



FRAMATOME ANP, Inc.

November 23, 2004 NRC:04:063

Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

## **Evaluation of a Potential Safety Significant Issue Pursuant to 10CFR21(a)(2)**

Framatome ANP initiated a discovery (Condition Report 2004-1590) on September 27, 2004, as a result of the determination that thermal aging and embrittlement of the CRDM leadscrew male coupling (bayonet) on B&W-designed plants could lead to failure of the bayonet during operation, causing a dropped rod event that may not be bounded by the analyses of record for that event. After conducting a discovery process, Framatome ANP concluded that it did not have adequate information to determine whether this finding constituted a reportable defect under the provisions of Part 21.

Condition Report 2004-1590 was written to apply to all reactors included in the nuclear steam systems supplied by B&W with the exception of those installed at Oconee for Duke Power Company, which has included the analysis of this event in its licensing basis. Only the owners of the other four reactors can make the final determination of reportability under Part 21. Therefore, the responsibility for addressing this concern has been transferred to the members of the B&WOG, who will make their own determinations. A copy of the letter turning over this responsibility is enclosed.

Very truly yours,

James F. Mallay, Director

**Regulatory Affairs** 

**Enclosure** 

cc: M.C. Honcharik

Project 728

JE19



# November 1, 2004 FANP-04-3488

To: **B&W Owners Group Analysis Committee** 

**B&W Owners Group Materials Committee** 

**B&W Owners Group Licensing Working Group** 

Subject: Notification of Condition Report 2004-1590

References: 1. Condition Report, 2004-1590, "CRDM Leadscrew Male Coupling"

Embrittlement," August 10, 2004

2. Letter, R.J. Schomaker, Framatome ANP, to B&WOG, "Notification of Evaluation of FANP Condition Report 2004-1590." October 25. 2004

3. Memorandum, J.J. Cudlin to J.F. Mallay, "Condition Report 2004-1590," September 27, 2004

### **Dear Members:**

The Condition Report (CR), 2004-1590 (Reference 1) was discussed in a conference call on September 28, 2004, with the B&WOG Analysis Committee. A purpose of the call was to notify the Analysis Committee that Framatome ANP (FANP) had determined that the situation identified in the CR constituted a deviation under the provisions of 10CFR21. You were notified of this finding in a letter of October 25 (Reference 2).

This letter notifies you that, as individual licensees (except Duke Energy, as noted below), you are responsible for evaluating this deviation for possible reportability under Part 21.

In summary, the CR described a situation in which a CRDM bayonet becomes embrittled, breaks loose, and initiates a control rod drop (Reference 3). Since this event is not bounded by the analyses of record (except for Oconee), the deviation must be evaluated to determine whether it is reportable to the NRC as a "defect" as defined in Part 21.

The evaluation could involve (1) a determination of whether fracture due to embrittlement of the bayonet can be reasonably expected, or (2) a bounding analysis showing acceptable results of the control rod drop.

#### FRAMATOME ANP, INC.

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Since FANP identified this deviation, we are obligated to issue a letter to the NRC within 60 days (that is, by November 24) concerning the reportability of the situation. Since responsibility for determining reportability belongs to the individual licensees, this letter will simply state that fact.

If FANP can be of assistance in evaluating this condition please feel free to call me at 434-832-2917.

Sincerely,

R. J. Schomaker Project Manager

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**B&W Owners Group Services** 

### RJS\mcl

### **Analysis Committee**

M. E. Henshaw - Duke Energy Corporation
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G. W. Hayner - Exelon Nuclear

K. S. Zellers - FirstEnergy Nuclear Operating Company

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