

May 17, 2000

Mr. James F. Mallay
Director, Regulatory Nuclear Affairs
Siemens Power Corporation
2101 Horn Rapids Road
Richland, WA 99352

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - SIEMENS TOPICAL REPORT,
EMF-CC-074(P) VOLUME 4 REVISION 0, "BWR STABILITY ANALYSIS:
ASSESSMENT OF STAIF WITH INPUT FROM MICROBURN-B2."
(TAC NO. MA7221)

Dear Mr. Mallay:

By letter dated November 24, 1999, the Siemens Power Corporation submitted Topical Report EMF-CC-074(P) Volume 4 Revision 0, "BWR Stability Analysis: "Assessment of STAIF with Input from MICROBURN-B2," for staff review. The staff is reviewing the topical report and additional information, as discussed in the enclosure is requested, in order for the staff to complete its review.

The enclosed request was discussed with your staff on April 3, 2000. A mutually agreeable target date of within 45 days of the date of this letter for your response was established. If circumstances result in the need to revise the target date, please call me at the earliest opportunity at 301-415-1480.

Sincerely,

/RA/

N. Kalyanam, Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 702

Enclosure: Request for Additional Information

May 17, 2000

Mr. James F. Mallay
Director, Nuclear Regulatory Affairs
Siemens Power Corporation
2101 Horn Rapids Road
Richland, WA 99352

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - SIEMENS TOPICAL REPORT,
EMF-CC-074(P) VOLUME 4 REVISION 0, "BWR STABILITY ANALYSIS:
ASSESSMENT OF STAIF WITH INPUT FROM MICROBURN-B2."
(TAC NO. MA7221)

Dear Mr. Mallay:

By letter dated November 24, 1999, the Siemens Power Corporation submitted Topical Report EMF-CC-074(P) Volume 4 Revision 0, "BWR Stability Analysis: Assessment of STAIF with Input from MICROBURN-B2," for staff review. The staff is reviewing the topical report and additional information, as discussed in the enclosure is requested, in order for the staff to complete its review.

The enclosed request was discussed with your staff on April 3, 2000. A mutually agreeable target date of within 45 days of the date of this letter for your response was established. If circumstances result in the need to revise the target date, please call me at the earliest opportunity at 301-415-1480.

Sincerely,
/RA/

N. Kalyanam, Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 702

DISTRIBUTION:
PUBLIC
PDIV-2 Reading
OGC (RidsOgcMailCenter)
ACRS (RidsAcrsAcnwMailCenter)
SRichards (RidsNrrDlpmLpdiv)
SBlack (RidsNrrDlpm)
LBerry
T Huang

ACCESSION NUMBER: ML003715869

OFFICE	PDIV-1/PM	PDIV-D/LA	PDIV-2/SC
NAME	SDembek for NKalyanam:am	EPeyton	SDembek
DATE	05/17/00		05/17/00

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION ON TOPICAL REPORT

"BWR STABILITY ANALYSIS:

ASSESSMENT OF STAIF WITH INPUT FROM MICROBURN-B2",

EF-CC-074(P) VOLUME 4 REVISION 0

1. The original STAIF SER makes reference to a code MB2STF, which is an interface code used to prepare the STAIF input files from the MICROBURN-B core files. In view of the upgrade to MICROBURN-B2, what is the status of MB2STF?
2. Provide a short description of the interface capabilities of the new version of STAIF with either MICROBURN-B or MICROBURN-B2.
3. Provide a short description of the applicability of the STAIF validation presented in EMF-CC-074(P) Volume 4 to cases where the new version of STAIF generates its input from the old version of the 3D simulator (MICROBURN-B)
4. Table A.1 of EMF-CC-074(P) Volume 4 lists a comparison of hydraulic correlation sets between MICROBURN-B2 and STAIF. Provide a comparison between the correlations in the new version of STAIF and the old licensed version. Provide a short description of the impact on stability calculations of these modifications.
5. EMF-CC-074(P) Volume 1 states that the old licensed copy of STAIF used the Zuber-Staub correlation for subcooled boiling energy distribution. MICROBURN-B2 uses the Zuber-Staub correlation, yet, the new version of STAIF has been modified to use the Lahey Mechanistic correlation. Provide a short description of the impact on stability calculations of this modification.
6. The new gap conductance model in STAIF uses parameters fitted to more sophisticated fuel pin models. Provide a short description and/or benchmark data to show that the STAIF gap conductance model gives results comparable to those of the more sophisticated models.
7. It is not evident in EMF-CC-074(P) Volume 4 whether the new more-accurate modal neutron kinetics methodology applies exclusively to the regional mode calculation or also to the fundamental mode. Provide a short description of the neutron kinetics model used to calculate each instability mode.

Enclosure