



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

October 11, 1996

Mr. H. Donald Curet
Manager of Product Licensing
Siemens Power Corporation-Nuclear Division
2101 Horn Rapids Road
Richland, WA 99352-0130

Dear Mr. Curet:

SUBJECT: TELECONS CONCERNING SIEMENS POWER CORPORATION LARGE BREAK LOSS OF
COOLANT ACCIDENT ANALYSIS METHODOLOGY

The purpose of this letter is to document the telephone conferences between the NRC staff and representatives of Siemens Power Corporation on October 10 and October 11, 1996, and to briefly discuss regulatory issues related to the staff's evaluations of Siemens' previously approved (1986 version) and modified (1991 version) large break LOCA evaluation models (EMs), as reported in Siemens Topical Reports XN-NF-85-16(P), XN-NF-82-20, Rev. 1 and subsequent supplements, up to and including Supplement 5.

Participants in the telephone calls were:

NRC Staff: R. C. Jones, T. E. Collins, G. Thomas, A. E. Levin,
E. Y. Wang, J. N. Donohew, and J. L. Staudenmeier

Siemens: W. V. Kayser, H. D. Curet, S. E. Jensen, R. E. Collingham

The NRC staff informed Siemens that the staff has evaluated the modifications incorporated into the LBLOCA EM in 1991, and has found them to be unacceptable. The staff will be issuing a detailed Safety Evaluation Report (SER), documenting the reasons for rejection of the modifications, in the near future.

The NRC staff also informed Siemens that, based on information currently available to the staff, the previously approved EM has been determined to contain an unacceptable error, in that, over the range of reflood velocities between approximately 1 in/s and 1.77 in/s, the reflood heat transfer correlation may predict that the heat transfer coefficient increases as the reflooding rate decreases, which the staff concludes is non-physical. The staff understands that Siemens is currently evaluating this problem to determine an appropriate means by which to correct it.

The NRC staff further advised Siemens that Siemens should consider the applicability of 10 CFR 21 to the current situation. The staff understands that Siemens is considering notification of affected licensees in accordance with 10 CFR 21.

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Finally, the staff informed Siemens that a public meeting on this issue has been scheduled with currently affected licensees. The meeting will convene at NRC Headquarters, in the One White Flint North building, room 12B11, at 1:00 p.m. on Wednesday, October 16, 1996.

Sincerely,

/s/

Robert C. Jones, Chief
Reactor Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

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OFC	SRXB/DSSA	SC:SRXB/DSSA	BC:SRXB/DSSA
NAME	A. Levin	T. Collins	R. Jones
DATE	10/11/96	10/11/96	10/11/96
COPY	YES/NO	YES/NO	YES/NO

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