

# UNITED STATES NUCLEAR REGULATORY COMMISSION

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

February 10, 2021

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

SUBJECT: FERMI POWER PLANT, UNIT 2 - INTEGRATED INSPECTION REPORT

05000341/2020004

Dear Mr. Dietrich:

On December 31, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Fermi Power Plant, Unit 2. On January 19, 2021, the NRC inspectors discussed the results of this inspection with Mr. E. Olson, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> 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/

Néstor J. Féliz Adorno, Chief Branch 4 Division of Reactor Projects

Docket No. 05000341 License No. NPF-43

Enclosure: As stated

cc w/ encl: Distribution via LISTSERV®

Letter to Peter Dietrich from Néstor Féliz Adorno dated February 10, 2021.

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

05000341/2020004

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## ADAMS ACCESSION NUMBER: ML21041A276

$\boxtimes$	SUNSI Review	Non-Sensitive Sensitive		Publicly Available  Non-Publicly Available	
OFFICE	RIII	RIII			
NAME	RNg: ve via email	NFéliz Adorno via email			
DATE	02/9/2021	02/10/2021			

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# U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Number: 05000341

License Number: NPF-43

Report Number: 05000341/2020004

Enterprise Identifier: I-2020-004-0062

Licensee: DTE Electric Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, MI

Inspection Dates: October 01, 2020 to December 31, 2020

Inspectors: T. Briley, Senior Resident Inspector

T. McGowan, Resident Inspector V. Myers, Senior Health Physicist

R. Ng, Project Engineer T. Taylor, Resident Inspector

Approved By: Néstor J. Féliz Adorno, Chief

Branch 4

Division of Reactor Projects

#### 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 <a href="https://www.nrc.gov/reactors/operating/oversight.html">https://www.nrc.gov/reactors/operating/oversight.html</a> for more information.

## **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

**Additional Tracking Items** 

None.

#### **PLANT STATUS**

Unit 2 began the inspection period at rated thermal power. On November 18, 2020, the unit was down powered to 94 percent rated thermal power for planned hydraulic control unit maintenance. The unit was returned to rated thermal power the following day. On November 20, 2020, the unit was down powered to 74 percent rated thermal power for a planned control rod pattern adjustment. The unit was returned to rated thermal power the following day. The unit remained at or near rated thermal 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 <a href="http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html">http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html</a>. 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 Disease 2019 (COVID-19), resident 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; conducted plant status activities as described in IMC 2515, Appendix D, "Plant Status"; 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 portions 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

#### Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of the cold weather winter months for the following systems:
  - Plant heating steam, including secondary containment isolations
  - Circulating water system

#### 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 a high wind advisory on November 19, 2020

## 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) Division 2 emergency diesel generators (EDG) 13 and 14 while EDG 11 was out of service for maintenance during the week ending October 10, 2020
- (2) Division 2 emergency equipment cooling water while the reactor core isolation cooling (RCIC) system was out of service for maintenance during the week ending November 7, 2020
- (3) Division 1 non-interruptible air system (NIAS) while Division 2 NIAS was out of service for maintenance during the week ending November 21, 2020
- (4) Division 2 emergency equipment service water (EESW) while Division 1 EESW was out of service for maintenance during the week ending December 5, 2020

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

(1) The inspectors evaluated system configurations during a complete walkdown of the Division 1 residual heat removal (RHR) system during the week ending October 31, 2020

#### 71111.05 - Fire Protection

## Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 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) Auxiliary building first floor, Division 1 switchgear room during the week ending October 17, 2020
- (2) Auxiliary building basement, control rod drive pump room during the week ending October 17, 2020
- (3) Reactor building basement and sub-basement, north east quad during the week ending December 12, 2020
- (4) Circulating water pump house during the week ending December 12, 2020

## 71111.06 - Flood Protection Measures

#### Inspection Activities - Internal Flooding (IP Section 03.01) (2 Samples)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Relay room
- (2) Division 1 switchgear room

## 71111.07A - Heat Sink Performance

## Annual Review (IP Section 03.01) (1 Sample)

The inspectors evaluated readiness and performance of:

(1) EDG 13 lubricating oil, jacket water, and air coolant heat exchangers

## 71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

## Regualification Examination Results (IP Section 03.03) (1 Sample)

(1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification program annual operating test administered between October 19 and November 20, 2020

#### 71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

#### <u>Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)</u>

(1) The inspectors observed and evaluated a licensed operator requalification graded scenario in the control room simulator on October 8, 2020

#### 71111.12 - Maintenance Effectiveness

### Maintenance Effectiveness (IP Section 03.01) (6 Samples)

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

- (1) Reactor recirculation system during the week ending October 31, 2020
- (2) Reactor feedwater system during the week ending November 28, 2020
- (3) Safety relief valves during the week ending December 12, 2020
- (4) NIAS during the week ending December 5, 2020
- (5) RHR complex dampers during the week ending December 11, 2020
- (6) Visual annunciator system during the week ending December 19, 2020

## 71111.13 - Maintenance Risk Assessments and Emergent Work Control

## Risk Assessment and Management Sample (IP Section 03.01) (3 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) Division 1 switchyard breaker GK and EDG 11 out of service for planned maintenance during the week ending October 10, 2020
- (2) RCIC system and offsite power Shoal line planned maintenance, and emergent work on combustion turbine generator (CTG) 11-1 with CTG 11-2 and 11-4 out of service during the week ending November 7, 2020

(3) Emergent work on main turbine control system during the week ending December 31, 2020

#### 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) Operability and functionality of RCIC following Division 1 high steam line flow master trip unit failure, as documented in condition assessment resolution document (CARD) 20-39104
- (2) Operability and functionality of EDG 11 following identification of a change in crankcase oil chemistry parameters, as documented in CARD 20-33238

#### 71111.18 - Plant Modifications

# <u>Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02)</u> (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Condensate storage tank vortex suppressor installation (permanent)
- (2) Uninterruptible power supply 'B' logic and fuse sizing change (permanent)

## 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) Reactor building outer railroad door testing following identification of a degraded seal during the week ending October 3, 2020
- (2) RCIC system testing following a planned maintenance outage during the week ending November 7, 2020
- (3) Reactor building ventilation radiation monitor testing following identification of spurious operation and trips during the week ending November 14, 2020
- (4) Division 2 NIAS system testing following planned maintenance during the week ending November 28, 2020
- (5) Recirculation pump 'B' differential pressure channel 'B' master trip unit (MTU) testing following planned MTU replacement during the week ending December 4, 2020

## 71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

#### Surveillance Tests (other) (IP Section 03.01) (1 Sample)

(1) EDG 13 slow start surveillance testing during the week ending October 24, 2020

#### Inservice Testing (IP Section 03.01) (1 Sample)

(1) Division 2 core spray auto actuation testing during the week ending December 12, 2020

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

(1) N+1 Neptune pump testing during the week ending November 28, 2020

#### 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 December 8, 2020. This evaluation does not constitute NRC approval.

#### 71114.06 - Drill Evaluation

#### Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

(1) Emergency preparedness tabletop drill on October 8, 2020

#### **RADIATION SAFETY**

#### 71124.07 - Radiological Environmental Monitoring Program

#### Environmental Monitoring Equipment and Sampling (IP Section 03.01) (1 Sample)

(1) The inspectors evaluated environmental monitoring equipment and observed collection of environmental samples

## Radiological Environmental Monitoring Program (IP Section 03.02) (1 Sample)

(1) The inspectors evaluated the implementation of the licensee's radiological environmental monitoring program

#### GPI Implementation (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated the licensee's implementation of the Groundwater Protection Initiative program to identify incomplete or discontinued program elements

# 71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation

## Radioactive Material Storage (IP Section 03.01) (1 Sample)

(1) Inspectors evaluated the licensee's performance in controlling, labelling and securing radioactive materials

#### Radioactive Waste System Walkdown (IP Section 03.02) (1 Sample)

(1) Inspectors walked down accessible portions of the solid radioactive waste systems and evaluated system configuration and functionality

#### Waste Characterization and Classification (IP Section 03.03) (3 Samples)

The inspectors evaluated the licensee's characterization and classification of the following radioactive waste shipments:

- (1) EF2-19-050, resin
- (2) EF2-20-040, torus paint chips
- (3) EF2-20-117, resin

## Shipment Preparation (IP Section 03.04) (1 Sample)

The inspectors observed the preparation of the following radioactive material shipment:

(1) EF2-20-120, resin shipped as Type B

#### Shipping Records (IP Section 03.05) (3 Samples)

- (1) EF2-19-050, resin shipped as LSA-II
- (2) EF2-20-040, torus paint chips shipped as LSA-II
- (3) EF2-20-117, resin shipped as Type B

#### 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) July 1, 2019 through September 30, 2020

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

(1) July 1, 2019 through September 30, 2020

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

(1) July 1, 2019 through September 30, 2020

# BI01: Reactor Coolant System (RCS) Specific Activity Sample (IP Section 02.10) (1 Sample)

(1) July 1, 2019 through September 30, 2020

#### OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

(1) July 1, 2019 through September 30, 2020

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample (IP Section 02.16) (1 Sample)

(1) July 1, 2019 through September 30, 2020

#### 71152 - Problem Identification and Resolution

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

(1) The inspectors reviewed the licensee's corrective action program for potential adverse trends that might be indicative of a more significant safety issue

## 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) A sample of issues open in the corrective action program with operability being maintained via compensatory measure or pending some final action to update or change the design basis. The inspectors reviewed a partial modification to the condensate storage tank to address the potential for vortexing, a degraded valve in the lube oil system for EDG 14, and licensee follow up to an error in methodology regarding motor operated valve calculations that had been discovered during a prior NRC inspection.

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

## Personnel Performance (IP Section 03.03) (1 Sample)

(1) The inspectors evaluated a control rod drive hydraulic system transient and licensee's performance on November 14, 2020

## **INSPECTION RESULTS**

Observation: Semi-Annual Corrective Action Program Trend Review 71152

The inspectors noted a trend in organizational and programmatic issues entered into the corrective action program that did not have sustainable corrective actions. Several examples included, but were not limited to, the following:

• In May 2019, following a planned safety system maintenance outage for EDG 14, Nuclear Quality Assurance (NQA) identified several tube clamps taped to the wall in the EDG 14 room that had not been reinstalled as intended. The primary cause listed

in the organizational effectiveness analysis that followed was inadequate field oversight. Specifically, it concluded that one field supervisor was not sufficient to oversee multiple major-scope jobs occurring in parallel. However, none of the corrective actions taken addressed the primary cause or the organizational issues which led to the breakdown during the EDG outage. The missing clamps ultimately did not impact EDG 14 operability.

- In February 2020, the licensee initiated CARD 20-21195 for some organizational effectiveness issues associated with execution and implementation of a planned safety system maintenance outage for EDG 13. The licensee determined the work delays were caused by issues with how the schedule was prepared, communication challenges between day and night shift and between departments, and the operations department not being formally part of the outage control center (OCC) staff. The corrective action was to revise a post-outage critique form which added some organizational effectiveness questions. However, the inspectors noted this corrective action did not address issues associated with the execution and implementation of system outages because the post-outage critique form was used following the completion of safety system outages.
- During the most recent refueling outage (i.e., from March to August 2020), the inspectors identified foreign material issues (mainly small cleanliness issues) during their primary containment closeout inspection. Most of the material was fairly easy to find or was discovered in a location that was easily accessible. During the prior refueling outage, inspectors also noted a large amount of material during their closeout inspections. Given the prior issues, the inspectors questioned the process the licensee employed to validate primary containment cleanliness prior to final closeout. In response, the licensee added a list of drywell areas and a reference to operations department cleanliness standards to a work order used by decontamination personnel. However, these actions were similar to those documented for a similar issue captured in May 2018 as CARD 18-23959. The inspectors questioned the effectiveness of implementing corrective actions that were similar to actions that were already in place and demonstrated to not address the issue during the most recent refueling outage.

The inspectors discussed their observations with licensee staff, who subsequently generated CARD 21-20263 to capture the issues. Through the discussions with licensee personnel, the inspectors learned that licensee staff had recently noted similar (but separate) issues regarding sustainability of corrective actions as part of a self-assessment. The inspectors will continue to routinely monitor CAP performance via the baseline inspection program.

#### **EXIT MEETINGS AND DEBRIEFS**

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

- On January 19, 2021, the inspectors presented the integrated inspection results to Mr. E. Olson, Site Vice President, and other members of the licensee staff.
- On October 22, 2020, the inspectors presented the radiation protection inspection results to Mr. R. LaBurn, Radiation Protection Manager, and other members of the licensee staff.

- On December 8, 2020, the inspectors presented the emergency action level and emergency plan changes inspection results to Mr. E. Olson, Site Vice President, and other members of the licensee staff.
- On December 15, 2020, the inspectors presented the licensed operator requalification program annual operating test results inspection results to Mr. A. Spencer, Licensed Operator Requalification Program Lead, and other members of the licensee staff.

# **DOCUMENTS REVIEWED**

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
71111.01	Corrective Action Documents	20-29557	NQA-First Level Escalation-Repeat Deficiencies with Seasonal Readiness Activities	08/24/2020
		20-32239	Pri 4 Cold Weather Prep Work Order Not Scheduled	11/16/2020
	Engineering Changes	TM-16-0025	Install One Temp Boiler and Provide Spare Connections for a Second Temp Boiler	11/08/2016
	Miscellaneous	MOP01-200	Severe Weather Guidelines	3
	Procedures	MWC16-100	Seasonal Readiness	1
	Work Orders	51732374	Perform MWC16-100 Cold Weather System Readiness Review Checklists	03/20/2020
71111.04	Calculations	DC-6356	Stress and Seismic Analysis of the Reactor/Auxiliary Building CTI Nuclear Fan Coil Units	А
	Corrective Action	20-31283	Damaged Labels - RBSB NW	10/15/2020
	Documents	20-31377	Torus Room AZ 250	10/19/2020
		20-31440	NRC Identified Condition, Insulation Repairs	10/20/2020
		20-32269	NRC Identified Issue: The E1100F619A and E1100F619B have Local Manual Positioners but are Not Tracked by	11/17/2020
			Valve Lineups	
		20-32273	NRC Concern: Missing Label on P50R413A	11/17/2020
	Drawings	6M721-2084	Diagram Residual Heat Removal (RHR) Division I	BQ
	3-	6M721-2084	Diagram Residual Heat Removal (RHR) Division I	BQ
		6M721-5729-2	EECW Division II Functional Operating Sketch	BD
		6M721-5734	Emergency Diesel Generator System Functional Operating Sketch	BL
		M-2015	Station and Control Air	CS
		M-4615	Interruptible and Non-Interruptible Control Air	AH
		M-5706-3	RHR Service Water Make-Up Decant and Overflow Systems	AH
		M-5729-2	Emergency Equipment Cooling Water Division II	BD
	Miscellaneous	Operator Logs	Operations AUTOTOUR Logs - Reactor Building	0
	Procedures	23.129	Station and Control Air	121
		23.205	Division 1 RHR LPCI Standby Lineup Verification, Attachment 8A	147

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		23.208	RHR Complex Service Water Systems	129
71111.05	Fire Plans	FP-AB-2-9b	Auxiliary Building, Division 1 Switchgear Room, Zone 9, El. 613'6"	3
		FP-AB-B-4b	Control Rod Drive Pump Room, Zone 4, El. 562'0"	4
		FP-CWPH-1-32	Circulating Water Pumphouse Zone 32 Elevation 58'6"	6
		FP-RB-B-5b	Reactor Building Basement Northeast Corner Room Zone 5, Elevation 562'0"	4
71111.06	Engineering	EF2-PRA-011	Internal Flood Walkdown Summary Notebook	0
	Evaluations	EF2-PRA-012	Fermi 2 Nuclear Power Station PRA Internal Flood Analysis Notebook	3
71111.07A	Calculations	DC-5804	Diesel Generator Service Water Design Basis Requirements Calculation	F
	Miscellaneous	MES540001	EDG 11 Air Coolant Heat Exchanger Inspection Report	10/05/2020
		MES54001	EDG 11 Jacket Cooling Heat Exchanger Inspection Report	10/05/2020
		MES54001	EDG 11 Lube Oil Heat Exchanger Inspection Report	10/05/2020
71111.11A	Miscellaneous		Fermi 2020 LORT Annual Operating Test Summary Results	12/15/2020
71111.11Q	Miscellaneous	SS-OP-904-2001	Evaluation Scenario	2
71111.12	Corrective Action Documents	17-25639	Management Review Committee (MRC) Cognitive Trend - SRVs	06/27/2017
		18-20350	North Reactor Feed Pump Turbine Lube Oil Level High	01/16/2018
		18-20351	N RFPT Turning Gear Engage Solenoid Valve (N21F111A) is Blowing By	04/30/2018
		18-23923	Received 5D28 South RFP/RFPT Shaft Trouble While Taking the N RFP Out of Service	05/17/2018
		19-20000	Unexpected Alarm During Startup of NRFPT	01/01/2019
		19-20309	SRV 'A' (B2104F013A) Tail Pipe Temperature Elevated to ~205F	01/14/2019
		19-20660	SRV 'J' Tail Pipe Temperature Elevated to ~212F	01/30/2019
		19-21751	Need RF20 WO to Perform a Body Off Inspection of SRV 'A' due to Elevated Tailpipe Temperatures per CARD 19-20309	03/06/2019
		19-23939	2019 DBAI: MRFF Action Needed for Previously Closed CARD 17-23452	05/22/2019
		19-24545	Oil Surrounding Mechanical Seal on RRMG LO	06/17/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
1.100044.0			B3103C001D	Date
		19-28069	Excessive Carbon on Brushes and Intake	10/23/2019
		20-00023	Bushing Broken on N2100-F006B SRFPT OTBD Seal	03/23/2020
			Water TCV Outlet Isolation Valve	
		20-20091	Division 1 RHR Pump Room Dampers	01/06/2020
		20-20099	Abnormal Noise/Indications from P50-F516A Solenoid	01/06/2020
		20-21585	Time Delay Relay P50M832 Failed as Found Testing	02/12/2020
		20-21602	Division 2 Control Air Compressor Failed PMT	02/13/2020
		20-21659	Control Air Compressor PMT	02/14/2020
		20-21688	Online Work Orders for Vendor Inspection of Recirc MG Set Brushes and Potential Stoning	02/14/2020
		20-21708	As-Found Condition of Division II NIAS Dryer	02/16/2020
		20-21840	Division 2 Control Air Compressor Will Not Load	02/11/2020
		20-21936	X4103F128 Excessive Scoring on Hydra Motor Shaft	02/20/2020
		20-23975	Received 3D19 Annunciator System Trouble	12/16/2020
		20-24502	VAS Total System Failure	04/14/2020
		20-24779	VAS Multiplexor C Time Errors	04/19/2020
		20-25054	Potential Common Cause Failure of VAS	04/23/2020
		20-25856	Discharge Pressure is High Out of Spec for N RRMG Set Lube Oil Pump (B103C001A)	05/17/2020
		20-25881	B3103C001D PMT Unsatisfactory due to Vibration Level	05/18/2020
		20-26161	Stopped and Backed Out of 27.129.04	05/27/2020
		20-26271	Findings from Division 1 NIAS Air Dryer Troubleshooting	05/29/2020
		20-26312	VAS Clock Signal Distortion Cause and Remediation	05/30/2020
		20-26672	RRMG Set Lube Oil Level Challenges in Refuel Requires Add and Removal of Oil	06/08/2020
		20-26692	P603 VAS Alarm Check Malfunction and System Battery Low Voltage Warning	06/08/2020
		20-26723	Dual Indication for Open Damper X4103F115	06/10/2020
		20-26772	Dual Indication for Open Damper X4103F103	06/10/2020
		20-27423	Two of Four North and South RFPT Speed Indications in IPCS Erroneous	06/29/2020
		20-28723	UNSAT SRV Inspection	07/28/2020

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		20-29013	SRV 'A' Tailpipe Temperature Elevated Following RF-20 Startup	08/06/2020
		20-29165	SRV 'M' Tailpipe Temperature Elevated Following RF-20 Startup	08/10/2020
		20-30180	Abnormal Speed Changes on South RFPT	09/13/2020
		20-30351	Learnings from Industry Responses for 20-30180, SRFPT Speed Anomaly	09/17/2020
		20-30443	Abnormal Speed Differential Between North and South RFPTs	09/21/2020
		20-30554	Three SRVs Removed in RF-20 Found Outside of As-Found Set-Point Tolerance	09/24/2020
		20-30779	Oil Leak	09/30/2020
		20-32479	Trend CARD - B2104F013A Tailpipe Temperature Increase	11/25/2020
		20-32730	Broken Insulation in Hydra Motor Electrical Housing	12/08/2020
	Engineering Evaluations		Monthly Maintenance Rule Evaluation Report - Safety Relief Valve - September 2020	10/09/2020
	Miscellaneous		RHR Complex Ventilation (X4103) System Performance Monitoring Plan	09/20/2020
			P5002 (NIAS) System Monitoring Plan	03/15/2019
		ACMP 20-007	SRV 'A' & 'M' Weeping	1
		MMR 02	Maintenance Rule Program Description	6A
		MMR 10	Maintenance Rule, Monitoring	18A
		MMR APP E	Maintenance Rule Conduct Manual, Appendix E, Maintenance Rule SSC Specific Functions	27
		MMR Appendix B	Maintenance Rule Conduct Manual, Terms and Definitions	7
		MMR Appendix D	Maintenance Rule Conduct Manual, Guidelines for Determining Functional Failures and Maintenance Preventable Function Failures	20
		MMR Appendix E	Maintenance Rule Conduct Manual, Maintenance Rule SSC Specific Functions	27
		MMR Appendix F	Maintenance Rule Conduct Manual, Maintenance Rule Performance Criteria	26
		Monthly M-Rule Evaluation Report	Tracking Group: N2100	July - September,

Inspection	Туре	Designation	Description or Title	Revision or
Procedure				Date
				2020
		Plant Health	Reactor Feedwater (System N2100)	2019, Quarter
		Report		1 and 2
		Plant Health	Condensate and Heater Feed Pumps (System N2000 and	2019, Quarter
		Report	N2003)	3
		Plant Health	Reactor Feedwater (System N2100)	2019, Quarter
		Report		4
		Plant Health	Reactor Feedwater (System N2100)	2020, Quarter
		Report		1, 2, and 3
		VMR1-46	Target Rock Model 7567F Safety Relief Valves Vendor Manual	J
	Procedures	23.420	RHR Complex Heating and Ventilation	41
		23.621	Main Control Room Annunciator and Sequence Recorder	89
		24.129.04	Control Air Valve Operability/Position Verification/Isolation	52
			Integrity Test	
		49.419.002	RHR Damper Blocking	7
		VAS USER	Visual Annunciator System (VAS) User Manual	0
	Work Orders	54506175	North Recirc MG Set Slip Ring Measurement	04/09/2020
		54506203	South Recirc MG Set Slip Ring Measurement	04/08/2020
71111.13	Corrective Action Documents	15-21424	Number 2 HPSV went Closed and Then Open to 22 Percent Multiple Times	02/21/2015
		20-30925	Radka Air Compressor Air Leak	10/05/2020
		20-31945	CTG 11-1 Not Ratcheting	11/04/2020
		20-32152	Shoal Line Maintenance Risk Evaluation	11/11/2020
		20-32176	Operations Performance Gap in Risk Management and Identification of Risk	12/02/2020
		20-33180	4D91 Electric Governor Trouble Number 1 HP Stop Valve CC2 HW	12/23/2020
	Corrective Action Documents Resulting from Inspection	20-33113	Update ARP Action for Ratchet Trouble	12/21/2020
	Miscellaneous	EF2-PRA-005.33	Combustion Turbine Generators (CTGs)	1
		MMR APP H	Maintenance Rule Conduct Manual, Appendix H - On-Line	15

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
			Core Damage Risk Management Guidelines	
	Procedures	11D50	CTG 11 Unit 1 Trouble Alarm Response Procedure	15
		ARP 4D91	Electric Governor Trouble	19
		MMR12	Equipment Out of Service Risk Management	20A
		MOP05-100	Protected Equipment	2C
		MWC15	Elevated Risk Management	20
71111.15	Corrective Action	20-31904	MTU Failed During 44.020.234	11/03/2020
	Documents	20-33238	EDG 11 Crankcase Oil Exhibits Increased Fuel Oil in the Crankcase Oil	11/29/2020
	Procedures	44.020.234	NSSSS-RCIC Steam Line Flow, Trip System B Calibration/Functional	41
	Work Orders	54136747	Perform 44.020.234 NS4 RCIC Steam Line Flow, Trip System B, Calibration/Functional	11/03/2020
_	Corrective Action Documents	19-23227	Recommend Review of Site Response to Open CARD 07-23630	04/26/2019
		20-23661	UPS Battery Feed to UPS-B Fuse Found Blown	04/21/2020
		20-26704	3071-128-EJ Spec R3100S027 Fuse Discrepancy	07/03/2020
		20-27546	UPS B Appears to Have Repeat Failure of Battery Fuse	07/02/2020
		20-27855	UPS A and B Fuse Ratings	07/09/2020
		20-31438	Material Found at Bottom of Condensate Storage Tank	10/20/2020
		20-31468	18-inch Pipe Clamp Bolt Length Issue	10/21/2020
		20-31488	Threaded Rod Set Screw Too Short	10/21/2020
	Drawings	M-5715-3	EDP-80127-018	0
		M-5721-1	EDP-80127-006	0
		M-Y-2000	EDP-80127	Α
	Engineering	80127	ECCS Pump CST Vortex Suppression Device	В
	Changes	DEC 70303	UPS A/B DC Circuit Fuses and Cables	Α
		DEC 70304	UPS B Parallel Operation Software Change	0
		EDP 70042	UPS A and B Replacement	С
	Miscellaneous	Risk Management Plan	CST Vortex Suppression	10/19/2020
71111.19	Corrective Action Documents	20-30561	Received 3D6, Division 1/2 Reactor Building Vent Exhaust Rad Monitor Upscale Trip, RBHVAC Trip, and D1 SGTS	09/24/2020

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		20-30756	While Replacing Seals on RR Car Interlock Door, 4 Bolts Failed While Removing Bolts	09/30/2020
		20-30824	East and West Airlock Door Seal Long Term Recommendations	10/01/2020
		20-32018	RCIC Turbine Exhaust Rupture Disc Leak	11/06/2020
		20-32205	NRC Identified: IST Program Testing Methodology for E5100F011	11/13/2020
	Drawings	61721-2611	Reactor Building Main Control Room A/C Mode Selection Division 1	AA
		61721-2611-10	Reactor Building Secondary Containment Isolation Signals Division 1	Т
		6M721-2034	Core Spray System CSS Reactor Building	AS
		6M721-2035	High Pressure Coolant Injection System Reactor Building	BP
		6M721-2044	Reactor Core Isolation Cooling System	BE
_		6M721-2045	Reactor Core Isolation Cooling System Barometric Condenser	AT
	Miscellaneous	22A1354AR	Reactor Core Isolation Cooling System	13
		Clearance: D1100-000138	Jumper Out High High Trip of Division 1 Rad Monitor	11/13/2020
		ERE 54575	Evaluate Suitability of Replacement Garlock 3400 Sheet Gasket	0
		VMR4-15	Continental Disc Corp	Α
	Procedures	23.206	Reactor Core Isolation Cooling System	104
		24.206.01	RCIC System Pump and Valve Operability Test	87
		44.030.073	ECCS - Reactor Recirculation Pump B DP, Division 1, Channel B Calibration/Functional	36
		46.206.001	RCIC Turbine Governor Control System Calibration	45A
	Work Orders	24231076	Replace MTU B31N614A - Tin Whisker Susceptible Rosemont 710DY MTU	11/30/2020
		42386240	Replace and Calibrate RCIC Speed Controller (EG-M)	11/02/2020
		42386240	Replace and Calibrate RCIC Speed Controller (EG-M)	01/14/2015
		43954320	Replace NIAS Isolation Valve P5000F403 Solenoid Valve	11/17/2020
		43954342	Replace Time Delay Relays in P50P402B, D2 NIAS Dryer Control Cabinet	11/17/2020

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		53421010	Calibrate Pressure Switch RCIC Pump Suction Low Pressure Trip	11/03/2020
		54136663	Perform 24.206.01 RCIC System Pump Operability and Valve Test at 1000 PSIG	11/05/2020
		54268801	Replace Division 2 S Control Air Compressor Unloading Cylinder Solenoid Valve	11/17/2020
		58734795	Troubleshoot/Replace Relay T41M80 in H21P296C Causing 3D36 and RBHVAC Trip	11/02/2020
		E967190100	Replace Secondary Containment Railroad SE Airlock Door Inflatable Seal NE-6.6-EQMS.122	09/28/2020
		E967190100	Replace Secondary Containment Railroad SE Airlock Door Inflatable Seal	09/28/2020
		T363180100	License Renewal Required Replace Secondary Containment Railroad South Airlock Door Inflatable Seal	09/29/2020
71111.22	Corrective Action Documents	20-32994	Procedure Enhancement to 24.203.02 and 24.203.03 Division 1 / 2 Core Spray Operability Test	12/16/2020
	Drawings	6M721-2034	Diagram Core Spray System CSS Reactor Building	AS
	Work Orders	53934688	Perform 24.307.16 Sec 5.1 EDG 13 Start and Load Test-Slow Start	10/19/2020
		54370155	Perform Quarterly Testing of N+1 Train Neptune Diesel	11/28/2020
		54514769	Perform 24.203.03 Sec-5.2 Division 2 CSS Simulated Automatic Actuation Test	12/16/2020
71114.04	Corrective Action Documents	CARD 19-25318	Review EP-101 Revisions Using ACR Process to Determine 10CFR50.54(q) Applicability	07/15/2019
		CARD 19-27058	Changes Needed to Improve EP-101	09/19/2019
		CARD 19-28389	Error Made While Revising EP-101	11/04/2019
	Miscellaneous		10CFR50.54(q) Screen Number 2019-69S	10/18/2019
			10CFR50.54(q) Screen Number 2019-71S	10/17/2019
			10CFR50.54(q) Screen Number 2019-72S	10/18/2019
			10CFR50.54(q) Screen Number 2019-73S	10/18/2019
			10CFR50.54(q) Screen Number 2019-74S	10/18/2019
			10CFR50.54(q) Screen Number 2019-75S	10/18/2019
			10CFR50.54(q) Screen Number 2019-76S	10/18/2019
			10CFR50.54(q) Screen Number 2019-82S	10/18/2019

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
			10CFR50.54(q) Screen Number 2019-87S	10/23/2019
			10CFR50.54(q) Evaluation Number 2019-11E	10/18/2019
			10CFR50.54(q) Screen Number 2019-88S	10/23/2019
			10CFR50.54(q) Screen Number 2019-89S	10/23/2019
			10CFR50.54(q) Screen Number 2019-90S	10/23/2019
			10CFR50.54(q) Screen Number 2019-91S	11/01/2019
			10CFR50.54(q) Evaluation Number 2019-15E	10/23/2019
	Procedures	EP-101	Classification of Emergencies	42C
		EP-101	Classification of Emergencies	43
		EP-101	Classification of Emergencies	43A
		EP-590	10CFR50.54(q) Screens and Evaluation	0
		LP-ER-874-0001	10 CFR 50.54Q Compliance Reviews Training Lesson Plan	0
		RERP	Fermi 2 Radiological Emergency Response Preparedness Plan  Fermi 2 Radiological Emergency Response Preparedness	Fermi 2 Radiological Emergency Response Preparedness Plan; Revision 48
			Plan	
71114.06	Procedures	EP-101	Classification of Emergencies	43A
71124.07	Calibration Records		Radeco Model AVS-28A Calibration Form for Serial Number 6980	01/03/2020
			Radeco Model AVS-28A Calibration Form for Serial Number 7570	01/03/2020
			Radeco Model AVS-28A Calibration Form for Serial Number 7571	01/03/2020
	Corrective Action Documents Resulting from Inspection	20-31431	NRC Identified - Vegetation Sampling in ODCM Not Consistent with Annual Report and Surveillances	10/20/2020
	Miscellaneous		Offsite Dose Calculation Manual	22
			Offsite Dose Calculation Manual	23

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		NRC-20-0027	Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report	04/29/2020
71124.08	Miscellaneous	NPRP-20-0044	Scaling Factor Report for Torus Debris	05/27/2020
	Procedures	67.000.505	Survey and Movement of Waste Liners in the OSSF	1C
		MRP15	Controlling Radioactive Material Outside the Plant Radiologically Controlled Area	14
	Shipping Records	EF2-19-050	Resin Characterization and Shipping Package	08/28/2019
		EF2-20-040	Torus Paint Chips Characterization and Shipment	04/21/2020
		EF2-20-117	Resin Characterization and Shipping Package	09/30/2020
71151	Miscellaneous		Alert and Notification System Reliability Performance Indicator Records	07/01/2019 - 09/30/2020
			Emergency Response Organization Drill Participation Performance Indicator Records	07/01/2019 - 09/30/2020
			Drill and Exercise Performance - Performance Indicator Records	07/01/2019 - 09/30/2020
71152	Corrective Action	07-23630	CDBI: UFSAR Anti-Vortex Methodology Non-Conservative	06/28/2007
	Documents	18-28666	NRC Concern: Foreign Material Left in Drywell	10/23/2018
		19-21822	NQA - EDG 14 Tubing Not Secured Per Design	03/08/2019
		19-23328	NQA - Failure of Multiple Groups to Adequately Evaluate the EDG 14 Clamp Issue and Associated Contributors	05/01/2019
		19-23915	2019 DBAI: Methodology Error Found in MOV Torque Calculation	05/21/2019
		19-23915	2019 DBAI: Methodology Error Found in MV Torque Calculation	05/21/2019
		20-20867	Received 10D21 Division II EDG 14 Lube Oil Tank D Level High/Low in MCR	01/24/2020
		20-20876	Clarification of Design Basis Document R40-00 Needed Regarding EDG Lube Oil Requirements	01/25/2020
		20-21195	OCC Effectiveness Challenged During EDG 13 SSO	02/03/2020
		20-21597	EDG 14 LO Sump Level High	02/12/2020
		20-27717	EDG 14 Oil Sump Level HOOS	07/07/2020
		20-28726	Emerging Trend in CAP Performance Gaps	07/28/2020
		20-28753	Results of Drywell Closeout Walkdown	07/28/2020

Inspection Procedure	Туре	Designation	Description or Title	Revision or Date
		20-29742	Request a Revision to Planners Template: FO18	08/28/2020
		20-29776	Revision to the RFO Plant Restoration Checklist	08/31/2020
		20-31928	EDG Lube Oil Tank Low Level Alarm Less than Required for 7-Day Run Time	11/03/2020
		20-32446	NQA Audit 02-0112 Finding - Identified Gap Between Fermi 2 Corrective Action Program Performance and Standards	11/24/2020
		20-32817	ODMI 20-007 has Incorrect LCO Completion Time	12/10/2020
	Corrective Action Documents	20-31385	NRC Identified: CARD 20-28850 Closed Without Issue Resolution	10/19/2020
	Resulting from	20-32182	NRC Identified- Meeting Effectiveness	11/12/2020
	Inspection	20-32858	NRC Identified - NRC Question on CARD 20-28753	12/11/2020
		21-20263	NRC Identified - NRC Semiannual PI&R Trend Review Observations	01/08/2021
	Miscellaneous	Fermi 2 Refuel Outage 20	Plan of the Day	07/06/2020
		MOP05	Operations Conduct Manual, Chapter 5 - Control of Equipment	57
		MQA11-200	Quality Assurance Conduct Manual Implementing Procedure, Condition Initiation	1B
		MWC13	Outage Nuclear Safety	22
		Operations Department Expectation ODE- 6	Operator Challenges	18
	Procedures	24.000.02	Shiftly, Daily, and Weekly Required Surveillances	159
71153	Corrective Action	20-31731	CRD Pump Suction Press Control Valve Issues	10/29/2020
	Documents	20-31732	Received CRD Accumulator Trouble for HCU 22-15 due to High Water Level	10/29/2020
	Fire Plans	Troubleshooting Plan	CARD 20-31731, WO 59092486, Component C1106C001B	0
	Miscellaneous	30 Day Recharge Report	CRD Accumulator Recharge Report	November 2020
		ARP 3D1	CRD Pump A/B Suction Pressure Low	10
		ARP 3D13	CRD Hydraulic Temperature High	20

Inspection	Туре	Designation	Description or Title	Revision or
Procedure				Date
			Operator Log	10/29/2020
			SOER Log Report	11/06/2020
	Procedures	20.106.01	CRD Hydraulic System Failure	21