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February 6, 2018
NRC-18-0014

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Fermi 2 Power Plant
NRC Docket No. 50-341
NRC License No. NPF-43

Subject: Response to Request for Additional Information Regarding Relief Request No. RR-A37, Revision 1, for the Inservice Inspection Program Third 10-Year Interval

References: 1) DTE Electric Letter to NRC, "Submittal of Revised Relief Request No. RR-A37, Revision 1, for the Inservice Inspection Program Third 10-Year Interval," NRC-17-0062, dated September 26, 2017 (ML17270A036)

In Reference 1, DTE Electric Company (DTE) submitted Relief Request RR-A37, Revision 1, for the third 10-year interval of the Fermi 2 Inservice Inspection (ISI) Program. In an email from Ms. Sujata Goetz to Mr. Jason Haas dated January 19, 2018, the NRC sent DTE a request for additional information (RAI) regarding this relief request. The response to the RAI is enclosed.

No new commitments are being made in this submittal.

Should you have any questions or require additional information, please contact Mr. Scott A. Maglio, Manager – Nuclear Licensing, at (734) 586-5076.

Sincerely,

Keith J. Polson
Senior Vice President and CNO

Enclosure: Response to Request for Additional Information

cc: NRC Project Manager
NRC Resident Office
Reactor Projects Chief, Branch 5, Region III
Regional Administrator, Region III
Michigan Public Service Commission
Regulated Energy Division (kindschl@michigan.gov)

Enclosure to
NRC-18-0014

Fermi 2 NRC Docket No. 50-341
Operating License No. NPF-43

Response to Request for Additional Information

Response to Request for Additional Information

RAI-1

Electric Power Research Institute, Technical Report 1003557, "BWRVIP [Boiling Water reactor Vessel and Internal Project] -108, "Technical Basis for the Reduction of Inspection Requirements for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Inner Radii" and Topical Report BWRVIP-241, "Probabilistic Fracture Mechanics [PFM] Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii" contain PFM analysis results supporting Code Case N-702. BWRVIP-241 contains additional PFM results supporting revision of the evaluation criteria under "Conditions and Limitations" in the safety evaluation (SE) for BWRVIP 108. Section 3 of BWRVIP-108 states that CRD nozzles are eliminated from consideration since they are not full penetration welds. The staff's SE for BWRVIP-108, dated December 19, 2007 (ADAMS Accession No. ML073600374) states the report considered nozzles which are joined with full penetration welds and as a result, the CRD nozzles, which use partial penetration welds, are outside the scope of the report. Furthermore, ASME Code Case N-702 states, in part, that it excludes the control rod drive return line nozzles.

In Attachment 2 of the licensee's letter dated September 26, 2017, in the table "Applicable Components," the licensee included the N10 nozzle, ID# 15 315 IRS, "CRD Nozzle Inside Radius Section" and N10 Nozzle, ID# 15-315, "CRD Nozzle-to-Vessel Weld in its list of components affected." Based on the staff's review of the licensee's application, the inclusion of the N10 nozzle from the CRD System is inconsistent with ASME Code Case N-702, BWRVIP 108 and BWRVIP-241 criteria. In order to expand the scope of BWRVIP-108 and BWRVIP-241 to include the CRD nozzles in the submittal, the licensee would need [to] submit an analysis similar to the one provided in BWRVIP-108 and considers all stresses, including the reduced thermal fatigue stresses and use assumptions relevant to the CRD nozzles.

Please justify the inclusion of the N10 nozzle from the CRD System in this Relief Request for the use of the proposed alternative in Code Case N-702. Alternatively, remove N10 nozzle from the list of applicable components from your application.

RESPONSE

DTE Electric Company is hereby withdrawing the request to include the N10 (CRD) nozzle in Relief Request RR-A37. Attachment 1 provides an updated list of applicable components.

Attachment 1
RR-A37 – Applicable Components

Nozzle	Code Category	Item Number	Identification	Description	System	Isometric
N3	B-D	B3.100	8-316A IRS	Nozzle Inside Radius Section	Main Steam	5361-5
N3	B-D	B3.100	8-316B IRS	Nozzle Inside Radius Section	Main Steam	5361-5
N3	B-D	B3.100	8-316C IRS	Nozzle Inside Radius Section	Main Steam	5361-5
N3	B-D	B3.100	8-316D IRS	Nozzle Inside Radius Section	Main Steam	5361-5
N5	B-D	B3.100	14-316A IRS	Nozzle Inside Radius Section	Core Spray	5361-5
N5	B-D	B3.100	14-316B IRS	Nozzle Inside Radius Section	Core Spray	5361-5
N1	B-D	B3.100	5-314A IRS	Nozzle Inside Radius Section	Reactor Recirc Suction	5361-5
N1	B-D	B3.100	5-314B IRS	Nozzle Inside Radius Section	Reactor Recirc Suction	5361-5
N2	B-D	B3.100	13-314A IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314B IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314C IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314D IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314E IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314F IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314G IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314H IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314J IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N2	B-D	B3.100	13-314K IRS	Nozzle Inside Radius Section	Reactor Recirc Inlet	5361-5
N8	B-D	B3.100	19-314A IRS	Nozzle Inside Radius Section	Jet Pump Instrument	5361-5
N8	B-D	B3.100	19-314B IRS	Nozzle Inside Radius Section	Jet Pump Instrument	5361-5
N7	B-D	B3.100	2-318 IRS	Nozzle Inside Radius Section	RPV Head Vent	5361-5
N6	B-D	B3.100	4-318A IRS	Nozzle Inside Radius Section	RPV Head Spare	5361-5
N6	B-D	B3.100	4-318B IRS	Nozzle Inside Radius Section	RPV Head Spare	5361-5
N3	B-D	B3.90	8-316A	M.S. Nozzle-to-Vessel Weld	Main Steam	5361-5
N3	B-D	B3.90	8-316B	M.S. Nozzle-to-Vessel Weld	Main Steam	5361-5
N3	B-D	B3.90	8-316C	M.S. Nozzle-to-Vessel Weld	Main Steam	5361-5
N3	B-D	B3.90	8-316D	M.S. Nozzle-to-Vessel Weld	Main Steam	5361-5
N5	B-D	B3.90	14-316A	C.S. Nozzle-to-Vessel Weld	Core Spray	5361-5
N5	B-D	B3.90	14-316B	C.S. Nozzle-to-Vessel Weld	Core Spray	5361-5
N1	B-D	B3.90	5-314A	RRI Nozzle-to-Vessel Weld	Reactor Recirc. Suction	5361-5
N1	B-D	B3.90	5-314B	RRI Nozzle-to-Vessel Weld	Reactor Recirc. Suction	5361-5

Attachment 1
RR-A37 – Applicable Components
(continued)

Nozzle	Code Category	Item Number	Identification	Description	System	Isometric
N2	B-D	B3.90	13-314A	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314B	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314C	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314D	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314E	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314F	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314G	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314H	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314J	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N2	B-D	B3.90	13-314K	RRI Nozzle-to-Vessel Weld	Reactor Recirc Inlet	5361-5
N8	B-D	B3.90	19-314A	JPI Nozzle-to-Vessel Weld	Jet Pump Instrument	5361-5
N8	B-D	B3.90	19-314B	JPI Nozzle-to-Vessel Weld	Jet Pump Instrument	5361-5
N7	B-D	B3.90	2-318	Head/Vent Nozzle-to-Vessel Weld	RPV Head Vent	5361-5
N6	B-D	B3.90	4-318A	Spare Nozzle-to-Vessel Weld	RPV Head Spare	5361-5
N6	B-D	B3.90	4-318B	Spare Nozzle-to-Vessel Weld	RPV Head Spare	5361-5