



**FRAMATOME ANP**

An AREVA and Siemens Company

**FRAMATOME ANP, Inc.**

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

### **Deviation Associated with Swelling in Certain Control Rods**

Framatome ANP has discussed experience in control rod performance with a number of its customers and with counterpart organizations within AREVA located in France and Germany. In a limited number of cases operators have observed swelling in their control rods that has adversely affected the movement of these rods. None of Framatome's U.S. customers have observed such adverse behavior in control rods that we have manufactured and supplied.

Framatome ANP has provided all the control rods (called extended life control rod assemblies) used by members of the B&WOG. The expected design life of these rods has been established to exceed 20 years. Because of a few instances of significant swelling in control rods supplied by other vendors, we have reevaluated our swelling model and have preliminarily concluded it may be non-conservative. Whenever Framatome supplies a safety-related component that is placed in service and that does not meet the customer's performance expectations, we declare a deviation under the provision of Part 21. We also initiate a Part 21 evaluation to determine whether a defect exists. We initiated a Part 21 evaluation on May 19 associated with control rod swelling.

Framatome had conducted a Part 21 evaluation on this subject earlier this year, starting on February 4, 2004. This evaluation was closed out on April 24 with the conclusion that the situation did not constitute a defect. On reconsideration, however, we decided to conduct a more thorough investigation of the situation.

Framatome has also supplied control rods to several Westinghouse-designed reactors. All of these rods have a service life that is less than nine years and are not expected to be affected by swelling for many years.

A detailed poolside inspection will be conducted in November 2004 of the control rods that have the longest service life, about 17 years. We also plan to participate in an industry program sponsored by EPRI that will investigate the swelling phenomena.

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Framatome ANP will issue a subsequent letter to the NRC within 60 days describing its evaluation program. We will also provide a conclusion regarding whether the situation is considered a defect or if it is necessary to hold the evaluation open for a longer period under the provisions of Part 21.

Very truly yours,



James F. Mallay, Director  
Regulatory Affairs

cc: M. C. Honcharik  
Project 728