

framatome

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December 16, 2021
NRC:21:034

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

**Request for Review and Approval of ANP-10311P-A, Revision 1, Supplement 1P,
Revision 0, "COBRA-FLX: ORFEO-HMP Critical Heat Flux Correlation"**

Framatome Inc. (Framatome) requests the NRC's review and approval of the topical report ANP-10311P-A, Revision 1, Supplement 1P, Revision 0, "COBRA-FLX: ORFEO-HMP Critical Heat Flux Correlation."

This topical report documents a critical heat flux correlation as a supplement to the COBRA-FLX topical report. The CHF correlation is based on CHF tests performed for (i) several different grid designs without flow mixing devices, including HMP grids and (ii) HTP grids. This correlation is referred to as ORFEO-HMP and it is applicable to fuel assemblies equipped with HMP grids and HTP grids. This report describes the correlation development, data sets, and the resulting application design limits and applicability ranges.

Framatome would appreciate NRC approval of this Supplement by December 2022 to support customer applications.

Framatome considers some of the material contained in the enclosure to be proprietary. As required by 10 CFR 2.390(b), an affidavit is enclosed to support the withholding of the information from public disclosure. Proprietary and non-proprietary versions of the enclosed document are provided.

There are no commitments within this letter or its enclosures.

If you have any questions related to this information please contact Ms. Gayle Elliott, Deputy Director, Licensing and Regulatory Affairs, by telephone at (434) 832-3347, or by e-mail at Gayle.Elliott@framatome.com.

Sincerely,



Gary Peters, Director
Licensing & Regulatory Affairs
Framatome Inc.

YGD1
NRR

cc: N. Otto
Project 728

Enclosures:

- 1) ANP-10311P-A, Revision 1, Supplement 1P, Revision 0
- 2) ANP-10311NP-A, Revision 1, Supplement 1NP, Revision 0
- 3) Notarized Affidavit for Withholding of Proprietary Information

AFFIDAVIT

1. My name is Gayle Elliott. I am Deputy Director, Licensing and Regulatory Affairs, for Framatome Inc. (Framatome) 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 ANP-10311P-A, Revision 1, Supplement 1P, Revision 0, entitled, "COBRA-FLX: ORFEO-HMP Critical Heat Flux Correlation," dated December 2021 and 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(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.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: December 16, 2021.

ELLIOTT Gayle Digitally signed by ELLIOTT Gayle
Date: 2021.12.16 10:13:23 -05'00'

Gayle Elliott