



## NUCLEAR REGULATORY COMMISSION

[Docket No. 70-7027; NRC-2022-0201]

TRISO-X, LLC;

**Special Nuclear Material License Application**

**for the TRISO-X Fuel Fabrication Facility;**

**Draft Environmental Impact Statement**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment a draft Environmental Impact Statement (EIS) for a Special Nuclear Material License Application for the TRISO-X Fuel Fabrication Facility. TRISO-X, LLC (TRISO-X) would be authorized to possess and use special nuclear material to manufacture high-assay low enriched uranium (HALEU) fuel. The proposed fuel fabrication facility would be located on a 110-acre site at the Horizon Center in Oak Ridge, Roane County, Tennessee.

**DATES:** Members of the public are invited to submit comments by **November 17, 2025**.

Comments received after that date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before that date.

**ADDRESSES:** You may submit comments by any of the following methods; however, the NRC encourages electronic comment submission through the **Federal rulemaking website**:

- **Federal rulemaking website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2022-0201**. Address questions about Docket IDs in Regulations.gov to Bridget Curran; telephone: 301-415-1003; email: [Bridget.Curran@nrc.gov](mailto:Bridget.Curran@nrc.gov). For technical questions, contact the individual(s) listed in the "For Further Information Contact" section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Jill Caverly, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-7674; email: Jill.Caverly@nrc.gov.

**SUPPLEMENTARY INFORMATION:**

**I. Obtaining Information and Submitting Comments**

**A. Obtaining Information**

Please refer to Docket ID **NRC-2022-0201** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this action using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2022-0201**.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin ADAMS Public Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, at 301-415-4737, or by email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov). The draft EIS is available in ADAMS under Accession No. ML25267A128.

- **NRC’s PDR:** The PDR, where you may examine and order copies of publicly available documents, is open by appointment. To make an appointment to visit the PDR, please send an email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov) or call 1-800-397-4209 or 301-415-

4737, between 8 a.m. and 4 p.m. eastern time (ET), Monday through Friday, except Federal holidays.

- **Public Library:** A copy of the draft EIS for a Special Nuclear Material License Application for the TRISO-X Fuel Fabrication Facility will be available for public review at the Oak Ridge Public Library, 1401 Oak Ridge Turnpike, Oak Ridge, TN 37830.

#### B. Submitting Comments

The NRC encourages electronic comment submission through the **Federal Rulemaking website** (<https://www.regulations.gov>). Please include Docket ID **NRC-2022-0201** in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at <https://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

## II. Discussion

The NRC has prepared a draft EIS as part of its environmental review of the TRISO-X application for a 40-year license to possess and use special nuclear material at a fuel fabrication facility (FFF) to be constructed on a 110-acre greenfield site in Oak Ridge, Roane County, Tennessee. This draft EIS assesses the potential environmental impacts of the TRISO-X license application and the associated proposal to construct, operate, and decommission the FFF, as well as an alternative to the proposed action.

The proposed federal action is the issuance of a license, under part 70 title 10 of the *Code of Federal Regulations* (10 CFR), “Domestic Licensing of Special Nuclear Material” to authorize TRISO-X to possess and use special nuclear material to manufacture HALEU fuel at a to-be-constructed FFF. The FFF would produce tri-structural isotropic–based coated particles and final fuel forms using uranium enriched to less than 20 weight percent uranium-235. Issuance of a license enabling the possession and use of special nuclear material at the FFF would be for a first-of-its-kind fabrication operation in the United States.

The draft EIS for TRISO-X’s license application includes the NRC staff’s preliminary analysis that evaluates the environmental impacts of the proposed action and the no-action alternative to the proposed action. The NRC staff based its recommendation on the following factors:

- The NRC staff’s review of TRISO-X’s environmental report (included as part of the TRISO-X license application) and associated responses from TRISO-X to requests from the NRC staff for clarifying information;
  - The NRC staff’s review of comments received as part of the scoping process;
  - The NRC staff’s communications with Federal, State, and local agencies, as well as Tribal officials; and
- The NRC staff’s independent environmental review.

The NRC staff’s preliminary recommendation, unless safety issues mandate otherwise, is that the NRC issue the license to possess and use special nuclear material to TRISO-X.

Dated: October 21, 2025.

For the Nuclear Regulatory Commission.

Kimyata Savoy, Acting Deputy Director,  
Division of Rulemaking, Environmental,  
and Financial Support,  
Office of Nuclear Material Safety,  
and Safeguards.

