



The Grainger College of Engineering

Department of Nuclear, Plasma, & Radiological Engineering
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February 29, 2024

Docket No.: 99902094
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Subject: Submittal of revised University of Illinois Topical Report, “University of Illinois Urbana-Champaign High Temperature Gas-cooled Research Reactor: Applicability of Nuclear Regulatory Commission Regulations,” Release 03, dated February 28, 2024

By letter dated December 9, 2022 (ML22343A283), the University of Illinois Urbana-Champaign (UIUC) submitted the Topical Report (TR), “University of Illinois Urbana-Champaign High Temperature Gas-cooled Research Reactor: Applicability of Nuclear Regulatory Commission Regulations” (ML22343A284) to the U.S. Nuclear Regulatory Commission (NRC) for acceptance review and generation of a review schedule. A 12 month review for the TR was requested and approval of the methodology used and determinations of applicability/non-applicability of specific regulations identified in the TR as the licensing basis for the UIUC research reactor. NRC approval of the process for treatment of exemptions was also requested; approval for needed exemptions will be requested as part of the application submittal process.

By email dated February 9, 2023 (ML23020A284), the NRC provided UIUC the completeness determination for the TR. Based on a preliminary review of the TR, the NRC staff determined that it provided sufficient information for the NRC staff to begin a detailed technical review.

On May 31, 2023, the NRC provided UIUC a list of discussion items regarding the TR titled: ‘UIUC Topical Report: “Applicability of Nuclear Regulatory Commission Regulations” Discussion Topics’ (ML23151A544).

On June 8, 2023, a public meeting was held between NRC and UIUC project staff to discuss the items that were listed in the document titled ‘UIUC Topical Report: “Applicability of Nuclear Regulatory Commission Regulations” Discussion Topics.’ Based on discussions during that meeting, UIUC agreed to provide the NRC with a new revision of the TR to address the NRC staff’s questions.

By letter dated August 30, 2023 (ML23242A330), UIUC submitted the revised version (Release 02) of the “University of Illinois Urbana-Champaign High Temperature Gas-cooled Research Reactor: Applicability of Nuclear Regulatory Commission Regulations” TR (ML23242A331).

By email dated October 18, 2023 (ML23291A332), the NRC staff requested additional information and clarification regarding Release 02 of the TR in the form of six (6) request for additional information (RAI).

By letter dated December 11, 2023 (ML23345A237), UIUC provided responses to the RAI (ML23345A238).

On January 24, 2024 (ML24012A035), a public meeting was held between NRC and UIUC project staff to discuss the RAI responses as well as additional discussion topics as presented by the NRC staff during the meeting (ML24031A628). On February 7, 2024, a summary of the January 24, 2024 (ML24031A627), public meeting was posted on the NRC Agencywide Documents Access and Management System (ADAMS).

Based on the RAI responses and discussion topics during the January 24, 2024, public meeting, enclosed as Attachment 1 is the revised University of Illinois TR, "University of Illinois Urbana-Champaign High Temperature Gas-cooled Research Reactor: Applicability of Nuclear Regulatory Commission Regulations," Release 03, dated February 16, 2024.

The revised TR does not contain any commercially sensitive information and can be posted for unrestricted access by the public. Questions or other requests related to the TR should be directed to Caleb Brooks at csbrooks@illinois.edu or (217) 265-0519.

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 29, 2024.

Sincerely,



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Attachments:

1. UIUC TR: "University of Illinois Urbana-Champaign High Temperature Gas-cooled Research Reactor: Applicability of Nuclear Regulatory Commission Regulations," Release 03, dated February 28, 2024

Cc:

University of Illinois Urbana-Champaign
Tim Grunloh
Les Foyto

Ultra Safe Nuclear Corporation
Zackary Rad
Jeff Perry

U.S. Nuclear Regulatory Commission



Edward Helvenston

