



August 21, 2001  
NRC:01:037A

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

**NRC Review of EMF-2103(P) Revision 0, Realistic Large Break LOCA Methodology for Pressurized Water Reactors**

Ref.: References are listed on page 2.

Framatome ANP requested the NRC's acceptance for referencing in licensing actions the topical report EMF-2103(P) Revision 0, Realistic Large Break LOCA Methodology for Pressurized Water Reactors in Reference 1. This letter transmits a collection of additional information to support and facilitate the NRC's review: specifically, References 2 through 9. A CD containing proprietary versions of the supporting information is enclosed with this letter.

We have also enclosed a CD containing the code S-RELAP5 and a sample problem. The CD includes those codes and files necessary to execute the sample problem. The attachment to this letter provides a description of the contents of the CD containing the code S-RELAP5 and how to extract the information from the CD.

Framatome ANP considers some of the information contained in the enclosures to be proprietary. As required by 10 CFR 2.790(b), an affidavit is enclosed to support the withholding of the information from public disclosure.

Very truly yours,

*James F. Mallay by [signature]*

James F. Mallay, Director  
Regulatory Affairs

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Enclosures

cc: R. Caruso  
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*Rec'd w/aut CD*

- Ref.: 1. Letter, J. F. Mallay (FRA-ANP) to Document Control Desk (NRC), "Request for Review of EMF-2103(P) Revision 0, Realistic Large Break LOCA Methodology for Pressurized Water Reactors," NRC:01:035, August 20, 2001.
- Ref.: 2. EMF-2100(P) Revision 4, *S-RELAP5 Models and Correlations Code Manual*, January 2001.
- Ref.: 3. EMF-2101(P) Revision 2, *S-RELAP5 Programmers Guide*, January 2001.
- Ref.: 4. EMF-CC-097(P) Revision 7, *S-RELAP5 Input Data Requirements*, August 2000.
- Ref.: 5. ANF-90-145(P)(A), *RODEX3 Fuel Rod Thermal-Mechanical Response Evaluation Model*, Volume 1, "Theoretical Manual," and Volume 2, "Thermal and Gas Release Assessments," April 1996.
- Ref.: 6. EMF-1557(P) Revision 4, *RODEX3A: Theory and User's Manual*, November 2000.
- Ref.: 7. EMF-CC-039(P) Revision 2 Supplement 1, *ICECON Code User's Manual: A Computer Program Used to Calculate Containment Back Pressure for LOCA Analysis (Including Ice Condenser Plants)*, December 1999.
- Ref.: 8. EMF-2054(P) Revision 2, *Code Input Development Guidelines for Realistic Large Break LOCA Analysis of a Pressurized Water Reactor*, July 2001.
- Ref.: 9. EMF-2058, Revision 1, *S-RELAP5 Realistic Large Break LOCA Analysis Guideline*, July 2001.