



FRAMATOME ANP

An AREVA and Siemens company

FRAMATOME ANP, Inc.

November 11, 2002
NRC:02:050

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

Correction of Statements Concerning the Behavior of M5 Cladding

At an ACRS fuels subcommittee meeting on October 9, 2002, it was asserted that certain tests had been conducted at the Chalk River Laboratory in Canada on M5 cladding. In addition, it was stated that M5 had a particular propensity for the pickup of deuterium during these tests. Framatome ANP told the NRC staff at the time that it was highly unlikely such tests had been performed or results observed. We committed to investigate whether such testing took place. We found that no tests were performed on M5 cladding in Canada at any time.

Framatome ANP is dismayed that statements such as this are made in a public forum without any substantiating evidence. We are particularly concerned when the purported results are in direct conflict with extensive tests performed under many operating and accident conditions that demonstrate the ability of M5 cladding to successfully resist hydrogen pickup. In fact, M5 picks up significantly less hydrogen under operating and accident conditions than any other cladding material currently in commercial use.

There is also evidence that a number of individuals have erroneously characterized M5 as displaying behavior similar to other materials containing niobium. Again, extensive tests demonstrate that such similarities are false, including the behavior of M5 in operating and accident conditions.

(It is possible, although we are unable to confirm such an instance with our suppliers, that AECL might have evaluated piping material, for potential use as a calandria, which had a chemical composition similar to M5. Such material would be manufactured in an entirely different process from cladding and would be completely different in all pertinent aspects of materials structure and would, therefore, be irrelevant to the behavior of M5 cladding.)

Framatome ANP expects that this corrected information will be disseminated to others on the NRC staff and the ACRS who may have occasion to address the behavior of M5 and other cladding materials.

Very truly yours,

James F. Mallay, Director
Regulatory Affairs

D045

cc: R. Caruso
F. Eltawila
D. G. Holland
R. O. Meyer
D. A. Powers
U. Shoop
J. R. Strosnider
A. C. Thadani
J. S. Wermiel
S-L. Wu
Project 693