

Program Management Office 20 International Drive Windsor, Connecticut 06095

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BAW-2192, Revision 0, Supplement 2P, Revision 0 BAW-2192, Revision 0, Supplement 2NP, Revision 0 Project Number 99902037

October 8, 2019

OG-19-219

U.S. Nuclear Regulatory Commission Document Control Desk 11555 Rockville Pike Rockville, MD 20852

Subject: PWR Owners Group <u>Submittal of BAW-2192, Revision 0, Supplement 2P/NP, Revision 0</u> (PA-MSC-1481)

Reference: BAW-2192, Revision 0, Supplement 1P-A and Supplement 1NP-A, Revision 0, "Low Upper-Shelf Toughness Fracture Mechanics Analysis of Reactor Vessels of B&W Owners Reactor Vessel Working Group for Levels A & B Service Loads"

The purpose of this letter is to submit the following Topical Report (TR) Supplement developed by the Pressurized Water Reactor Owners Group (PWROG) in program PA-MSC-1481 for extension of the Linde 80 Weld Low Upper-Shelf Toughness Fracture Mechanics Analysis to the Rotterdam Weld:

BAW-2192, Revision 0, Supplement 2P, Revision 0, "Low Upper-Shelf Toughness Fracture Mechanics Analysis of Reactor Vessels of B&W Owners Reactor Vessel Working Group for Levels A & B Service Loads"

Supplement 1P-A of BAW-2192 was approved by SER dated December 2018 and the final –A versions of the proprietary and non-proprietary reports were issued in April 2019.

The purpose of Supplement 2P is to compare newly acquired Rotterdam weld J-integral resistance data to the B&WOG J-integral resistance Model 6B reported in Appendix A of Supplement 1P-A, and to provide justification that the J-R Model 6B may be applied to the Rotterdam welds that were used to fabricate the reactor vessels described in the TR.

U.S. Nuclear Regulatory Commission Document Control Desk OG-19-219

The PWROG requests the following from the NRC relative to review of this topical report.

For the additional Rotterdam welds in scope of the reports--finding that PWROG J-integral resistance Model 6B may be applied to Rotterdam welds that were used to fabricate the reactor vessels described in the TR.

The enclosed TR Supplement (Enclosures 1) contains information proprietary to Framatome Inc.; which is supported by an affidavit signed by Framatome Inc., owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b) (4) of Section 2.390 of the Commission's regulations. The affidavit is included as Enclosure 3.

Accordingly, it is respectfully requested that the information which is proprietary to Framatome Inc. 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 of the information or supporting Framatome affidavit should reference this letter and should be addressed to Mr. Philip Opsal, Manager, Product Licensing, Framatome Inc., 3315 Old Forest Road, Lynchburg, Virginia 24506-0935.

TR Classification: As discussed above, this TR Supplement addresses the J-integral resistance Model 6B applicability to Rotterdam welds that will be used for evaluating upper shelf energy (equivalent margins analyses).

Specialized Resource Availability: This TR Supplement is being submitted to the NRC for review and approval so that the NRC approved version can be utilized for performing plant-specific evaluations of the equivalent margins analyses for the applicable units.

This letter transmits BAW-2192, Revision 0, Supplement 2P, Revision 0 (Enclosure 1), and BAW-2192, Revision 0, Supplement 2NP, Revision 0 (Enclosure 2). A notarized Affidavit is provided as Enclosure 3.

Applicability: This TR Supplement is applicable to reactor vessels described in the TR.

NRC Review Schedule

The PWROG requests that the NRC complete their review of the TR by August 15, 2020.

U.S. Nuclear Regulatory Commission Document Control Desk OG-19-219 October 8, 2019 Page 3 of 3

Correspondence related to the non-proprietary transmittal should be addressed to:

Mr. W. Anthony Nowinowski, Program Manager PWR Owners Group, Program Management Office Westinghouse Electric Company 1000 Westinghouse Drive, Suite 172 Cranberry Township, PA 16066

If you have any questions, please do not hesitate to contact me at (434) 832-2382 or Mr. W. Anthony Nowinowski, Program Manager of the PWR Owners Group, Program Management Office at (412) 374-6855.

Sincerely yours,

King Schraden

Ken Schrader Chief Operating Officer & Chairman Pressurized Water Reactor Owners Group

KJS:DRPB:am

Enclosure	1: BAW-2192, Revision 0, Supplement 2P, Revision 0, "Low Upper-Shelf
	Toughness Fracture Mechanics Analysis of Reactor Vessels of B&W Owners
	Reactor Vessel Working Group for Levels A & B Service Loads" (Proprietary)
Enclosure	2: BAW-2192, Revision 0, Supplement 2NP, Revision 0, "Low Upper-Shelf
	Toughness Fracture Mechanics Analysis of Reactor Vessels of B&W Owners
	Reactor Vessel Working Group for Levels A & B Service Loads"
Enclosure	3: Affidavit for Withholding Proprietary Information
cc with enclosures:	
L. Fields, US NRC	
PWROG Materials Committee Representatives in MSC-1481, Revision 3	
cc without enclosures:	
PWROG Steering and Management Committee	
PWROG Licensing Committee	
PW	ROG PMO
B. Grambau, Framatome	

M. Chandrashekar, Framatome

- P. Thallapragada, Framatome
- M. Rinckel, Framatome
- A. Nana, Framatome
- P. Opsal, Framatome
- R. Stewart, Framatome
- G. Elliott, Framatome
- D. Page Blair, Framatome

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AFFIDAVIT

1. My name is Philip A. Opsal. I am Manager, Product Licensing for Framatome Inc. (formally known as AREVA Inc.), and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by Framatome to determine whether certain Framatome information is proprietary. I am familiar with the policies established by Framatome to ensure the proper application of these criteria.

3. I am familiar with the Framatome information contained in Topical Report, BAW-2192, Revision 0, Supplement 2P Revision 0, "Low Upper-Shelf Toughness Fracture Mechanics Analysis of Reactor Vessel of B&W Owners Reactor Vessel Working Group for Levels A & B Service Loads", referred to herein as "Document." Information contained in this Document has been classified by Framatome as proprietary in accordance with the policies established by Framatome for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by Framatome and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information." 6. The following criteria are customarily applied by Framatome to determine whether information should be classified as proprietary:

- (a) The information reveals details of Framatome's research and development plans and programs or their results.
- (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
- (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for Framatome.
- (d) The information reveals certain distinguishing aspects of a process,
 methodology, or component, the exclusive use of which provides a
 competitive advantage for Framatome in product optimization or marketability.
- (e) The information is vital to a competitive advantage held by Framatome, would be helpful to competitors to Framatome, and would likely cause substantial harm to the competitive position of Framatome.

The information in this Document is considered proprietary for the reasons set forth in paragraphs 6(b), 6 (c), 6(d) and 6(e) above.

7. In accordance with Framatome's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside Framatome only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. Framatome policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Rep Q. Opal Philip A. Opsal

Commonwealth of Virginia)) ss. City of Lynchburg)

SUBSCRIBED before me this ______ day of ______ day of ______, 2019.

Ella Frances Carr-Payne NOTARY PUBLIC, COMMONWEALTH OF VIRGINIA MY COMMISSION EXPIRES: 8/31/2021 Reg. # 309873

