

January 30, 2006

MEMORANDUM TO: John T. Larkins, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Carl J. Paperiello, Director **/RA J. T. Wiggins Acting for/**
Office of Nuclear Regulatory Research

SUBJECT: REQUEST FOR ACRS REVIEW OF REGULATORY GUIDE 1.97,
"CRITERIA FOR ACCIDENT MONITORING INSTRUMENTATION
FOR NUCLEAR POWER PLANTS," REVISION 4

The Office of Nuclear Regulatory Research (RES) has developed the enclosed Revision 4 of Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants." The RES staff developed this revised guide in response to User Need Request 2002-017, submitted by the Office of Nuclear Reactor Regulation (NRR). The guide was previously presented as Draft Regulatory Guide DG-1128 to the Advisory Committee on Reactor Safeguards (ACRS) Digital I&C Subcommittee on June 14, 2005, and issued for public comment on August 25, 2005. During the comment period, which ended on October 21, 2005, the U.S. Nuclear Regulatory Commission (NRC) received comments from seven correspondents, including utilities, user groups, vendors, and the Institute of Electrical and Electronics Engineers (IEEE). The enclosed final draft reflects the incorporation of those comments (as appropriate), has been reviewed by the NRC staff, and is now ready for review by the ACRS. Enclosure 2 to this memorandum details the public comments and the staff's related responses.

This revised regulatory guide offers guidance to NRC licensees and applicants for their use in developing and implementing practices that the staff finds acceptable for complying with General Design Criteria 13, 19, and 64, as set forth in Appendix A, "General Design Criteria for Nuclear Power Plants," to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50). As such, Revision 4 of Regulatory Guide 1.97 provides a performance-based method for meeting these criteria, which is less-prescriptive than in previous revisions of the guide and is primarily intended for licensees of new nuclear power plants. As the basis for this guidance, the NRC staff has selected and endorsed a consensus industry standard issued by the IEEE. Specifically, this revised guide endorses IEEE Std. 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," in its entirety, with eight stated exceptions.

We are currently scheduled to present this guide to ACRS during the March 9-11, 2006 meeting. We would appreciate your review of this guide by March 24, 2006. If you have any questions, please feel free to contact Mr. George Tartal of my staff at (301) 415-0016 or GMT1@nrc.gov.

Enclosures:
As stated (2)

MEMORANDUM TO: John T. Larkins, Executive Director
Advisory Committee on Reactor Safeguards

FROM: Carl J. Paperiello, Director
Office of Nuclear Regulatory Research

SUBJECT: REQUEST FOR ACRS REVIEW OF REGULATORY GUIDE 1.97,
"CRITERIA FOR ACCIDENT MONITORING INSTRUMENTATION
FOR NUCLEAR POWER PLANTS," REVISION 4

The Office of Nuclear Regulatory Research (RES) has developed the enclosed Revision 4 of Regulatory Guide 1.97, "Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants." The RES staff developed this revised guide in response to User Need Request 2002-017, submitted by the Office of Nuclear Reactor Regulation (NRR). The guide was previously presented as Draft Regulatory Guide DG-1128 to the Advisory Committee on Reactor Safeguards (ACRS) Digital I&C Subcommittee on June 14, 2005, and issued for public comment on August 25, 2005. During the comment period, which ended on October 21, 2005, the U.S. Nuclear Regulatory Commission (NRC) received comments from seven correspondents, including utilities, user groups, vendors, and the Institute of Electrical and Electronics Engineers (IEEE). The enclosed final draft reflects the incorporation of those comments (as appropriate), has been reviewed by the NRC staff, and is now ready for review by the ACRS. Enclosure 2 to this memorandum details the public comments and the staff's related responses.

This revised regulatory guide offers guidance to NRC licensees and applicants for their use in developing and implementing practices that the staff finds acceptable for complying with General Design Criteria 13, 19, and 64, as set forth in Appendix A, "General Design Criteria for Nuclear Power Plants," to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50). As such, Revision 4 of Regulatory Guide 1.97 provides a performance-based method for meeting these criteria, which is less-prescriptive than in previous revisions of the guide and is primarily intended for licensees of new nuclear power plants. As the basis for this guidance, the NRC staff has selected and endorsed a consensus industry standard issued by the IEEE. Specifically, this revised guide endorses IEEE Std. 497-2002, "IEEE Standard Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants," in its entirety, with eight stated exceptions.

We are currently scheduled to present this guide to ACRS during the March 9-11, 2006 meeting. We would appreciate your review of this guide by March 24, 2006. If you have any questions, please feel free to contact Mr. George Tartal of my staff at (301) 415-0016 or GMT1@nrc.gov.

Enclosures:
As stated (2)

Distribution: ERAB r/f DET r/f B. Marcus, NRR A.Howe, NRR

DOCUMENT NAME: C:\MyFiles\Copies\RG 1.97R4 Final Memo to ACRS Dec05-edited.wpd

OAR in ADAMS? (Y or N) Y ADAMS ACCESSION NO: **Pkg: ML053640173** TEMPLATE NO.: RES-006

Publicly Available? (Y or N) Y DATE OF RELEASE TO PUBLIC: N/A SENSITIVE? N

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RES/DET/ERAB	E	SISP Review	RES/DET/ERAB	E	RES/DET/ERAB	C	RES Tech Ed
NAME	G. Tartal /RA/		G. Tartal /RA/	W. Kemper /RA/		M. Evans /W. K. for/		P. Garrity /Via email/
DATE	12/30/05		12/30/05	12/30/05		12/30/05		12/28/05

OFFICE	RES/DET		NRR/DE/EICB	NRR/DE		NRR/DPR		OGC - NLO
NAME	M. Cunningham /RA/		A. Howe /RA/	M. Mayfield /RA/		C. Grimes /RA/		H. Woods /RA/
DATE	01/05/06		1/13/06	1/18/06		1/19/06		1/11/06

OFFICE	RES	
NAME	C. Paperiello /J.W for/	
DATE	1/30/06	

OFFICIAL RECORD COPY

Memo: ML053640127, Enclosure 1. ML053640151, Enclosure 2. ML053640161