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Subject: Westinghouse comments on NRC draft white paper “Micro-Reactor Licensing and Deployment Considerations: Fuel Loading and Operational Testing at a Factory”

Westinghouse Electric Company LLC (Westinghouse) appreciates the recent engagement with the U.S. Nuclear Regulatory Commission (NRC) staff on a variety of topics related to the deployment of microreactors, including the release of a draft white paper¹ and the public meeting held on September 11, 2023² (in addition to the other public engagements that led to these activities). While Westinghouse understands that there is not currently a public comment period on this draft white paper, the topics discussed therein are of utmost importance to the deployment of the **eVinci™** microreactor. Therefore, Westinghouse is providing the following comments to the NRC staff as they prepare for interactions with both the Advisory Committee on Reactor Safeguards (ACRS) and the Commission on these topics.

Westinghouse agrees with and endorses the comments provided by the Nuclear Energy Institute (NEI) on this draft white paper. In addition, Westinghouse wants to emphasize the importance of resolution of these microreactor policy issues to the deployment of the **eVinci™** microreactor. Specifically, the issue of allowing fuel load of a factory-manufactured reactor module at a manufacturing facility is the highest priority policy issue to Westinghouse. This is a topic that Westinghouse has discussed with the NRC staff since 2022 and is encouraged by the proposed near-term resolution as documented in the draft white paper. Westinghouse would also like to emphasize a point made by the NRC staff in the draft white paper (and cited in NEI’s comment letter) that “loading fuel in a factory without an operating license or combined license could improve regulatory efficiency of licensing and deployment of factory-fabricated microreactors without a reduction in safety.” Westinghouse encourages the NRC staff to continue with the proposed timeline for ACRS interaction and sending a SECY to the Commission in the near future to ensure timely resolution of this issue. In addition, Westinghouse would like to recommend that the NRC staff send the planned SECY to the Commission as a Notation Vote paper in order to achieve regulatory

¹ NRC Staff Prepared White Paper “Micro-Reactor Licensing and Deployment Consideration: Fuel Loading and Operational Testing at a Factory,” August 2023 Draft – Released to Support ACRS Interaction (ADAMS ML23236A598) and Enclosure to NRC Staff Prepared White Paper “Micro-Reactor Licensing and Deployment Considerations: Fuel Loading and Operational Testing at a Factory,” August 2023 Draft – Released to Support ACRS Interaction (ADAMS ML23236A597).

² NRC Public Meeting Announcement, “Information Meeting on the U.S. Nuclear Regulatory Commission (NRC) Staff Draft White Paper on Licensing and Deployment Considerations for Factory-Fabricated Microreactors,” September 11, 2023 (ADAMS ML23250A288).

clarity and certainty on the matter of establishing a new position that "removal of physical features to preclude criticality" is a suitable analogue to "fuel load" to define the start of "operation" for a factory-fabricated reactor module. In addition, while this will provide the necessary near-term solution that Westinghouse and other microreactor developers need to fully enact the envisioned deployment models, Westinghouse requests NRC consider pursuing rulemaking as a longer-term solution to change the definition of fuel load to achieve regulatory efficiency and certainty by minimizing the need for future exemption requests.

Finally, during the September 11, 2023 public meeting, NRC staff indicated that they would be interested in hearing stakeholder input on priorities for addressing the other policy issues discussed in the white paper enclosure. To support that request, Westinghouse would offer the following as its highest priority issues (after resolution of the topics discussed in the body of the draft white paper). Note, these items are not listed in order of priority:

1. Licensing of replacement reactor modules
2. Timeframe for authorization to operate, including timing of ITAAC closure
3. Staffing levels (for both operators and security) for microreactor operating sites (including required training, certification, and licensing)
4. Transportation of fueled factory-fabricated reactor modules
5. Storage of fuel after irradiation (including potential redefinition of spent fuel)
6. Decommissioning and decommissioning funding
7. Siting in densely-populated areas

Westinghouse appreciates the NRC staff's consideration of all comments provided in this comment letter and the comment letter submitted by NEI and looks forward to continued discussions with the NRC staff on these and other policy issues related to microreactor deployment.

If you need additional information, please contact Anthony Schoedel of my staff at 412-374-6118 or schoedaj@westinghouse.com.

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