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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 12, 2022

Mr. Anthony J. Schoedel, Manager Advanced Reactors Licensing Engineering Westinghouse Electric Company 1000 Westinghouse Drive Cranberry Township, PA 16066

SUBJECT: WESTINGHOUSE ELECTRIC COMPANY - U.S. NUCLEAR REGULATORY

COMMISSION FEEDBACK REGARDING EVINCI WHITE PAPERS WAVE 3

Dear Mr. Schoedel:

By letter dated June 30, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22181A134), Westinghouse Electric Company (Westinghouse), submitted for the U.S. Nuclear Regulatory Commission (NRC) staff's review, eight white papers:

- EVR-SAR-GL-004, "Code Verification and Validation Plan for Design Basis Safety Analysis"
- EVR-ACS-GL-001, "Advanced Logic System v2 Platform Licensing Strategy"
- EVR-PGD-GL-003, "Core Component ASME Design Qualification Strategy"
- EVR-PGD-GL-005, "Emergency Planning Zone Sizing Methodology"
- EVR-SEC-G0-002, "Preliminary Assessment Against 10 CFR 73.55 Requirements"
- EVR-RXS-GL-001, "Heat Pipe Design, Qualification and Testing"
- EVR-RXS-GL-002, "Nuclear Design"
- EVR-TPS-G0-002, "U.S. Transportation Strategy"

These white papers describe proposed aspects of the eVinci micro-reactor for which Westinghouse desires to have pre-application interactions. The NRC staff was asked to perform a review of these papers and provide written feedback on each. The NRC staff completed its review of the white papers and has found no major deficiencies for this stage of the pre-application process. The enclosures of this letter provide the NRC staff's detailed observations for Westinghouse to consider.

The Enclosures 1, 2, 3, 4, 5, 6, 7 and 8 to this letter contain proprietary information. When separated from the enclosures this document is DECONTROLLED.

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If you have questions regarding this matter, please contact Donna Williams at (301) 415-1322 or via email at Donna. Williams@nrc.gov.

Sincerely,

Signed by Jessup, William on 10/12/22

William Jessup, Chief Advanced Reactor Licensing Branch 1 Division of Advanced Reactors and Non-Power Production and Utilization Facilities Office of Nuclear Reactor Regulation

Project No.: 999902079

Enclosures:

- 1. NRC Feedback Regarding EVR-SAR-GL-004, "Code Verification and Validation Plan for Design Basis Safety Analysis"
- 2. NRC Feedback Regarding. EVR-ACS-GL-001, "Advanced Logic System v2 Platform Licensing Strategy"
- 3. NRC Feedback Regarding 4. EVR-PGD-GL-003, "Core Component ASME Design Qualification Strategy"
- 4. NRC Feedback Regarding 5. EVR-PGD-GL-005, "Emergency Planning Zone Sizing Methodology"
- 5. NRC Feedback Regarding 6. EVR-SEC-G0-002, "Preliminary Assessment Against 10 CFR 73.55 Requirements"
- 6. NRC Feedback Regarding 7. EVR-RXS-GL-001, "Heat Pipe Design, Qualification and Testing"
- 7. NRC Feedback Regarding 8. EVR-RXS-GL-002, "Nuclear Design"
- 8. NRC Feedback Regarding 9. EVR-TPS-G0-002, "U.S. Transportation Strategy"

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