UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

September 10, 2019

Mr. Paul Fessler, 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—TEMPORARY INSTRUCTION 2515/193 - IMPLEMENTATION OF RELIABLE HARDENED CONTAINMENT VENTS INSPECTION REPORT 05000341/2019011

Dear Mr. Fessler:

On August 23, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Fermi Power Plant, Unit 2 and discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any finding or violation of more than minor significance.

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

Sincerely,

/RA/

Ann Marie J. Stone
Technical Support Team Leader
Division of Reactor Projects

Docket No. 05000341
License No. NPF-43

Enclosure:
As stated

cc: Distribution via LISTSERV®

Letter to Paul Fessler from Ann Marie Stone dated September 10, 2019

SUBJECT: FERMI POWER PLANT, UNIT 2—TEMPORARY INSTRUCTION 2515/193 - IMPLEMENTATION OF RELIABLE HARDENED CONTAINMENT VENTS INSPECTION REPORT 05000341/2019011

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	05000341
License Number:	NPF-43
Report Number:	05000341/2019011
Enterprise Identifier:	I-2019-011-0033
Licensee:	DTE Electric Comp[any
Facility:	Fermi Power Plant, Unit 2
Location:	Newport, MI
Inspection Dates:	August 19, 2019 to August 23, 2019
Inspectors:	B. Bartlett, Project Engineer S. Sheldon, Project Engineer
Approved By:	Ann Marie J. Stone Technical Support Team Leader Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Temporary Instruction 2515/193 - Implementation of Reliable Hardened Containment Vents 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.

List of Findings and Violations

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

Additional Tracking Items

None.

INSPECTION SCOPES

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

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

2515/193 - Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions

Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions (1 Sample)

(1) Based on samples selected for review, the inspectors verified the licensee satisfactorily implemented appropriate elements of the reliable hardened containment wetwell vent as described in the plant specific submittals and the associated safety evaluation (ADAMS Accession No. ML19183A023). The inspectors determined the licensee was in compliance with NRC Order EA-13-109 Phase 1, "Reliable, Severe Accident Capable Wetwell Venting System" (ADAMS Accession No. ML13143A321).

The inspectors verified the licensee satisfactorily:

- installed the hardened containment ventilation system (HCVS) to meet the performance objectives outlined in Section A.1.1 of Attachment 2 to the Order EA-13-109;
- installed the HCVS system with the design features specified in Section A.1.2 of Attachment 2 to the Order EA-13-109;
- designed the HCVS to meet the quality standards described in Section A.2 of Attachment 2 to the Order EA-13-109;
- developed and implemented adequate maintenance and testing of HCVS equipment to ensure their availability and capability;
- developed and issued procedures to safely operate the HCVS using normal power supplies, during an extended loss of AC power (ELAP) condition, and a postulated severe accident scenario, and integrated the procedures into existing plant procedures; and
- trained their staff to assure personnel can proficiently operate the HCVS.

Based on samples selected for review, the inspectors verified the licensee satisfactorily implemented appropriate elements of the reliable wetwell venting strategy as described in the plant specific submittals and the associated safety evaluation (ADAMS Accession No. ML19183A023) and determined the licensee was in compliance with NRC Order EA-13-109 Phase 2, "Reliable, Severe Accident

Capable Drywell (or alternative strategy) Venting System" (ADAMS Accession No. ML13143A321).

The inspectors verified the licensee satisfactorily developed a strategy making it unlikely that the licensee would need to vent from the containment drywell, that includes the following:

- implemented the severe accident water addition/management (SAWA/SAWM) systems as defined and fulfilled functional requirements for installed and portable equipment;
- installed and/or identified the previously-installed instrumentation necessary to implement SAWM;
- developed and implemented adequate maintenance and testing of SAWA/SAWM equipment to ensure availability and capability;
- developed and issued procedures to safely operate the SAWA/SAWM during an ELAP and during postulated severe accident scenario, and integrated their procedures into their existing plant procedures such that entry into and exiting from the procedures are clear when using existing plant procedures; and
- trained their staff to assure personnel can proficiently operate the HCVS during an ELAP and accident scenario.

The inspectors verified that any noncompliance with requirements, and standards identified during the inspection were entered into the licensee's corrective action program

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On August 23, 2019, the inspectors presented the Temporary Instruction 2515/193 - Implementation of Reliable Hardened Containment Vents Inspection results to Mr. P. Fessler and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
2515/193	Calculations	DC-6636	HCVS Bottle Sizing	01/31/2016
	Corrective Action Documents	13-27558	NQA Identified, Inadequate Risk Assessment of FLEX Pump Testing	10/23/2013
		15-26050	EDP-37114 FLEX and HCVS Panel (H21P101) Component Level Qualification Test Anomalies	08/27/2015
		15-28499	47.000.94, Test 4 is Above its Total Max Leakage as Written	10/31/2015
		15-28503	LLRT 47.000.94 Test 3, T4600-F406 is Above its Total Max Leakage	11/01/2015
		18-21242	CARD 17-20400 Correction did not Perform Validation per FLEX Requirements	02/14/2018
		18-22865	FSF-2 Building and Equipment Checks Unsat	04/08/2018
		18-25912	Fuel Sender Leaking on N+1 Neptune	08/06/2018
		18-26627	Satellite Phones in FSF-1 and FSF-2 Not Working Properly	08/30/2018
		18-27860	Test Procedure Enhancement 27.404.01	10/05/2018
		18-28646	27.404.01 Procedure Enhancement	10/23/2018
		19-25846	Self Assessment Deficiency. No PM Exist to Cycle SAWA Check Valves.	08/02/2019
	Corrective Action Documents Resulting from Inspection	19-26287	During NRC Walkdown of HCVS Procedures it was Identified that Several Leads in the Back of Panel H21P101 were Taped and were Unraveling.	08/20/2019
		19-26288	2019 NRC HCVS Inspection; T4600F 420 Missing Label	08/20/2019
		19-26315	2019 NRC HCVS Inspection; Enhancement Needed to the Overrides in 20.300.SBO	08/21/2019
		19-26356	2019 NRC HCVS Inspection; Typo in Final Integrated Plan	08/22/2019
		19-26358	2019 NRC HCVS Inspection; Enhancement Needed for 47.000.94 "Local Leak Rate Testing for Hardened Vent" Procedure	08/22/2019
	Drawings	6M721-5706-1	Residual Heat Removal (RHR) Division II Functional Operating Sketch	T
	Engineering Evaluations	NPOP-18-0098	Time Sensitive Actions	11/30/2018
	Miscellaneous	LP-OP-202-1811	FLEX HCVS Delta Training	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	20.300.SBO	Loss of Offsite and Onsite Power	28
		29.400.03	HCVS	1
		29.FSG.13	FLEX Containment Venting	5
		29.FSG.HVCS-Plant	HCVS Plant	1
		MOP25	Beyond-Design-Basis Event Coping Strategies Program Document	6
	Self-Assessments	NPOP-19-0048	Quick Hit Self-Assessment - NRC Inspection for HCVS	08/08/2019
	Work Orders	43865604	Perform 47.000.94 LLRT for Hardened Vent (Test 3 - T4600F406)	10/31/2015
		44241734	Perform 66.000.417 Torus Hardened Vent Pipe Radiation Monitor Calibration	10/13/2018
		44306170	Perform 47.000.94 LLRT for Hardened Vent (Test 3 - T4600F406)	04/11/2017
		44306172	Perform 47.000.94 LLRT for Hardened Vent (Test 4 - T4600F438)	04/10/2017
		48026043	Perform 27.404.01 Sec-5.1 & 5.2 HCVS Div 1 & Div 2 Primary Method	10/23/2018
		50160559	Perform 27.404.01 Sec-5.3 HCVS-Div 1 Pneumatics Supply for Secondary Method	10/23/2018
		52230063	Perform 27.404.01 Sec-5.4 HCVS Div 2 Pneumatics Supply for Secondary Method	10/24/2018