



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT

DOCKET NO. 72-71

EXEMPTION REQUEST FOR DTE ELECTRIC COMPANY

FERMI-2

INDEPENDENT SPENT FUEL STORAGE INSTALLATION

1.0 SUMMARY

By letter dated July 27, 2021 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML21208A259), DTE Electric Company (DTE) submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for an exemption from requirements in *Title 10 of the Code of Federal Regulations* (10 CFR) Part 72. More specifically, DTE requested an exemption from the timing requirement in 10 CFR 72.44(d)(3) which 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 for the Fermi 2 independent spent fuel storage installation (ISFSI).

As discussed in more detail below, the NRC staff cannot grant DTE an exemption from 10 CFR 72.44(d)(3) because, under 10 CFR 72.13, "Applicability," this provision does not apply to general licensees such as DTE. That said, under 10 CFR 72.212, DTE must follow the technical specifications (TS) for the spent fuel casks it uses, and its relevant TS require DTE to submit the 10 CFR 72.44(d)(3) effluent monitoring report. Thus, DTE must make the 10 CFR 72.44(d)(3) report. Consequently, the NRC is, on its own initiative, considering granting DTE an exemption from the applicable requirements such that DTE would receive relief equivalent to the relief it requested. In practice, this means that the NRC would be exempting DTE from 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214 pursuant to 10 CFR 72.7, "Specific exemptions," for the Fermi-2 (Fermi 2), Independent Spent Fuel Storage Installation (ISFSI).

In its July 27, 2021 letter, DTE requested relief regarding the 60-day requirement in 10 CFR 72.44(d)(3) so that it may submit the annual effluent release report for the Fermi 2 ISFSI prior to May 1, rather than on or before March 1, of each year. According to DTE, this would allow it to align its submission of the 10 CFR 72.44(d)(3) report with its submittal of the Annual Radioactive Effluent Release Report (ARERR) as required by 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." As with the exemption as requested, the exemption the NRC is considering granting on its own initiative, would, if granted, only provide relief from the 60-day requirement so that the annual effluent release report for the Fermi 2 ISFSI may be submitted prior to May 1, rather than on or before March 1, of each year. If granted, the exemption would only change the due date and not the content of the information that the licensee would provide in the annual report.

Enclosure

This safety evaluation report documents the NRC staff's review and evaluation of the exemption the NRC staff is considering granting, upon its own initiative, for Fermi 2 ISFSI. Under 10 CFR 72.7, "Specific exemptions," the Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of 10 CFR Part 72 as it determines are authorized by law and will not endanger life, property, or the common defense and security, and are otherwise in the public interest.

2.0 REGULATORY BACKGROUND

Fermi 2, located in Newport, Michigan, has been storing boiling water reactor spent fuel in its ISFSI since 2014. DTE operates its ISFSI at the Fermi 2 site as a general licensee in accordance with the provisions of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste." Fermi 2 uses Amendment Nos. 5 and 10 to Certificate of Compliance (CoC), No. 1014 — Holtec International's HI-STORM 100 system.

Section 72.44(d)(3) of 10 CFR requires:

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.

Per 10 CFR 72.13(c), 10 CFR 72.44(d)(3) does not apply to general licensees. That said, several provisions in 10 CFR 72.212 require general licensees to use storage casks in accordance with their respective TS. More specifically, per 10 CFR 72.212(a)(2), the general license is limited to storage of spent fuel in casks approved under 10 CFR Part 72. Both 10 CFR 72.212(b)(2) and (b)(4) require general licensees to provide information to the NRC which includes cask certificate number(s) and the CoC amendment number(s) for casks used by the licensees and when applying an amended CoC. The NRC is considering granting DTE an exemption from 10 CFR 72.212(a)(2), (b)(2), and (b)(4) only to the extent that those three provisions require licensees to use casks exactly as described in the relevant TS. Under 10 CFR 72.212(b)(3), general licensees must ensure that each cask they use conforms to the terms, conditions, and specifications of a CoC or an amended CoC listed in 10 CFR 72.214. Per 10 CFR 72.212(b)(5)(i), general licensees must perform written evaluations establishing that the cask, once loaded with spent fuel or once the changes authorized by an amended CoC have been applied, will conform to the terms, conditions, and specifications of a CoC or an amended CoC listed in 10 CFR 72.214. Pursuant to 10 CFR 72.212(b)(11), general licensees must, among other things, comply with the terms, conditions, and specifications, of the CoC and, for those casks to which the licensee has applied the changes of an amended CoC, the terms, conditions, and specifications of the amended CoC.

Finally, 10 CFR 72.214 lists the casks approved for use by general licensees under the conditions specified in their CoCs.

3.0 PROPOSED EXEMPTION

By letter dated July 27, 2021, DTE submitted an exemption request to deviate from the requirements in 10 CFR 72.44(d)(3) for Fermi 2. The requirement in 10 CFR 72.44(d)(3) states 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 relief from the 60-day requirement so that the report may be submitted prior to May 1, rather than on or before March 1, of each year. This would allow DTE to align submission of this report with the timing of the 10 CFR Part 50 ARERR submission.

As noted above, under 10 CFR 72.13(c), 10 CFR 72.44(d)(3) does not apply to general licensees such as DTE. Therefore, the NRC cannot grant DTE the exemption as requested. As described above, however, general licensees can only store spent fuel in casks with CoC listed in 10 CFR 72.214 and, among other things, must ensure that the casks conform to the terms, conditions, and specifications of a CoC or an amended CoC.

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 referred to as "212 Report"). According to the 212 Report, DTE stores spent fuel in the Holtec International HI-STORM 100 Cask System, CoC No. 1014. More specifically, DTE uses CoC Amendments Nos. 5 and 10 at Fermi 2. Appendix A of CoC No. 1014, TS for the HI-STORM 100 Cask System, Section 5.4, "Radioactive Effluent Control Program," Subsection C states, "An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3)." As noted above, per 10 CFR 72.44(d)(3), the annual report must be submitted "within 60 days after the end of the 12-month monitoring period." The NRC staff notes that Fermi 2's 12-month monitoring period runs from January 1 to December 31. Thus, per Appendix A of CoC No. 1014, currently DTE must submit the annual effluent monitoring report for its ISFSI on or before March 1 of every year.

Fermi 2 Renewed Facility Operating License (No. NPF-43) TS 5.6.3, "Radioactive Effluent Release Report," requires the licensee to submit a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released 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." DTE stated that, in order to address CoC No. 1014, Appendix A, Section 5.4.c, its 212 Report states, in part, the following:

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.

At Fermi 2, a single monitoring period is used for all effluent reports (i.e., January 1 to December 31), including the annual report per CoC No. 1014, Amendment Nos. 5 and 10, Appendix A for its ISFSI and the ARERR for its operating reactor. Because of the different requirements, there are two different due dates (on or before March 1 versus prior to May 1) for these reports while using a single monitoring period.

As discussed in more detail below, with its exemption request, DTE sought to delay its deadline to submit the CoC No. 1014, Amendment Nos. 5 and 10, Appendix A annual report from on or

before March 1 to before May 1 to align the reporting deadline with the reporting deadline for the ARERR.

As noted above, because 10 CFR 72.44(d)(3) does not directly apply to DTE, the NRC staff cannot grant DTE the exemption as requested. However, if granted, an exemption from 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214, would achieve the licensee's requested effect — moving the CoC No. 1014 Appendix A requirement for submitting an annual report pursuant to 10 CFR 72.44(d)(3) from on or before March 1 to before May 1.

4.0 SAFETY EVALUATION

In accordance with the provision of 10 CFR 72.7, “[t]he Commission may, upon application by any interested person or upon its own initiative, grant such 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.”

By letter dated July 27, 2021, DTE requested an exemption for Fermi 2 ISFSI from 10 CFR 72.44(d)(3) pursuant to 10 CFR 72.7, in order to deviate from the requirements in CoC No. 1014, Amendment Nos. 5 and 10 Appendix A, “Technical Specifications (TS) for the HI-STORM 100 Cask System,” Section 5.4, “Radioactive Effluent Control Program,” Subsection C.

As noted above, the NRC staff cannot grant the exemption as requested because 10 CFR 72.44(d)(3) does not apply to DTE. The NRC staff can provide equivalent relief, however, by granting an exemption from the requirements of 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214, upon its own initiative. Consequently, the NRC staff is, on its own initiative, evaluating whether an exemption from the requirements of 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4) (b)(5)(i), (b)(11), and 72.214 meets the 10 CFR 72.7 criteria.

Authorized by Law

The Commission has the legal authority to issue exemptions from the requirements of 10 CFR Part 72 as provided in 10 CFR 72.7. The NRC staff has determined that issuance of this exemption is consistent with the Atomic Energy Act of 1954, as amended, and not otherwise inconsistent with NRC regulations or other applicable laws. Therefore, issuance of the exemption is authorized by law.

Will Not Endanger Life or Property or the Common Defense and Security

As the exemption the NRC is considering granting upon its own initiative would give DTE relief equivalent to the request relief, the NRC staff has reviewed and considered the information that DTE provided.

As noted above, per Appendix A to CoC No. 1014 Amendment Nos. 5 and 10, Section 5.4, “Radioactive Effluent Control Program,” Subsection C states, “An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3).” In its submittal, DTE requested 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.” As discussed above, the NRC staff cannot grant the exemption as requested, but can achieve the same effect by granting DTE an exemption from the requirements of 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214.

DTE's original exemption request stated that the date by which the report is required to be submitted has no impact on the report's content. Similarly, the exemption the NRC staff is considering granting on its own initiative would not change the content of the relevant reports. DTE also noted with the exemption as requested, it would still have to submit effluent monitoring data on an annual basis, meaning that the overall frequency with which it must submit data would remain unchanged. This is also true for the exemption the NRC staff is considering granting on its own initiative. DTE stated that its 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. As the exemption under consideration would, if granted, provide equivalent relief, to that requested by DTE. The only substantive difference between the two exemptions are the sections in 10 CFR that they cite. Thus, the NRC staff concludes that just as the exemption as originally requested would not change DTE's process for verifying the accuracy of the effluent data, the exemption the NRC is considering granting on its own initiative would not change said process.

In its request, DTE asserted that the date by which DTE must submit the document is unrelated to "the assurance of the common defense and security." As with the DTE's exemption as requested, the exemption the NRC staff is considering does not affect any requirements related to the common defense and security. Finally, DTE informed the NRC staff that Fermi 2 has a work instruction in place which provides relevant plant procedures that cover effluent monitoring, and data from these procedures are compiled to prepare the Fermi 2 annual effluent release report and ARERR. These plant procedures are subject to periodic inspections by the NRC. If DTE were to discover a problem with the effluents during the monitoring period, it would need to resolve the problem in accordance with its respective plant procedures, as appropriate. The annual effluent release report and the ARERR are not the means DTE would use to resolve the issue. Further, as noted above, DTE must still submit effluent data to the NRC on an annual basis and this exemption, if granted, would not substantively change the report's contents. Based on the fact that the reporting frequency remains unchanged, and that the submittal date is unrelated to the resolution of issues discovered with the monitoring program, the NRC staff concludes granting the exemption would not endanger life or property.

Based on the review, the NRC staff finds that allowing DTE to submit a single report, which covers the annual report described in Appendix A to CoC No. 1014, Amendment Nos. 5 and 10, Section 5.4, "Radioactive Effluent Control Program," Subsection C, and the ARERR reporting requirements per Fermi 2 Technical Specifications 5.6.3, to the NRC prior to May 1 of each year, using a single monitoring period, will not endanger life or property or common defense and security.

Otherwise in the Public Interest

According to DTE, the exemption as requested would allow DTE to focus resources and management attention on areas of safety significance. DTE also asserted that the submittal of separate reports for Fermi 2's operating reactor and ISFSI would entail using resources for duplication of report preparation and data verification. The NRC staff reviewed the information provided by DTE. As the exemption that the NRC staff is considering granting on its own initiative achieves the same effect as the exemption requested by DTE, the NRC staff concludes that the information provided by DTE is equally applicable to that exemption. As granting this exemption allows DTE to focus resources on issues of safety significance, the NRC staff concluded that granting this exemption, upon its own initiative, is in the public interest.

5.0 ENVIRONMENTAL CONSIDERATION

The NRC staff considered whether there would be any significant environmental impacts associated with the exemption from the reporting requirement in 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214. The NRC staff determined that the proposed action belongs to a category of actions which the Commission has determined to be a categorical exclusion. Specifically, the exemption meets the categorical exclusion in 10 CFR 51.22(c)(25)(vi)(B).

A categorical exclusion for reporting requirements is provided under 10 CFR 51.22(c)(25)(vi)(B) if the criteria in 10 CFR 51.22(c)(25)(i)–(v) are also satisfied. The proposed action constitutes a timing change, from on or before March 1 to prior to May 1 of every year, pertaining to the annual effluent release reporting for the Fermi 2 ISFSI which DTE must submit. The proposed action is unrelated to any operational restriction. Accordingly, in its review of the exemption which the NRC is considering granting on its own initiative, the NRC staff determined that the proposed exemption satisfies the following 10 CFR 51.22(c)(25) requirements:

- (i) There is no significant hazards consideration;
- (ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite;
- (iii) There is no significant increase in individual or cumulative public or occupational radiation exposure;
- (iv) There is no significant construction impact;
- (v) There is no significant increase in the potential for or consequences from radiological accidents; and
- (vi) The requirements from which an exemption is sought involve:
 - (B) Reporting requirements;

Therefore, the NRC's approval of this exemption is categorically excluded under 10 CFR 51.22(c)(25)(vi)(B), and there are no extraordinary circumstances present that would preclude reliance on this exclusion. Pursuant to 10 CFR 51.22(b), an environmental assessment or an environmental impact statement is not required in connection with the approval of this exemption.

6.0 CONCLUSION

Based on the above, the NRC staff finds that this exemption (1) is authorized by law, (2) will not endanger life or property or the common defense and security, and (3) is otherwise in the public interest. Therefore, the NRC hereby grants DTE, on its own initiative, an exemption from 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214, pursuant to 10 CFR 72.7, permitting Fermi 2 ISFSI to deviate from the requirements in CoC No. 1014, Amendment Nos. 5 and 10, Appendix A, Section 5.4, "Radioactive Effluent Control Program," Subsection C, which states that "An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3)" to the extent that DTE will now submit the relevant report prior to May 1 as opposed to on or before March 1 every year. All other relevant requirements shall be met.