



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

September 1, 2015

Mr. Paul Fessler  
Chief Nuclear Officer  
DTE Energy Company  
Fermi 2 - 210 NOC  
6400 North Dixie Highway  
Newport, MI 48166

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR FERMI POWER PLANT, UNIT 2  
(REPORT 05000341/2015005)**

Dear Mr. Fessler:

On August 13, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Fermi Power Plant, Unit 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Fermi Power Plant, Unit 2, operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Fermi Power Plant, Unit 2, during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility. During the fourth quarter of 2014, Fermi Power Plant, Unit 2 was within the Regulatory Response Column of the NRC's ROP Action Matrix because of one or more greater-than-green Security Cornerstone inputs as described in Report Number 05000341/2014407 (ML14150A041), dated May 29, 2014. The supplemental inspection was completed and the inspection report and assessment follow-up letter was issued on January 15, 2015, that returned Fermi Power Plant, Unit 2, to the Licensee Response Column at the start of the first quarter of 2015.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence. Notable infrequent inspections planned include the biennial Problem Identification and Resolution Inspection, Triennial Fire Protection inspection, Triennial Heat Sink inspection, Temporary Instruction -191 Flex/Mitigating Strategies/SFPI inspection, and Component Design Basis inspection.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. This audit includes an onsite component in order for the NRC to evaluate licensee plans for complying with the Orders, as described in site-specific submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The date for the onsite component at your site is being coordinated with your staff. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (630) 829-9618 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Michael A. Kunowski, Chief  
Branch 5  
Division of Reactor Projects

Docket No. 50-341  
License No. NPF-43

Enclosure:  
Fermi Power Plant, Unit 2  
Inspection Plan

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In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. This audit includes an onsite component in order for the NRC to evaluate licensee plans for complying with the Orders, as described in site-specific submittals, and to receive and review information relative to associated open items. This onsite activity will occur in the months prior to a declaration of compliance for the first unit at each site, and will aid staff in development of an ultimate Safety Evaluation for the site. The date for the onsite component at your site is being coordinated with your staff. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

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DATE	08/27/2015					

**OFFICIAL RECORD COPY**

Letter to P. Fessler from M. Kunowski dated September 1, 2015

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR FERMI POWER PLANT, UNIT 2  
(REPORT 05000341/2015005)

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**Fermi**  
**Inspection / Activity Plan**  
**09/01/2015 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>OL EXAM - OL EXAM/SEPT 2015</b>		<b>3</b>
2	09/14/2015	09/18/2015	W90330	OL - INITIAL EXAM - 2015 FEB-MAR - FERMI 2	
			<b>BI ISI - ISI INSPECTION</b>		<b>1</b>
2	09/28/2015	10/28/2015	IP 7111108G	Inservice Inspection Activities - BWR	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
2	10/19/2015	10/23/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			<b>BI EPR - EP ROUTINE INSPECTION / PI VERIFICATION</b>		<b>2</b>
2	11/30/2015	12/04/2015	IP 7111402	Alert and Notification System Testing	
2	11/30/2015	12/04/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2	11/30/2015	12/04/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
2	11/30/2015	12/04/2015	IP 71151	Performance Indicator Verification	
			<b>PI&amp;R - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>
2	11/30/2015	12/18/2015	IP 71152B	Problem Identification and Resolution	
			<b>BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
2	12/07/2015	12/11/2015	IP 7111111B	Licensed Operator Requalification Program	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
2	02/29/2016	03/04/2016	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
2	05/02/2016	05/06/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>ENG BI - TRIENNIAL HEAT SINK INSPECTION</b>		<b>3</b>
2	05/16/2016	05/20/2016	IP 7111107T	Heat Sink Performance	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
2	05/23/2016	05/27/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			<b>ISFSI - CASK LOADING INSPECTION</b>		<b>1</b>
2	07/05/2016	08/31/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>ENG BI - COMPONENT DESIGN BASES INSPECTION</b>		<b>6</b>
2	08/01/2016	09/02/2016	IP 7111121	Component Design Bases Inspection	
			<b>BI EP - EP EXERCISE INSPECTION / PI VERIFICATION</b>		<b>5</b>
2	08/08/2016	08/12/2016	IP 7111401	Exercise Evaluation	
2	08/08/2016	08/12/2016	IP 7111406	Drill Evaluation	
2	08/08/2016	08/12/2016	IP 7111408	Exercise Evaluation – Scenario Review	
2	08/08/2016	08/12/2016	IP 71151	Performance Indicator Verification	

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Fermi**  
**Inspection / Activity Plan**  
**09/01/2015 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
2	09/26/2016	09/30/2016	IP 71151	Performance Indicator Verification	
			<b>TI191</b>	<b>- FLEX/MITIGATING STRATEGIES/SFPI</b>	<b>4</b>
2	10/03/2016	10/07/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
2	10/31/2016	11/04/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			<b>OL PREP</b>	<b>- INIT EXAM/MARCH 2017</b>	<b>3</b>
2	02/27/2017	03/03/2017	W90356	OL - INITIAL EXAM - 2017 FEB-MAR - FERMI 2	
			<b>OL EXAM</b>	<b>- INIT EXAM/MARCH 2017</b>	<b>3</b>
2	03/20/2017	03/31/2017	W90356	OL - INITIAL EXAM - 2017 FEB-MAR - FERMI 2	
			<b>ISI</b>	<b>- INSERVICE INSPECTION</b>	<b>1</b>
2	03/20/2017	04/19/2017	IP 7111108G	Inservice Inspection Activities - BWR	
			<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
2	04/03/2017	04/07/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2	04/03/2017	04/07/2017	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>BI PI&amp;R</b>	<b>- BIENNIAL PI&amp;R INSPECTION</b>	<b>4</b>
2	06/05/2017	06/23/2017	IP 71152B	Problem Identification and Resolution	
			<b>BI RP</b>	<b>- RADIATION PROTECTION BASELINE INSPECTION</b>	<b>1</b>
2	06/12/2017	06/16/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2	06/12/2017	06/16/2017	IP 71124.04	Occupational Dose Assessment	
			<b>BI FIRE</b>	<b>- TRIENNIAL FIRE PROTECTION AND BAG TRIP</b>	<b>3</b>
2	08/14/2017	09/15/2017	IP 7111105T	Fire Protection [Triennial]	
			<b>BI EP</b>	<b>- EP BASELINE INSPECTION/ PI VERIFICATION</b>	<b>1</b>
2	10/23/2017	10/27/2017	IP 7111402	Alert and Notification System Testing	
2	10/23/2017	10/27/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2	10/23/2017	10/27/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
2	10/23/2017	10/27/2017	IP 71151	Performance Indicator Verification	
			<b>OL-RQ</b>	<b>- BIENNIAL REQUAL PROGRAM INSPECTION</b>	<b>1</b>
2	10/30/2017	11/03/2017	IP 7111111B	Licensed Operator Requalification Program	

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