## SIEMENS

4rot 702

March 13, 2000 NRC:00:015

U.S. Nuclear Regulatory Commission ATTN: Mr. J. S. Wermiel, Chief Reactor Systems Branch Mail Stop 10 B3 Washington, D.C. 20555-0001

Dear Mr. Wermiel:

This letter provides projections for the submittal of topical reports by Siemens Power Corporation. These projections are summarized in Table 1, which also includes a brief description of each report. In addition, a summary of our understanding of the status of the topical reports currently being reviewed by the NRC is contained in Table 2.

SPC has submitted numerous topical reports to the NRC since these two tables were last updated in May 1999. The number of future submittals is more limited, but these reports are equally important to SPC because they address large break LOCA analyses and future fuel designs for both BWR- and PWR-type units.

SPC plans to submit two additional topical reports not shown on Table 1. Definitive completion dates have not been established for these reports because they will not be ready for review until after July 1, 2001. One report describes the SIERRA code and its application to the mechanistic analysis of fuel rod behavior. SIERRA is a best estimate code based on statistical methodologies and will replace RODEX2, which is conservatively biased and is used for bounding analyses. This report is planned for completion in mid-2001.

The second report (not included in Table 1) describes the application of three codes that are combined to analyze events with asymmetric power distributions that experience significant changes during the event, such as a control rod ejection accident. The three codes are S-RELAP5 for systems analysis, PANBOX for 3D kinetics analysis, and COBRA for thermal-hydraulics analysis. This report may not be completed until 2002.

Two NRC-initiated practices that have been recently instituted provide substantial benefits to the exchange of information and to the understanding of the expectations of both the NRC and SPC. One practice is the opportunity for SPC to present a description of each topical report to the NRC soon after its submittal. The second is the opportunity for the NRC to visit SPC to discuss open issues with the personnel who developed the report and the associated computer codes, and to execute sample problems on these codes. SPC anticipates that valuable results will flow from a continuation of these two practices.

## **Siemens Power Corporation**

 2101 Horn Rapids Road
 Tel:
 (509) 375-8100

 Richland, WA
 99352
 Fax:
 (509) 375-8402



Mr. J. S. Wermiel March 13, 2000

÷

NRC:00:015 Page 2

SPC appreciates your continued attention to the timely review of these topical reports and for allocating an appropriate level of personnel.

Very truly yours,

Ceret

James F. Mallay, Director Regulatory Affairs

/arn

Attachments - 2

cc: N. Kalyanam Project No. 702

Report	Planned Submittal Date	Comments
EXEM/BWR LBLOCA	8/31/00	Simplifies the reflood analysis and reflects new V&V process.
PWR Realistic LBLOCA	9/30/00	Realistic LBLOCA analysis based on S-RELAP5.
Generic Mechanical Design for Duplex Cladding	8/31/00	New alloy added to outside of Zircaloy cladding to provide improved corrosion performance.

## Table 1. Planned Topical Report Submittals – Siemens Power Corporation

2

\_\_\_\_

Topical Report	Reviewer, Approximate Schedule for SER, & TAC Number
EMF-1961(P), <i>Statistical</i> <i>Setpoint/Transient Methodology for CE</i> <i>Reactors</i>	Undine Shoop, 3/31/00, (MA4659)
EMF-2245(P) Rev. 0, <i>Application of</i> SPC's Critical Power Correlations to Co-Resident Fuel	Ed Kendrick, 4/30/00, (MA6438)
EMF-2110(P) Rev. 1, <i>TELEPERM XS:</i> A Digital Reactor Protection System	Hulbert Li, 4/30/00, (MA1983)
EMF-2292(P) Rev. 0, <i>ATRIUM-10</i> <i>Appendix K Spray Heat Transfer</i> <i>Coefficients</i>	Ed Kendrick, 4/30/00, (MA6785)
EMF-2209(P) Rev. 0, SPCB Critical Power Correlation	Tony Attard, 4/30/00, (MA6639)
EMF-CC-074(P) Vol. 4 Rev. 0, BWR Stability Analysis Assessment of STAIF with Input from MICROBURN-B2	Tai Huang & José March-Leuba, 6/30/00, (MA7221)
EMF-2310(P) Rev. 0, SRP Chapter 15 Non-LOCA Methodology for Pressurized Water Reactors	Ralph Landry, 9/30/00, (MA7192)
EMF-2157(P) Rev. 0, <i>Boiling Water</i> <i>Reactor Licensing Methodology</i> <i>Compendium</i>	Muffett Chatterton, Undefined, (MA7883)
EMF-2328(P) Rev. 0, <i>PWR Small Break</i> LOCA Evaluation Model, S-RELAP5 Based	Ralph Landry, 12/31/00, (MA8022)

## Table 2. Topical Reports Under Review – Siemens Power Corporation