July 5, 2002

MEMORANDUM TO: Charles E. Ader, Chairman
Committee to Review Generic Requirements

FROM: Mike Mayfield, Director ***/RA/ Nilesh Chokshi for***
Division of Engineering Technology
Office of Nuclear Regulatory Research

SUBJECT: CRGR REVIEW OF DRAFT REGULATORY GUIDE DG-1119 GUIDELINES FOR EVALUATING ELECTROMAGNETIC AND RADIO-FREQUENCY INTERFERENCE IN SAFETY-RELATED I&C (PROPOSED REV.1 of R.G. 1.180)

Regulatory Guide 1.180, "Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems," was issued in January 2000. This regulatory guide endorses design, installation, and testing practices acceptable to the NRC staff for addressing the effects of EMI/RFI and power surges on safety-related I&C systems in a nuclear power plant environment. Over the last two years significant changes have been made.

Some of these changes in this Rev. 1 of R.G. 1.180 (DG-1119) include endorsing Military Standard (MIL-STD) -461E and the International Electrotechnical Commission (IEC) 61000 series of EMI/RFI test methods, extending the guidance to cover signal line testing, incorporating frequency ranges where portable communications devices are experiencing increasing use, and relaxing the operating envelopes (test levels) when experience and confirmatory research warrants.

This package also contains draft NUREG/CR-XXXX, "Comparison of U.S. Military and International Electromagnetic Compatibility Guidance," and NUREG/CR-5609, "Electromagnetic Compatibility Testing for Conducted Susceptibility Along Interconnecting Signal Lines," which provide the technical basis endorsed in this regulatory guide for your review.

Issuing the draft regulatory guide for public comment is an Operating Plan target for FY2002; therefore, timely issuance of the guide for comment is important. In addition, since we may need to revise the guide based on the public comments, we suggest that the formal CRGR review be held after the public comment period. That is, we are requesting that the CRGR review be deferred until after the public comments are received, addressed, and incorporated as appropriate into the proposed final guide. This is consistent with past practice and would appear to be a more efficient use of both RES and CRGR resources.

This proposal has been coordinated with Mr. Les Cupidon of your staff. A response by July 16, 2002, would allow us to maintain our schedule.

If you have any questions, please contact Ms. Christina Antonescu at (301) 415-6792.

Attachments: As stated

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Distribution:
D. Dorman T. Hsia S. Arndt S.Duraiswamy
E. Marinos M. Chiramal C. Graham ERAB r/f, DET r/f

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OFFICE	ERAB/DET	ERAB/DET	ERAB/DET	ERAB/DET
NAME	C. Antonescu*	A. Hsia*	D. Dorman* (Hsia for)	M. Mayfield(N. Chokshi For)
DATE	6/27/02	7/2/02	7/2/02	7/5/02

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