



FRP 2025-009

Ref. Docket Number 99902021

October 28, 2025

Attention: James Delosreyes
Document Control Desk
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Responses to the Requests for Additional Information (RAIs) on EPRI Report Nos. 3002028674/5 "LOCA [Loss-of-Coolant Accident] Analysis of Fuel Fragmentation, Relocation, and Dispersal [FFRD] for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants: Evaluations of Cladding Rupture in High Burnup Fuel Rods Susceptible to Fine Fragmentation," Revision 0

References:

- [1] Issuance of Second-Round RAIs for EPRI Report 3002028674/5 LOCA Analysis of FFRD for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants, 07/15/25, ML25192A005 (pkg).
- [2] *Loss-of-Coolant-Accident-Induced Fuel Fragmentation, Relocation, and Dispersal with Leak-Before-Break Credit – Alternative Licensing Strategy*, EPRI, Palo Alto, CA: 2024. 3002028673.
- [3] LOCA Analysis of Fuel Fragmentation, Relocation, and Dispersal for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants – Proprietary, Evaluation of Cladding Rupture in High Burnup Fuel Rods Susceptible to Fine Fragmentation. EPRI, Palo Alto, CA: 2024. 3002028674.
- [4] LOCA Analysis of Fuel Fragmentation, Relocation, and Dispersal for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants – Non-Proprietary, Evaluation of Cladding Rupture in High Burnup Fuel Rods Susceptible to Fine Fragmentation. EPRI, Palo Alto, CA: 2024. 3002028675.
- [5] EPRI Affidavit Docket Number#99902021, "Request for Withholding of the following Proprietary Document: "Responses to the Requests for Additional Information (RAIs) on EPRI Report Nos. 3002028674/5 "LOCA [Loss-of-Coolant Accident] Analysis of Fuel

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Fragmentation, Relocation, and Dispersal [FFRD] for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants: Evaluations of Cladding Rupture in High Burnup Fuel Rods Susceptible to Fine Fragmentation," Revision 0" FRP 2025-009.

Enclosed are copies of the proprietary and non-proprietary versions of Responses to the Requests for Additional Information (RAIs) on EPRI Report Nos. 3002028674/5 "LOCA [Loss-of-Coolant Accident] Analysis of Fuel Fragmentation, Relocation, and Dispersal [FFRD] for Westinghouse 2-Loop, 3-Loop and 4-Loop Plants: Evaluations of Cladding Rupture in High Burnup Fuel Rods Susceptible to Fine Fragmentation," Revision 0. This submittal contains responses for the RAI transmitted via NRC letter to Dr. Aylin Kucuk (EPRI) dated July 15, 2025 [1]. The responses are provided in support of an application for the review and approval of the Alternate Licensing Strategy, which addresses PWR LOCA-Induced Fuel Fragmentation, Relocation, and Dispersal, submitted in April 2024 [2]. In particular, the responses are related to the supporting report cited in references [3] and [4].

The RAI responses include revisions to Chapter 4 and relevant sections of Chapter 5 of EPRI Report 3002028674/5. These revisions will be incorporated into the main body of the report in the final approved version.

The enclosure contains information proprietary to Westinghouse Electric Company LLC ("Westinghouse"), and it is supported by an Affidavit signed by Westinghouse, the owner of the information. The Affidavit sets forth the basis on which the information may be withheld from public disclosure by the Nuclear Regulatory Commission ("Commission") and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations. Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the proprietary aspects or the supporting Westinghouse Affidavit should reference CAW-25-059 and should be addressed to Jerrod A. Ewing, Manager, Operating Plants Licensing, Westinghouse Electric Company, 1000 Westinghouse Drive, Building 1, Cranberry Township, PA 16066.

The enclosure also contains information owned by Electric Power Research Institute ("EPRI"). It is requested under 10 CFR Section 2.390(a)(4) that the Commission withhold from public disclosure the information identified in the enclosed Affidavit (Steve Swilley, October 28, 2025) [5] consisting of the proprietary information owned by EPRI. The Affidavit supporting this request is enclosed.

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EPRI welcomes any discussions and /or questions relating to the information enclosed. In case the NRC rejects this affidavit for protection for any reason, EPRI request that the NRC contact the EPRI project manager (kmuftuoglu@epri.com) and the EPRI Order Center (vvaughn@epri.com) with an offer of an opportunity for EPRI to withdraw this submittal. Any questions on this topic should be directed to EPRI personnel as described in the Affidavit.

If you have any questions on this subject, please contact the ALS project manager, Kurshad Muftuoglu, by telephone at 650-855-2152 or by e-mail at kmuftuoglu@epri.com.

Sincerely,



Aylin Kucuk
Program Manager, Nuclear Fuels

FRP 2025-009

Attachment(s)

c: Fred Smith, EPRI
Kurshad Muftuoglu, EPRI
Jennie Rankin, NRC
Scott Krepel, NRC
Lois James, NRC

Commonwealth of Pennsylvania:

County of Butler:

- (1) I, Jerrod Ewing, Manager, Operating Plants Licensing; Cranberry Township, PA, have been specifically delegated and authorized to apply for withholding and execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse).
- (2) I am requesting the proprietary portions of FRP 2025-009 be withheld from public disclosure under 10 CFR 2.390.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged, or as confidential commercial or financial information.
- (4) Pursuant to 10 CFR 2.390, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse and is not customarily disclosed to the public.
 - (ii) The information sought to be withheld is being transmitted to the Commission in confidence and, to Westinghouse's knowledge, is not available in public sources.
 - (iii) Westinghouse notes that a showing of substantial harm is no longer an applicable criterion for analyzing whether a document should be withheld from public disclosure. Nevertheless, public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar technical evaluation justifications and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

- (5) Westinghouse has policies in place to identify proprietary information. Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:
- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
 - (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage (e.g., by optimization or improved marketability).
 - (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
 - (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
 - (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
 - (f) It contains patentable ideas, for which patent protection may be desirable.
- (6) The attached documents are bracketed and marked to indicate the bases for withholding. The justification for withholding is indicated in both versions by means of lower-case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower-case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (5)(a) through (f) of this Affidavit.

I declare that the averments of fact set forth in this Affidavit are true and correct to the best of my knowledge, information, and belief. I declare under penalty of perjury that the foregoing is true and correct.

Executed on: 10/10/2025

A handwritten signature in black ink that reads "Jerrod Ewing". The signature is written in a cursive style with a large, looped initial "J".

Signed electronically by

Jerrod Ewing