

**NUCLEAR REGULATORY COMMISSION**

**[Docket No. 72-0010; NRC-2013-0251]**

**Proposed License Renewal of License No. SNM-2506 for the Prairie Island  
Independent Spent Fuel Storage Installation**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering the renewal of License No. SNM-2506, issued in 1993 and held by Northern States Power Company, a Minnesota Corporation (NSPM) (doing business as Xcel Energy) for the operation of the Prairie Island Nuclear Generating Plant (PINGP) site-specific Independent Spent Fuel Storage Installation (ISFSI), for an additional 20 years.

**ADDRESSES:** Please refer to Docket ID **NRC-2013-0251** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0251**. Address questions about NRC dockets to Ms. Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**  
You may obtain publicly-available documents online in the ADAMS Public Documents collection

at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “[ADAMS Public Documents](#)” and then select “[Begin Web-based ADAMS Search](#).” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC’s PDR:** You may examine and purchase copies of public documents at the NRC’s PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

**FOR FURTHER INFORMATION CONTACT:** Jean Trefethen, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-0867, e-mail: [Jean.Trefethen@nrc.gov](mailto:Jean.Trefethen@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Introduction.**

The NRC is considering issuance of a renewal of License No. SNM-2506 to Northern States Power Company (NSPM) for the operation of the Prairie Island Nuclear Generating Plant (PINGP) site-specific Independent Spent Fuel Storage Installation (ISFSI) located within the city limits of Red Wing in Goodhue County, Minnesota for an additional 40 years. Therefore, as required by part 51 of Title 10 of the *Code of Federal Regulations* (10 CFR), “Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions,” which implement the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321

et seq), the NRC prepared an environmental assessment (EA) (ADAMS Accession No. ML15098A026). Based on the results of the EA, the NRC has determined that an environmental impact statement is not required for the proposed license renewal, and is issuing a finding of no significant impact (FONSI).

In 1993, the NRC issued a 20-year license to NSPM to receive, possess, store, and transfer spent nuclear fuel generated at the PINGP, Units 1 and 2, in the Prairie Island (PI) ISFSI. License SNM-2506 currently allows NSPM to store up to 48 transnuclear-40 (TN-40) casks and TN-40 high thermal (TN-40HT) casks at the PI ISFSI. The PI ISFSI is located within the facility boundary of the PINGP, which is located within the city limits of Red Wing in Goodhue County, Minnesota, approximately 45 kilometers (km) [28 miles (mi)] southeast of the Minneapolis–St. Paul metropolitan area.

On October 20, 2011, the licensee submitted their application for a 40-year license renewal for the PI ISFSI (ADAMS Accession No. ML113140518). This application was supplemented by letter(s), dated February 29, 2012 (ADAMS Accession No. ML12065A073) and dated April 26, 2012 (ADAMS Accession No. ML121170406).

In October 2012, the NRC and the Prairie Island Indian Community (PIIC) entered into a Memorandum of Understanding (MOU) (ADAMS Accession No. ML12284A456). The MOU acknowledges the PIIC's special expertise in the areas of historic and cultural resources, socioeconomics, land use, and environmental justice as they relate to license renewal for the PI ISFSI, and establishes a cooperating agency relationship between the NRC and the PIIC. The MOU also defines the roles and responsibilities of both entities and the process used to prepare an EA that incorporates and reflects the PIIC's views in the areas of special expertise.

In November 2013 (78 FR 69460), to further the environmental review process, the NRC published the draft EA and the draft FONSI for the proposed PI ISFSI license renewal in the *Federal Register* for public review and comment). Comments were received from the applicant

(NSPM), the Minnesota Department of Natural Resources, the City of Red Wing, and the PIIC. Appendix B of the final EA contains the NRC's responses to those comments.

## **II. Environmental Assessment.**

The proposed action is whether to renew the site-specific ISFSI license for an additional 40 years provided that NRC requirements are met. If approved, NSPM would continue to possess and store the PINGP, Units 1 and 2, spent fuel at the PI ISFSI for an additional 40 years under the requirements in 10 CFR part 72, "Licensing Requirements for the Independent Storage of Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste."

The PI ISFSI is needed to provide additional spent fuel storage capacity so that the PINGP Units 1 and 2 can continue to operate. The PINGP Units 1 and 2 operate under separate NRC licenses (DPR-42 and DPR-60, respectively) that will expire in 2033 and 2034, respectively. Spent fuel assemblies from PINGP Units 1 and 2 not already stored at the PI ISFSI are currently stored onsite in a spent fuel pool. The PINGP spent fuel pool does not have the needed capacity to store all the spent nuclear fuel that the PINGP Units 1 and 2 would generate through the end of their license term. The PI ISFSI provides additional spent fuel storage capacity necessary for NSPM to continue to operate the PINGP Units 1 and 2 until a permanent facility (or facilities) is available for offsite disposition of the spent fuel.

In the EA, the NRC staff describes the affected environment and evaluates the potential environmental impacts from the proposed 40-year renewal of license SNM-2506 on land use; transportation; socioeconomics; climatology, meteorology and air quality; geology and soils; water resources; ecology and threatened and endangered species; visual and scenic resources; noise; historic and cultural resources; public and occupational health and safety; waste

management; and environmental justice. The EA also discusses the alternatives to the proposed action, including the no-action alternative. The NRC staff also evaluated the potential environmental impacts from decommissioning of the PI ISFSI, taking into consideration an additional 40 years of operation. Additionally, the NRC staff analyzed the cumulative impacts from past, present, and reasonably foreseeable future actions when combined with the potential environmental impacts of the proposed action.

The NRC staff evaluated potential environmental impacts and categorized the impacts as follows:

- SMALL-environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
- MODERATE-environmental effects are sufficient to alter noticeably, but not to destabilize important attributes of the resource.
- LARGE-environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

The NRC staff finds that the impacts from the proposed action would be small for all environmental resource areas. In addition, the NRC staff concludes that there would be no disproportionately high and adverse impacts to minority and low-income populations and that federally listed threatened and endangered species would not be affected by the continued operation of the PI ISFSI during the proposed license renewal period.

The NRC staff is also performing a detailed safety analysis of the NSPM's license renewal application to assess compliance with 10 CFR part 20, "Standards for Protection Against Radiation," and 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." The NRC staff's analysis will be documented in a separate safety evaluation report (SER). The NRC staff's decision whether to renew the NSPM's PI ISFSI license as proposed

will be based on the results of the NRC staff's review as documented in the final EA, the final FONSI, and in the SER.

Based on its review of the proposed action in the EA relative to the requirements set forth in 10 CFR part 51, the NRC staff has determined that renewal of NRC license SNM-2506, which would authorize continued operation of the PI ISFSI in Goodhue County, Minnesota, for an additional 40 years, will not significantly affect the quality of the human environment. No significant changes in NSPM's authorized operations for the PI ISFSI were requested as part of the license renewal application. Approval of the proposed action would not result in any new construction or expansion of the existing ISFSI footprint beyond that previously approved. The ISFSI is a passive facility that produces no liquid or gaseous effluents. No significant radiological or nonradiological impacts are expected from continued normal operations. Occupational dose estimates from routine monitoring activities and transfer of spent fuel for disposal are expected to be at as low as reasonably achievable levels and are expected to be within the limits of 10 CFR 20.1201. The estimated annual dose to the nearest potential member of the public from ISFSI activities is 0.02 millisieverts/year (mSv/yr) [2.20 millirem/year (mrem/yr)], which is below the 0.25 mSv/yr [25 mrem/yr] limit specified in 10 CFR 72.104(a) and the 1 mSv/yr (100 mrem/yr) limit in 10 CFR 20.1301(a)(1).

### **III. Finding of No Significant Impact.**

Based on its review of the proposed action, in accordance with the requirements in 10 CFR part 51, the NRC staff has concluded that the proposed action, amendment of NRC Special Nuclear Materials License No. SNM-2506 for the PI ISFSI located in Goodhue County, Minnesota, will not significantly affect the quality of the human environment. Therefore, the

NRC staff has determined, pursuant to 10 CFR 51.31, that preparation of an environmental impact statement is not required for the proposed action and a FONSI is appropriate.

Dated at Rockville, Maryland, this 25<sup>th</sup> day of June, 2015.

For the Nuclear Regulatory Commission.

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