



**FRAMATOME ANP**

An AREVA and Siemens Company

**FRAMATOME ANP, Inc.**

December 15, 2003  
NRC:03:085

Office of Nuclear Regulatory Research  
ATTN: Ralph O. Meyer, Senior Technical Advisor  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

**Extended Scope of MOU on testing M5 Cladding**

- Ref.: 1. Letter, James F. Mallay (Framatome ANP) to Ashok C. Thadani (NRC), "ANL High Burnup Test Program" NRC:03:068, October 17, 2003.
- Ref.: 2. Letter, James F. Mallay (Framatome ANP) to Farouk Eltawila (NRC), "Confirmation of Existing Cladding Embrittlement Criteria", NRC:03:069, October 17, 2003.

Dear Ralph:

In early September you had requested that Framatome ANP consider extending our MOU to include high burnup fuel using M5 cladding. We have held a number of internal discussions on how to proceed, including deliberations with our colleagues in France and Germany. We would like to proceed with your suggestion by establishing a meeting with you and your management in early 2004 to outline the actions needed to proceed with this idea.

You should appreciate Framatome's reluctance to proceed with serious discussions, however, about providing irradiated fuel. As you know, we have always been willing to cooperate in this program, but we expect this spirit of cooperation to be extended in both directions. We want you to understand that we have several reservations about continuing this cooperation to include irradiated fuel.

First, we were dismayed when it was discovered that our M5 cladding was altered (etched) to perform some comparative tests with another type of cladding. This discovery was very disappointing because we were not asked about the test or whether we would want to participate. Moreover, the MOU specifically calls for our agreement with any new test; an agreement that was not sought in this case. We had also asked (and understood that we had agreement) that specific comparisons with other cladding material not be conducted. This agreement was especially important to us in this case because M5 had been repeatedly compared to this other cladding in highly adverse and inaccurate ways. We are not willing to suffer this embarrassment again.

Second, Framatome has been unable to gain recognition of M5 in the regulation (50.46) associated with ECCS acceptance. Our competitor cladding is included in the regulations by name, and the NRC had prepared to issue a direct final rule to include M5 more than 18 months ago. We were informed that this rulemaking did not proceed because of questions raised concerning the adequacy of the oxidation limits in the regulation; Research recommended that the inclusion of M5 cladding be delayed until the oxidation tests at Argonne were completed. Such a delay could extend for many years for no apparent value added. Not only did this

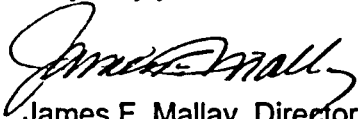
question constitute an inappropriate criticism about the integrity of M5 cladding, but it also constituted an anti-competitive action on the part of the NRC. We had been led to believe (for example, in numerous NRC statements made during the Argonne meeting in July 2002) that M5 was looked on favorably by the NRC, based in part on its outstanding performance, which is documented in the approved topical report on the application of M5 cladding.

Third, we continue to be concerned about the ongoing tests at Argonne that we expressed in earlier correspondence (References 1 and 2). Repeated statements have been made by the NRC that these tests are intended to be "confirmatory" in nature. However, it appears other objectives are being pursued that are not confirmatory in nature, including attempts to support major alterations to the ECCS regulations. In view of two very lengthy evaluations of ECCS criteria in 1972-73 and in the mid-1980s, in support of best-estimate analyses, we see no benefit to another evaluation at this time when nearly all evaluation models have reached satisfactory maturity.

Framatome ANP is anxious that these matters concerning the demonstrated integrity of M5 cladding and the conduct and intent of the ongoing testing program at Argonne be resolved before agreement is reached on extending the scope of our MOU.

I plan to contact you in January to establish a framework for continued discussions on the testing of our M5 cladding.

Very truly yours,



James F. Mallay, Director  
Regulatory Affairs

cc: Jack Rosenthal