



**TRISO-X, LLC**  
801 Thompson Avenue  
Rockville, MD 20852  
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TX0-LTR-0011\_0

**~~THE ENCLOSURES TO THIS LETTER CONTAIN SECURITY-RELATED, EXPORT  
CONTROLLED, AND PROPRIETARY INFORMATION – WITHHOLD IN  
ACCORDANCE WITH 10 CFR 2.390~~**

*ELECTRONIC DELIVERY*

November 4, 2022

Director, Office of Nuclear Material Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

- References:
- 1) Docket No. 70-7027
  - 2) TRISO-X letter from Jennifer Wheeler to Director, Office of Nuclear Material Safety and Safeguards, "TRISO-X Fuel Fabrication Facility License Application Submittal," dated April 5, 2022
  - 3) NRC letter from Senior Project Manager, Office of Nuclear Material Safety and Safeguards, to Jennifer Wheeler, "Requests for Supplemental Information for the Acceptance Review of the TRISO-X, LLC License Application for a Fuel Fabrication Facility," dated August 9, 2022
  - 4) TRISO-X letter from Jennifer Wheeler to Director, Office of Nuclear Material Safety and Safeguards, "TRISO-X Fuel Fabrication Facility Environmental Report Submittal," dated September 23, 2022
  - 5) TRISO-X letter from Jennifer Wheeler to Director, Office of Nuclear Material Safety and Safeguards, "Response to Requests for Supplemental Information for the Acceptance Review of the TRISO-X Fuel Fabrication Facility License Application Submittal," dated October 13, 2022

Subject: **License Application and ISA Summary Changes Associated with Responses to Requests for Supplemental Information for the Acceptance Review of the TRISO-X Fuel Fabrication Facility License Application Submittal**

TRISO-X, LLC (TRISO-X) hereby submits License Application (LA) and Integrated Safety Analysis (ISA) Summary changes associated with responses to Requests for Supplemental Information (RSI) (Reference 5), regarding the acceptance review of the application to possess and use special nuclear material in the TRISO-X Fuel Fabrication Facility (Reference 2).

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Enclosures 2 and 3 of this letter provide an updated LA Chapter 1, Revision 2, and ISA Summary, Revision 2, which incorporate commitments made in RSI responses submitted on October 13, 2022 (Reference 5). The only portion of the LA that required revisions due to RSI responses was Chapter 1, and Revision 2 is a complete replacement of the previous version of Chapter 1. The ISA Summary revisions involved several sections in the document, and Revision 2 is a complete replacement of the previous version of the document. Enclosures 2 and 3 include two attachments each. Attachment 1 includes changes showing text insertions (underlined), deletions (strikethroughs), and revision bars. Attachment 2 is a clean copy with changes accepted and includes revision bars only. Enclosure 2 includes in-text references to the Environmental Report, which is Reference 4 of this letter.

**Requests for Withholding**

Portions of the enclosed submittal contain information that TRISO-X requests be withheld from public disclosure. The following regulations and guidance were consulted to develop the document markings and specific withholding requests as noted in the description of each enclosure's contents.

- 10 CFR 2.390, *Public inspections, exemptions, requests for withholding*
- 10 CFR 110, *Export and Import of Nuclear Equipment and Material*, and other related regulations 10 CFR 810 and 15 CFR 730-774
- NRC Regulatory Issue Summary 2005-31, Revision 1, *Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material*

**Summary of this Submittal**

The following Enclosures and Attachments are included with this letter.

**Enclosure 1 – Affidavit**, as required by 10 CFR 2.390(b) to support TRISO-X requests to withhold the below-mentioned proprietary information.

**Enclosure 2 – License Application Chapter 1 (Non-Proprietary)**

Attachment 1 – Changes to License Application Chapter 1

Attachment 2 – License Application Chapter 1, Revision 2, November 4, 2022

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**Enclosure 3 – ISA Summary (Proprietary, Security-related, and/or Export  
Controlled Information)**

Attachment 1 – Changes to ISA Summary

Attachment 2 – ISA Summary, Revision 2, November 4, 2022

If there are questions or if additional information is required, please contact me at (865) 850-0893  
or [jwheeler@x-energy.com](mailto:jwheeler@x-energy.com).

Sincerely,

DocuSigned by:  
  
3894B6E8041A46D...

Jennifer K. Wheeler, P.E.  
Director, Regulatory Affairs

TRISO-X, LLC  
801 Thompson Avenue  
Rockville, MD 20852

Copy: Mr. Matthew Bartlett, US NRC, NMSS  
TRISO-X Regulatory Records File

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## ENCLOSURE 1

## AFFIDAVIT

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**AFFIDAVIT  
PROPRIETARY / FINANCIAL INFORMATION**

I, Jennifer K. Wheeler, Director, Regulatory Affairs, for TRISO-X, LLC, (TRISO-X) that to the best of my knowledge and beliefs, make the following representation contained herein:

- A. The following document(s) which TRISO-X requests to have withheld from public disclosure pursuant to Title 10 of the Code of Federal Regulations (10 CFR) 2.390 is:

Enclosure 3 – Integrated Safety Analysis Summary, Revision 2

- B. The information contained in the document(s) cited in A above has been held in confidence by TRISO-X, in that it contains financial information as defined in 10 CFR 2.390(a) that is not customarily disclosed to the public.
- C. The information contained in the document(s) cited in A above has been held in confidence by TRISO-X, in that it contains trade secrets or commercial information as defined in 10 CFR 2.390(a) that is not customarily disclosed to the public.
- D. The public disclosure of the information contained in the document(s) cited in A above would likely cause substantial economic harm to the competitive advantage held by TRISO-X because it contains distinguishing aspects of a process, methodology, or components which provide a competitive advantage in product optimization or marketability.
- E. Unrestricted disclosure of the information contained in the document(s) cited in A above would jeopardize the position of TRISO-X in the market and, thereby give a market advantage to any competitors who would benefit from access to substantial TRISO-X sensitive information related to the company's nuclear fuel manufacturing methods.
- F. The public disclosure of the information contained in the document(s) cited in A above is likely to cause substantial harm to the competitive position of TRISO-X because it would enhance the ability of competitors to address similar safety, regulatory and licensing issues without commensurate expenses.
- G. The information that TRISO-X requests to be withheld from public disclosure is contained in the entire document(s) as so marked. Non-proprietary versions of the documents would essentially be blank pages and are therefore not provided.

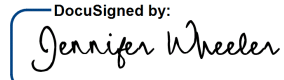
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Therefore, TRISO-X requests the versions of the submitted information marked as proprietary / financial be withheld from the public disclosure pursuant to 10 CFR 2.390(b) and Section 103(b) of the Atomic Energy Act of 1954, as amended.

The averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief:

DocuSigned by:  
 November 4, 2022 | 3:45 PM EDT  
389486E8041A40D...  
**Jennifer K. Wheeler** Date  
Director, Regulatory Affairs  
TRISO-X, LLC

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