

Peter Dietrich
Senior Vice President and Chief Nuclear Officer

DTE Electric Company
6400 N. Dixie Highway, Newport, MI 48166
Tel: 734.586.4153 Fax: 734.586.1431
Email: peter.dietrich@dteenergy.com



10 CFR 72.7

July 27, 2021
NRC-21-0036

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Director, Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
Washington, DC 20555-0001

Fermi 2 Power Plant
NRC Docket No. 50-341
NRC Docket No. 72-71
NRC License No. NPF-43

Subject: Request for Exemption from 10 CFR 72.44(d)(3) for Fermi 2

In accordance with 10 CFR 72.7, "Specific exemptions," DTE Electric Company (DTE) hereby requests an exemption from 10 CFR 72.44(d)(3). The 10 CFR 72.44(d)(3) requirement specifies that an annual report be submitted to the NRC regarding effluent releases within 60 days after the end of the 12-month monitoring period. Specifically, DTE requests exemption from the 60-day requirement so that the report can instead be submitted prior to May 1 of each year to align with submittal of the Annual Radioactive Effluent Release Report (ARERR). The exemption request is provided in Enclosure 1. The enclosed exemption request is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest per the requirements of 10 CFR 72.7.

DTE requests that the exemption request be approved prior to March 1, 2022, since that is the next time the report under 10 CFR 72.44(d)(3) would require submittal without the exemption.

No new commitments are being made in this submittal.

Should you have any questions or require additional information, please contact Mr. Ertman L. Bennett III, Manager – Nuclear Licensing, at (734) 586-4273.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Dietrich", written over a large, circular scribble.

Peter Dietrich
Senior Vice President and Chief Nuclear Officer

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Enclosure: 1) Request for Exemption from 10 CFR 72.44(d)(3)

cc: NRC Project Manager
NRC Resident Office
Regional Administrator, Region III

**Enclosure 1 to
NRC-21-0036**

**Fermi 2 NRC Docket No. 50-341
Fermi 2 NRC Docket No. 72-71
Operating License No. NPF-43**

Request for Exemption from 10 CFR 72.44(d)(3)

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Summary of Exemption Request

In accordance with the provisions of 10 CFR 72.7, “Specific exemptions,” DTE Electric Company (DTE) requests an exemption from certain requirements of 10 CFR 72.44, “License conditions.” Specifically, exemption is requested from the portion of 10 CFR 72.44(d)(3) which requires, “An annual report be submitted...within 60 days after the end of the 12-month monitoring period.” Rather than meet the 60-day requirement, DTE requests to submit the required information prior to May 1 of each year. No changes are proposed regarding the content of the information to be provided, only the due date.

Background

DTE operates an Independent Spent Fuel Storage Installation (ISFSI) at the Enrico Fermi Atomic Power Plant Unit 2 (Fermi 2) site as a general licensee in accordance with the provisions of 10 CFR 72. 10 CFR 72.13, “Applicability” identifies that 10 CFR 72.44(d)(3) is applicable to activities associated with a specific license. Although 10 CFR 72.13 does not explicitly identify 10 CFR 72.44(d)(3) as being applicable to activities associated with a general license, 10 CFR 72.44(d)(3) is nevertheless applicable to the Fermi 2 ISFSI as described below.

DTE maintains a report documenting the evaluations of the selected dry fuel storage system at Fermi 2, as required by 10 CFR 72.212, “Conditions of general license issued under § 72.210” (hereafter, “the 212 Report”). The 212 Report identifies the Holtec International HI-STORM 100 System as being the one in use at Fermi 2. This system is governed by Certificate of Compliance (CoC) 72-1014, with CoC Amendments 5 and 10 being applicable to Fermi 2. Appendix A of the CoC is the Technical Specifications (TS) for the HI-STORM 100 System. CoC Appendix A for both Amendment 5 and 10 (References 1 and 2) include Section 5.4, “Radioactive Effluent Control Program.” The Section 5.4 program describes that it implements the requirements of 10 CFR 72.44(d) and includes the following three items:

- a. The HI-STORM 100 Cask System does not create any radioactive materials or have any radioactive waste treatment systems. Therefore, specific operating procedures for the control of radioactive effluents are not required. Specification 3.1.1, Multi-Purpose Canister (MPC), provides assurance that there are not radioactive effluents from the SFSC [Spent Fuel Storage Cask].
- b. This program includes an environmental monitoring program. Each general license user may incorporate SFSC operations into their environmental monitoring programs for 10 CFR Part 50 operations.
- c. An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3).

The 212 Report includes Table 4.1-1 which provides a CoC compliance table. Table 4.1-1 contains an entry corresponding to CoC Appendix A Section 5.4, “Radioactive Effluent Control Program.” Similar to item a above, the 212 report reiterates that the HI-STORM 100 System does not release any radioactive materials or require any radioactive waste treatment systems and

the MPC provides assurance that there are no radioactive effluents from the ISFSI under all normal, off-normal, and credible accident conditions. Therefore, specific operating procedures for control of radioactive effluents and maintenance of radioactive waste treatment systems are not required for the ISFSI. As allowed by item b above, the 212 Report also identifies that the radiological and environmental program requirements of the Fermi 2 plant have been expanded to include the ISFSI.

The Fermi 2 Renewed Facility Operating License (No. NPF-43) TS 5.6.3, “Radioactive Effluent Release Report,” requires reporting the quantities of radioactive liquid and gaseous effluents and solid waste from the unit during the previous year prior to May 1 of each year in accordance with 10 CFR 50.36a, “Technical specifications on effluents from nuclear power reactors.” To address item c above, the 212 Report states that:

“Fermi submits dry cask storage effluent reports for the ISFSI in accordance with 10 CFR 72.44(d)(3) requirements. Annual Radioactive Effluent Release Reports (ARERRs) for the reactor site are submitted to the NRC to meet 10 CFR 50 requirements. Radioactive effluent release information related to dry cask storage activities at the ISFSI is incorporated in the ARERR...”

The 10 CFR 72.44(d)(3) annual report requires reporting the quantity of each principal radionuclide released to the environment in liquid and in gaseous effluents during the previous 12 months of operation. Since dry cask storage activities began at Fermi 2 in 2014, DTE has submitted seven ARERRs (References 3 through 9) that have also contained the information required by 10 CFR 72.44(d)(3), consistent with the 212 Report and CoC Appendix A Section 5.4. Each of these submittals has been made in late April and the overall ARERR is identified as being for the previous calendar year (i.e., the general Fermi 2 monitoring period is from January 1 to December 31). These submittals have clearly met the timeliness requirement of “prior to May 1” from TS 5.6.3 of the Fermi 2 Renewed Facility Operating License.

However, a recent review has identified that the 60-day timeliness requirement of 10 CFR 72.44(d)(3) may not have been met in all cases. Given the general Fermi 2 monitoring period is from January 1 to December 31, the “within 60 days” requirement of 10 CFR 72.44(d)(3) would require submittal of the ISFSI-related information by approximately March 1 of each year. In Reference 4, the ISFSI-related discussion identified a different monitoring period end date of March 31 for both References 3 and 4, such that the end of April submittals would have been within 60 days of the end of the monitoring period. In References 5 through 9, the monitoring period dates were either not consistently identified or only the general Fermi 2 monitoring period end date of December 31 was discussed. In these cases, the end of April submittal would not have been within 60 days of the end of the monitoring period. The failure to meet the timeliness requirement for previous submittals has been entered into the Fermi 2 Corrective Action Program (CAP) and led to this proposed request for exemption to prevent recurrence of any issues for future submittals.

Details of Exemption and Reason for Request

As described above, and in accordance with the provisions of 10 CFR 72.7, “Specific exemptions,” DTE requests an exemption from the portion of 10 CFR 72.44(d)(3) which requires, “An annual report be submitted...within 60 days after the end of the 12-month monitoring period.”

DTE has previously submitted a single ARERR to address both the 10 CFR 72.44(d)(3) and the Fermi 2 Renewed Facility Operating License TS 5.6.3 requirements. For the case where a single monitoring period is used for all effluent reports (i.e., January 1 to December 31), the two requirements will by definition have different due dates (March 1 versus May 1). In order to meet both deadlines while using a single monitoring period, DTE would have to either: (1) separate the ISFSI-related information from the ARERR and submit it as a stand-alone report prior to March 1 or (2) reduce the time available for processing and reviewing the operating plant (i.e., non-ISFSI) data such that the single ARERR could be submitted prior to March 1. Either option creates additional burden with no commensurate safety benefit. Alternatively, DTE could administratively create a separate monitoring period for the ISFSI-related information such that the two requirements would have the same due date. Although DTE did this previously in Reference 4, the use of two differing monitoring periods in a single report can cause confusion, as evidenced by the issue entered into the Fermi 2 CAP. This alternative is error-prone and also provides no commensurate safety benefit. For all these reasons, DTE is requesting the exemption.

Under this proposed request, DTE would submit a single ARERR to the NRC prior to May 1 of each year for both the 10 CFR 72.44(d)(3) and Fermi 2 TS 5.6.3 (10 CFR 50.36a) reporting requirements. The single report will utilize a single monitoring period definition of January 1 to December 31. No changes are proposed to the content of the ARERR, including the ISFSI-related portions of the report.

As identified in the CoC and the 212 Report, the ISFSI will have no routine operational events which result in a release of radioactive effluents and is not expected to contribute to reported release, such that the ISFSI is not expected to impact effluent data reporting in the future. This has been demonstrated in that none of the seven previously submitted reports addressing 10 CFR 72.44(d)(3) have identified any releases or effluents associated with the ISFSI. The non-effluent contributor status of the ISFSI, combined with the fact that the reporting date does not change the outcome of the report, supports the request that the Fermi 2 ARERR, which is submitted prior to May 1 of each year, be allowed to serve as the combined reporting mechanism for the Fermi 2 ISFSI and the operating plant. The process of verifying the accuracy of the collected effluent data, ensuring that no effluents are released by the Fermi 2 ISFSI, and maintaining facility integrity would remain the same.

Regulatory Requirements

10 CFR 72.44(d)(3) states, “An annual report be submitted to the Commission in accordance with Sec. 72.4, specifying the quantity of each of the principal radionuclides released to the

environment in liquid and in gaseous effluents during the previous 12 months of operation and such other information as may be required by the Commission to estimate maximum potential radiation dose commitment to the public resulting from effluent releases. On the basis of this report and any additional information that the Commission may obtain from the licensee or others, the Commission may from time to time require the licensee to take such action as the Commission deems appropriate. The report must be submitted within 60 days after the end of the 12-month monitoring period.”

Requirements of 10 CFR 72.7

The specific requirements for granting an exemption from 10 CFR 72 regulations are set forth in 10 CFR 72.7, “Specific exemptions,” which states that the NRC may grant “exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.” The following subsections address each of the three aspects of 10 CFR 72.7 and demonstrate that the NRC should grant the exemption request.

A. The Exemption Request is Authorized by Law

The NRC's authority to grant an exemption from its regulations in 10 CFR 72 is established by law as discussed in 10 CFR 72.7. Therefore, granting an exemption is explicitly authorized by the NRC's regulations.

B. The Exemption Request Will Not Endanger Life or Property or the Common Defense and Security

The schedular exemption from the requirement to submit the Fermi 2 ISFSI effluent release report within 60 days after the end of the 12-month monitoring period for the Fermi 2 ISFSI does not present any risk to the public health and safety. The date by which the report is required to be submitted has no impact whatsoever on the content of the report. Furthermore, submittal of the data continues to be required on an annual basis. Neither the reporting document itself nor its date of submittal are related to public health and safety issues or the assurance of the common defense and security.

C. The Exemption is in the Public Interest

The requested exemption would allow DTE resources and management attention to be more focused on areas of nuclear safety significance. Generally, the public interest would be served by the avoidance of using DTE resources for duplicative preparation and submittal of separate reports for the Fermi 2 ISFSI and the operating plant.

Conclusion

The requested schedular exemption from the 10 CFR 72.44(d)(3) requirement to submit the Fermi 2 ISFSI effluent release report within 60 days after the end of the 12-month monitoring

period has no adverse impact on safety and is consistent with NRC activities to reduce unnecessary regulatory burden. Granting the exemption is further justified based on the ability of Fermi 2 ISFSI operations to assure cask integrity, DTE's continuing program of monitoring and recording radioactive effluents, and reliance upon the existing Fermi 2 TS requirements for submitting annual reports.

Therefore, because the requested exemption is authorized by law, will not endanger life or property or the common defense and security, is in the public interest, and is requested for good cause, DTE respectfully requests that, in accordance with 10 CFR 72.7, the NRC grant the requested exemption.

Precedent

DTE identified that a similar exemption request was made for Peach Bottom (Reference 10). The Peach Bottom exemption request indicated that it was based on a similar exemption request that had been granted for North Anna, which was approved by the NRC staff in Reference 11.

References

1. HI-STORM 100 System 10 CFR 72 Certificate of Compliance 1014 and NRC Safety Evaluation Report, through Amendment 5 (ML082020116, ML082030122, ML082030170).
2. HI-STORM 100 System 10 CFR 72 Certificate of Compliance 1014 and NRC Safety Evaluation Report, Amendment 10 (ML16144A12).
3. Letter from DTE to NRC, NRC-15-0052, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 29, 2015 (ML15120A353).
4. Letter from DTE to NRC, NRC-16-0029, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 29, 2016 (ML16120A509).
5. Letter from DTE to NRC, NRC-17-0038, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 27, 2017 (ML17118A286).
6. Letter from DTE to NRC, NRC-18-0026, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 30, 2018 (ML18120A227).
7. Letter from DTE to NRC, NRC-19-0034, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 30, 2019 (ML19120A513).
8. Letter from DTE to NRC, NRC-20-0027, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 29, 2020 (ML20121A240).

9. Letter from DTE to NRC, NRC-21-0026, "Annual Radioactive Effluent Release Report and Radiological Environmental Operating Report," dated April 28, 2021 (ML21118B032).
10. Letter from PECO Energy Company to NRC, "Peach Bottom Atomic Power Station, Units 2 and 3 Request for Exemption from 10CFR72.44(d)(3) and 10CFR72.72(d)," dated May 27, 1999 (ML20195E605).
11. Safety Evaluation Report for the North Anna Independent Spent Fuel Storage Installation, dated June 30, 1998 (ML060760416).