May 11, 2005

MEMORANDUM TO: Robert Gramm, Chief, Section 2

Project Directorate IV

Division of Licensing Project Management Office of Nuclear Reactor Regulation

FROM: Drew Holland, Project Manager, Section 1/RA/

Project Directorate IV

Division of Licensing Project Management Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MARCH 23, 2005, MEETING WITH FRAMATOME ANP

TO DISCUSS INFORMATION REGARDING TOPICAL REPORT (TR) EMF-93-177(P), REVISION 1, "MECHANICAL DESIGN FOR BWR [BOILING WATER REACTOR] FUEL CHANNELS" (TAC NO. MC5665)

On March 23, 2005, a partially closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Framatome ANP (FANP) at the NRC Headquarters. The purpose of the meeting was to hold a discussion on the review and methodology for BWR fuel channel mechanical design.

FANP provided an overview of the TR which included background and the aspects of the TR that had changed from the Revision 0 version. The methods for evaluating fuel channels were described. Areas evaluated include stress, strain, loading limits, cyclic fatigue, corrosion, hydrogen pickup and other elements of the design. Results were provided for four fuel channel designs. FANP then described a detailed example illustrating a channel strength calculation. The channel pressure limit based on deformation was discussed in detail. This topic was then followed by a discussion of plastic analysis collapse load. The presentation was concluded with a description of the pressure limit for normal operation and details regarding all of the changes to the TR. At this point the meeting was concluded with no regulatory decisions having been made. The NRC staff thanked FANP for the presentation.

A list of meeting attendees is attached. The non-proprietary presentation slides are available in ADAMS under Accession Number ML050730332 and the proprietary slides are available under Accession Number ML050730338.

Project No. 728

Attachment: List of Attendees

cc w/att:

Mr. Jerald Holm
Director, Regulatory Affairs
Attn: Sherry McFaden
Framatome ANP
3315 Old Forest Road
Lynchburg, VA 24501

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Director, Regulatory Affairs Attn: Sherry McFaden Framatome ANP 3315 Old Forest Road Lynchburg, VA 24501

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## **MEETING WITH FRAMATOME ANP**

## **LIST OF ATTENDEES**

# **MARCH 23, 2005**

### **FRAMATOME ANP**

G. Holm

R. Schomaker

M. Smith

### **NRC**

D. Holland

A. Attard

F. Akstulewicz