

FRAMATOME ANP, Inc.

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NRC:03:081

Document Control Desk
ATTN: Chief, Planning, Program and Management Support Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Draft Safety Evaluation for BAW-10231

Ref.: 1. Letter, Stephen Dembek (NRC) to James F. Mallay (Framatome ANP), "Draft Safety Evaluation for Framatome ANP Topical Report BAW-10231P, 'COPERNIC Fuel Rod Design Code' Chapter 13, MOX Applications (TAC No. MB7547)," November 20, 2003.

Framatome ANP appreciates receiving the safety evaluation (SE) for BAW-10231 (Reference 1). This approval will be used to support MOX applications.

As discussed with the NRC, there are three inaccuracies contained in Reference 1 that need to be addressed. Attachment 1 describes these matters and provides clarifications for each.

Additionally in Reference 1, the NRC requested that Framatome ANP review the draft safety evaluation for proprietary material. Framatome ANP has determined that the draft safety evaluation does not contain proprietary material.

Framatome respectfully requests that these inaccuracies be addressed in the final corrected SE.

Very truly yours,



James F. Mallay, Director
Regulatory Affairs

Enclosures

cc: D. G. Holland
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D045

Attachment 1

Inaccuracy 1: *Section 1.0, first paragraph, fourth sentence states, "Currently, there are two types of PuO₂ in MOX fuel designs used in commercial nuclear reactors: reactor-grade PuO₂ fuel and weapons-grade (WG) PuO₂ fuel".*

Clarification 1: Weapons-grade fuel is not currently used in commercial nuclear reactors. Framatome ANP suggests rewording this sentence to: "Currently, there are two types of PuO₂ in MOX fuel designs."

Inaccuracy 2: *The units for burnup for MOX fuel used throughout the SE are indicated as GWd/MTU.*

Clarification 2: The units for burnup for MOX fuel should be indicated as GWd/MThm (gigawatt days per metric tonne of initial heavy metal).

Inaccuracy 3: *Section 1.0, second paragraph, last sentence states, "However, the staff notes that the MOX irradiated data provided by FANP and audit verifications are only up to a peak rod average burnup of 50 GWd/MTU."*

Clarification 3: Data provided by FANP exceeded peak rod average burnup of 50 GWd/MT in numerous instances. The original submittal, BAW-10231, Rev. 0, pages 5-48 and 5-49 (and pages 9-34 and 9-35), identifies six MOX data points in excess of 50 GWd/MThm.

Reference 8 of the draft SE contains numerous data points in excess of 50 GWd/MThm that extend up to and include the following peak rod average burnups:

Figure 1: 53 GWd/MT

Figure 8: 55 GWd/MT

Figure 9: 60 GWd/MT

Figure 10: 60 GWd/MT

Figure 11: 60 GWd/MT

Figure 12: 55 GWd/MT

Additionally, Reference 18 of the draft SE contains numerous data points in excess of 50 GWd/MThm that extend up to and include the following peak rod average burnups:

Figure 2: 59 GWd/MT

Figure 3: 60 GWd/MT

Figure 4: 63 GWd/MT

FANP suggests this sentence state: "To support this request, FANP provided MOX irradiated data, including audit verifications, to peak rod average burnups extending to 63 GWd/MThm."