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THE GRAINGER COLLEGE OF ENGINEERING

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August 5, 2022

Docket No.: 99902094

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

Subject: UIUC White Paper Submission, 'Proposed Contents of PSAR Using NUREG-1537 Guidance for the Micro Modular Reactor (MMR®)'

This letter accompanies the submission of the white paper titled, 'Proposed Contents of PSAR Using NUREG-1537 Guidance for the Micro Modular Reactor (MMR®)', which provides an overview of the alignment between the NUREG-1537 guidance with the proposed MMR research and test reactor.

The purpose of this report is to identify (a) items that UIUC plans to include in the PSAR for the purposes of obtaining a CP only and (b) items that are specified in NUREG-1537 but are non-applicable due to unique design characteristics of the MMR. Additionally, some information required in the license application is not yet available because design and analysis work has not been finalized. This report will identify content appropriate for a HTGR non-power reactor and other content which may be deferred from the PSAR to the Final Safety Analysis Report (FSAR) without compromising the NRC's ability to adequately review and approve the CP application.

With this submission, UIUC requests NRC staff review of the document to facilitate mutual understanding on the PSAR contents. Communication with NRC staff is requested within 60 days to discuss the white paper contents. Specifically, feedback is requested on the following:

- 1. Sufficiency of information (both topics covered and level of detail) for submittal of a PSAR.
- 2. For methodologies and content that conform with NUREG-1537, confirm that the interpretation of the guidance discussed herein is correct.
- 3. For design details that are not consistent with or addressed in NUREG-1537, confirm that the information planned to be provided is appropriate.
- 4. For content that is not expected to be available at the time of PSAR submittal, confirm that the information proposed to be provided in the PSAR is sufficient for the CP review.

This white paper does not contain any commercially sensitive information and can be posted for unrestricted access by the public.

Questions or other requests related to this white paper should be directed to Caleb Brooks at <u>csbrooks@illinois.edu</u> or (217) 265-0519.

Sincerely,



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Enclosures:

1. 'Proposed Contents of PSAR Using NUREG-1537 Guidance for the Micro Modular Reactor (MMR®),' White Paper, IMRDD-MMR-22-02, Release 1

Cc: <u>UIUC</u> Clive Townsend Rizwan Uddin

USNC Daniel Stout Adam Masten

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