

ML 16007 A 008 EPA algal blooms 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

DEC 21 2015

REPLY TO THE ATTENTION OF:

11/6/2015  
RFR 68881

E-19J

RULES AND DIRECTIVES  
BRANCH  
11/16/15

2016 JAN -4 PM 4:05

RECEIVED

12

Cindy Bladey  
Chief, Rules, Announcements, and Directives Branch  
Division of Administrative Services  
Office of Administration  
Mail Stop: 16 3WFN-06-A44MP  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Re: Draft Plant-Specific Supplement 55 to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Fermi 2 Nuclear Power Plant, Monroe County, Michigan - CEQ #20150313**

Dear Ms. Bladey:

The U.S. Environmental Protection Agency has reviewed the Draft Supplemental Environmental Impact Statement (EIS) for the above-mentioned project prepared by the Nuclear Regulatory Commission (NRC). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

Fermi 2 is a single-unit boiling water reactor located in Frenchtown Township, Michigan. It began commercial operation in July 1985; the license expires in 2025. Fermi 2 sits on 1,260 acres on the western shores of Lake Erie. The site also includes the permanently-shut-down Fermi 1 unit, auxiliary and support facilities, and part of the Detroit River International Wildlife Refuge. DTE Electric Company (the applicant) applied to the NRC to extend Fermi 2's operating license for an additional 20 years. No refurbishment activities associated with license renewal are proposed. NRC's preferred alternative is to grant the license renewal.

The NRC developed a Generic EIS to streamline the license renewal process based on the premise that environmental impacts of most nuclear power plant license renewals are similar. NRC develops facility-specific Supplemental EIS documents as facilities apply for license renewal. EPA acknowledges that mitigation measures that are un-related to nuclear safety and security cannot be included in the NRC license. However, because we find these measures to further reduce environmental impacts, we continue to recommend NRC share and promote such

SOWSI Review Complete

1

FRIDS=ADM-03

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (100% Post-Consumer)

Template = ADM-013

edd = E. Kegan (enk)

recommendations and measures with the applicant. We encourage the applicant to incorporate mitigation measures into the project, wherever possible.

Based on our review of the Draft Supplemental EIS, EPA recommends a rating of **Environmental Concerns – Adequate Information (EC-1)**. This is based, primarily, on cumulative impacts to Lake Erie water quality. We also recommend several clarifications to improve the quality of the document. We have the following comments and recommendations on the Draft Supplemental EIS.

### **Cumulative Impacts - Aquatic Resources**

EPA is generally concerned about increasing intensity of algal blooms in Lake Erie. We appreciate the discussion throughout the document about the linkages among and potential impacts to algal blooms, climate change, and water temperature as a result of continued discharge from Fermi 2. We acknowledge that the National Pollution Discharge Elimination System (NPDES) permit for Fermi 2's primary outfall (Outfall 001) does not include numerical temperature or nutrient limits. NRC concludes the cumulative impact to aquatic resources from all stressors, including Fermi 2, is LARGE. While Fermi 2 is not solely responsible for algal bloom issues in the western Lake Erie basin, EPA believes that all contributors should continue to monitor and adaptively manage their discharges in order to reduce environmental impacts, particularly as water temperature continues to increase from climate change.

**Recommendation:** EPA recommends NRC and the applicant commit to ongoing monitoring of algal blooms in the vicinity of the Fermi NPDES outfalls. We recommend the applicant take reasonable steps to further reduce the temperature of discharge as a means of mitigating contributions to algal blooms in the western basin of Lake Erie.

### **Cumulative Impacts - General**

EPA notes the discussion of the proposed and licensed Fermi 3 on the existing Fermi site throughout 4.16 (*Cumulative Impacts*). However, Fermi 3 was not included in Table E-1 (*Actions and Projects Considered in Cumulative Analysis*) found in Appendix E. Some subsections of the cumulative impacts analysis explicitly include Fermi 3, while others do not. The Draft Supplemental EIS is unclear if the cumulative impacts analysis included impacts from Fermi 3 for all categories of impacts.

**Recommendation:** The Final Supplemental EIS should be revised to adequately account for Fermi 3 in the cumulative impacts analysis, as appropriate, or explain why inclusion of Fermi 3 is not warranted.

### **Terrestrial Ecology**

Portions of the Fermi site are part of the Detroit River International Wildlife Refuge, managed by the U.S. Fish and Wildlife Service. EPA commends the applicant's efforts to maintain its Wildlife Management Plan and Wildlife Habitat Council Certification. As describes in Section



4.6 (*Terrestrial Resources*), these efforts includes biannual qualitative prairie vegetation surveys and periodic wildlife surveys, and adherence to their own Environmental Monitoring Conduct Manual.

Editorial

EPA appreciates the colors maps provided in the document. We recognize the added costs, but find color maps, where appropriate, improve the readability of the document.

The document appears to have a printing error, in which page 4-35 is located between pages 4-39 and 4-40.

EPA continues to recommend clearer distinctions between NRC assigned categories of impacts (SMALL, MODERATE, and LARGE). We have reviewed the discussion on page 1-3 and applicable sections of the Generic EIS regarding levels of significance. However, we continue to recommend more information be provided in the site-specific analyses to describe the difference among levels, particularly when a range is provided. For instance, EPA finds the discussion of cumulative impacts to terrestrial ecology from climate change to have appropriate and clear demarcations between MODERATE and LARGE; we recommend taking this approach to other categories.

Thank you for the opportunity to comment on this document. If you have any questions or wish to discuss any aspect of this document, please contact Elizabeth Poole of my staff at 312-353-2087 or [poole.elizabeth@epa.gov](mailto:poole.elizabeth@epa.gov).

Sincerely,



Kenneth A. Westlake  
Chief, NEPA Implementing Section  
Office of Enforcement and Compliance Assurance

Enclosure (1):            Summary of Ratings

Cc:                        Elaine Keegan, U.S. Nuclear Regulatory Commission