

April 4, 2000

Mr. James F. Mallay  
Director, Nuclear Regulatory Affairs  
Siemens Power Corporation  
210 Horn Rapids Road  
Richland, WA 99352

SUBJECT: ACCEPTANCE REVIEW OF SIEMENS EMF-2310(P), REV. 0, "SRP CHAPTER 15 NON-LOCA METHODOLOGY FOR PRESSURIZED WATER REACTORS," (TAC NO. MA7192) AND EMF-2328(P), REV.0, "PWR SMALL BREAK LOCA EVALUATION MODEL, S-RELAP5 BASED," (TAC NO. MA8022).

Dear Mr. Mallay:

Siemens Power Corporation (SPC), by its letters dated November 11, 1999, and January 10, 2000, submitted topical reports EMF-2310(P), Revision 0, "SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors," and EMF-2328(P), Revision 0, "PWR Small Break LOCA Evaluation Model, S-RELAP5 Based," respectively, and requested review and approval of use of the S-RELAP5 code for application to the PWR small break LOCA and non-LOCA transients. By letter dated February 3, 2000, the supporting documents, listed below, were also submitted to assist the review:

- EMF-2100(P) R2, S-RELAP5 Models and Correlations Code Manual, Siemens Power Corporation, January 2000,
- EMF-2101(P) R1, S-RELAP5 Programmers Guide, Siemens Power Corporation, January 2000,
- EMF-CC-097(P) R4, S-RELAP5 Input Data Requirements, and
- Description of contents of the CD (containing the code S-RELAP5 specific test cases) and how to extract information from the CD.

The S-RELAP5 based thermal-hydraulic analysis code (EMF-2100(P), Revision 2), submitted by Siemens Power Corporation, has been reviewed to determine acceptability of the code documentation for NRC review. The scope and detail of the code documentation pertaining to the thermal-hydraulic modeling, reactor kinetics modeling, code numerics, and code assessment have been reviewed and found sufficient for the staff to initiate its technical review of the application of the code to analysis of the PWR small break LOCA and Chapter 15 non-LOCA transients.

A meeting with the Advisory Committee on Reactor Safeguards (ACRS) Thermal-Hydraulic and Severe Accident Phenomena Subcommittee occurred on March 15, 2000. At that time an overview of the S-RELAP5 code and review schedule was presented. We anticipate providing requests for additional information (RAIs) regarding the technical adequacy of the submittal by early May 2000. We would propose to meet with your staff prior to issuance of any formal RAIs.

If you have any questions regarding the status of the RAIs or the safety evaluation, please do not hesitate to contact Mr. Ralph Landry at (301) 415-1140.

Sincerely,

*/RA/*

Stuart A. Richards, Director  
Project Directorate IV and Decommissioning  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Project No. 702

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