/16/2018
		2018-06E	10 CFR50.54(q) Evaluation - RERP Plan Change,	07/18/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Operations Support Center Relocation	
		2018-10S	10 CFR50.54(q) Screen - RERP Plan Change, Central Alarm Station Relocation	08/11/2018
		2018-35S	10 CFR50.54(q) Screen - RERP Plan Change, Operations Support Center Relocation	07/18/2018
		2018-36S	10 CFR50.54(q) Screen - RERP Plan Change, Plant Radio System Upgrade	08/06/2018
	Procedures		Fermi 2 Radiological Emergency Response Preparedness Plan	47
			Fermi 2 Radiological Emergency Response Preparedness Plan	48
		EP-590	10 CFR50.54(q) Screens and Evaluation	0A
71114.05	Corrective Action Documents	17-27716	NQA Audit 17-0112 Deficiency – Uncontrolled and Outdated RERP Documents in the EOF	09/18/2017
		17-27788	NQA Audit 17-0112 Recommendation –Training Enhancements for ERO Positions	09/20/2017
		17-29094	RadDose Program	11/09/2017
		17-29260	Incorrect Calibration Constant in RadDose V	11/16/2017
		19-21090	RERP Excellence Initiatives Tracking EI2	02/13/2019
		19-21964	Missed and Untimely Classification in the Simulator	03/13/2019
	Miscellaneous		Quarterly Operations Support Facility ERF Testing and Maintenance Records	09/01/2017 - 09/01/2019
			Exercise and Drill Evaluation Reports (Sample)	09/01/2017 - 09/01/2019
			Quarterly Control Room ERF Testing and Maintenance Records	09/01/2017 - 09/01/2019
			Quarterly Emergency Operations Facility ERF Testing and Maintenance Records	09/01/2017 - 09/01/2019
			Quarterly Technical Support Center ERF Testing and Maintenance Records	09/01/2017 - 09/01/2019
			Emergency Preparedness Letters of Agreements with Off-Site Response and Support Organizations	09/01/2017 - 09/01/2018

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		KLD-TR-1030	Fermi 2 Nuclear Power Plant 2018 Population Update Analysis	09/29/2018
	Procedures	EP-101	Classifications	42C
		EP-290	Emergency Notifications	42C
		EP-292	Emergency Call Out - Backup Method	32
		EP-580	Equipment Important to Emergency Response (EITER)	7
		EP-590	10 CFR 50.54(q) Screens and Evaluations	0A
		EP-601	Public Education and Information	11
	Self-Assessments	Audit Report 17-0112	Quality Assurance Audit of Emergency Preparedness Program	09/26/2017
Audit Report 18-0111		Quality Assurance Audit of the Emergency Preparedness Program	09/18/2018	
71114.06	Miscellaneous		2019 Fourth Quarter Table Top Drill, DTE Electric Company, Fermi 2	10/03/2019 - 10/24/2019
	Procedures	EP-101	Classification of Emergencies	42C
71124.01	Corrective Action Documents	18-29556	Dose Rate Increase Creating New Locked High Radiation Area on RB-2	11/28/2018
		19-20128	Higher Than Anticipated Dose Rates during RWCU Fill and Vent Activities	01/06/2019
		19-20981	Locked High Radiation Area Conditions Found in the Torus Room Sub-Basement Reactor Water Clean Up Return Line	02/09/2019
		19-22778	Elevated Dose Rates in the Auxiliary Building T-Room, Requiring the Posting of a High Radiation Area	04/14/2019
	Procedures	68.000.003	Radiological Air Sampling	1A
	Radiation Surveys	00116-A19	Reactor Core Isolation Cooling Run	05/10/2019
		00252-A19	Turbine Deck To Steam Tunnel	09/16/2019
		00305-A19	Reactor Water Clean Up Pump Room	10/02/2019
		01312-R19	Reactor Core Isolation Cooling Run	05/10/2019
		02412-R19	Reactor Core Isolation Cooling Run	08/14/2019
		02766-R19	Steam Tunnel	09/15/2019
02787-R19		Steam Tunnel	09/17/2019	
		02930-R19	Reactor Water Clean Up Pump Room	10/01/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		02958-R19	Reactor Water Clean Up Pump Room	10/01/2019
		03254-R19	Reactor Water Clean Up Phase Separator Room	11/06/2019
		03450-R18	Reactor Water Clean Up Phase Separator Room	09/25/2018
	Radiation Work Permits (RWPs)	191020	Emergent Issues Tasks	01
		191027	E41 and E51 System Maintenance, Inspections, Surveillance and Test Runs	02
		191050	Reactor Water Clean Up Pump Seal Repair/Replacement	01
		191051	Reactor Water Clean Up Phase Separator Room Entry and Component Repair	00
Work Orders	54082896	Perform 64.713.050 Source Leak Testing	06/19/2019	
71151	Miscellaneous		Performance Indicator Data Sheets - Drill and Exercise Performance (DEP)	07/01/2018 - 06/30/2019
			Performance Indicator Data Sheets - Alert and Notification System (ANS)	07/01/2018 - 06/30/2019
			Performance Indicator Data Sheets - Emergency Response Organization (ERO) Drill Participation	07/01/2018 - 06/30/2019
71152	Corrective Action Documents	19-20353	Mispositioned Component: APRM 3 not Bypassed during 46.604.001	01/16/2019
		19-20355	Cognitive Trend - Operations Mispositioning Events	01/16/2019
		19-20897	Security CLO - Plant Equipment Bumped during FOF Drills	02/07/2019
		19-21941	Mispositioned Component: Missed Procedure Step when Placing CFD C in Service	03/13/2019
		19-22208	Mispositioned Component: Ops Shift 5 CLO - Valve Fount out of Position during System Fill and Vent	03/22/2019
		19-22351	Evaluation of Operations Plant Status Control Performance	03/27/2019
		19-22376	2019 Plant Status Control Committee (PSCC) Meeting Actions	03/28/2019
		19-22799	DFP Jacket Cooler Inlet Alt Strn Outlet Isolation Valve was Found in Closed Position	04/15/2019
		19-23602	INPO Evaluation Plant Status Control	09/03/2019
		19-23623	Mispositioned Component: Discovered P5000F1013A not in Correct Positions	05/10/2019



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		19-23859	Potential Mispositioned Component: Unexpected Caps Left Installed on RB SPING Lines	05/20/2019
		19-24681	Document Assessment of IN 2019-03	06/21/2019
		19-25901	Mispositioned Component: Rosemount Readout Found Installed in Rosemount Trip Unit in H21P087 Section Z1	08/05/2019
		19-26203	Mispositioned Component: Operations Shift 5 CLO - Step not Performed in 23.300	08/16/2019
		19-26858	Plant Status Control Committee Input to Nuclear Safety Culture Monitoring Panel	09/12/2019
		19-26860	Effectiveness Review Measures will not be Met	09/12/2019
		19-27742	Mispositioned Component P6100F020B South Boiler Steam Relief Valve, While Performing 27.142.01 Auxiliary Boiler Trip and Safety Valve Test for the South Auxiliary Boiler	10/10/2019
		19-28157	Mispositioned Component - S Aux Boiler Atomizing Air Isolation Valve Found Open during Reference Leg Filling	10/25/2019
		19-28217	Plant Status Control Committee - Maintenance Plant Status Control Precursors	10/28/2019
		19-28218	Plant Status Control Committee - Operations Plant Status Control Precursors	10/28/2019
		19-28721	Human Performance Error while Performing Surveillance 44.030.263 ECCS ADS L3 and L8 Division 1 Channel 'A' Functional Test	11/13/2019
		19-29371	HCU 14-07: Leak Coming from the Manifold Filter Plug for the C11F120 FCV	12/07/2019
		19-29423	Chemistry Performance of SPING Weekly Surveillance without Signing on with the Tagging Center	12/09/2019
			Miscellaneous	MOP05 Operations Conduct Manual
ODE-7 Operations Department Expectation	Configuration Control			10
71153	Corrective Action Documents	19-25713	E1156-C001D, Div 2 RHRSW MDCT Fan D, Tripped When Placed in High Speed	07/30/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		19-25722	Blown Fuse on 'D' RHR MDCT Fan High Speed Breaker	07/30/2019
	Engineering Evaluations	TMSA-06-0067	Evaluation of the No. of MDCT Fans Required for Decay Heat Removal Success (CARD 06-26273)	12/18/2006
	Miscellaneous	LER 2019-003	Secondary Containment Declared Inoperable due to Opening Both Airlock Doors	0
		LER 2019-004	Division 2 Mechanical Draft Cooling Tower Fan "D" Tripped when Placed in High Speed due to a Blown Fuse	00
		LER 2019-005	Secondary Containment Pressure Exceeded Technical Specification due to Reactor Building HVAC Damper Malfunction	00