

January 4, 2005

MEMORANDUM TO: Catherine Haney, Program Director
Reactor Policy Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: George Mencinsky, Program Manager /RA/
Reactor Policy Rulemaking Program
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF DECEMBER 10, 2004, PUBLIC MEETING WITH THE
NUCLEAR ENERGY INSTITUTE AND THE ELECTRIC POWER
RESEARCH INSTITUTE FOR CALCULATING EFFECTIVE DOSE
EQUIVALENT

On December 10, 2004, the NRC staff met with the Nuclear Energy Institute (NEI) and Electric Power Research Institute (EPRI) representatives to discuss ongoing research in formulating a method for calculating effective dose equivalent (EDE) in place of the deep dose equivalent (DDE) in dose calculations. Also attending were Dr. George Xu from Rensselaer Polytechnic Institute who is sponsored by EPRI to perform this research. Three utility representatives also attended the meeting. The purpose of the meeting was to discuss the current status of an EPRI initiative to develop a simple method for calculating the EDE from a point source near the body, less than 30 cm, by a two dosimeter algorithm. This method would be used to report personnel EDE. Meeting attendees are listed in Attachment 1 of this memorandum. The slides used during the meeting are Attachment 2 to this memorandum (ADAMS Accession No. ML043560161).

The meeting centered on discussing the data that was collected of the spacial distribution of dose encountered on a phantom using a two dosimeter algorithm. The photon energies used for determining the EDE were 0.3 MeV, 1.0MeV, and 1.5MeV. These photon energies are representative of conditions that would be seen at nuclear facilities and cover most possible exposures. The data was presented to indicate the measured dose received by a phantom in the xyz-axis from the three energy photon levels. NEI and EPRI stated that it was not the intent of this meeting to debate the validity of the modeling results and to seek agreement from the NRC but only to share the research data with the NRC staff. NEI and EPRI representatives requested that a follow-up meeting be held in February 2005 to present further results of the research. Having discussed all of the agenda items, the meeting was adjourned.

Attachments: As stated
cc w/att: See list

**List of Attendees for December 10, 2004, Meeting
on Method for Calculating Dose**

NAME	ORGANIZATION
Ralph Andersen	NEI
Sean Bushart	EPRI
George Xu	RPI
Michael Russell	SCE
Michael Lantz	APS
Russell Gray	PG&E
Roger Pedersen	NRC/NRR
Thomas Essig	NRC/NMSS
Sami Sherbini	NRC/NMSS
Joseph DeCicco	NRC/NMSS
Stephanie Bush-Goddard	NRC/RES
Harriet Karagiannis	NRC/RES
George Mencinsky	NRC/NRR

Distribution: Public Mtg w/NEI & EPRI on Dose Calculation 12/10/04
ADAMS/PUBLIC

Email

WBorchardt	BSheron	DMatthews/FGillespie	CHaney
BBoger	RPedersen	SSherbini	TEssig
KGibson	SBush-Goddard	JDeCicco	HKaragiannis
EmcKenna	RPRP r/f		

Nuclear Energy Institute

Project No. 689

cc: Via email

Mr. Ralph Andersen
Nuclear Energy Institute
rla@nei.org

Mr. Sean Bushart
Electric Power Research Institute
sbushart@epri.com

Dr. George Xu
Rensselaer Polytechnic Institute
xug2@rpi.edu

Mr. Russell Gray
Pacific Gas & Electric
rxg4@pge.com

Mr. Michael Russell
Southern California Edison
russelmj@songs.sce.com

Mr. Michael Lantz
Arizona Public Service
mlantz@apsc.com

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Distribution: See list

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OFFICE	RPRP	IEHB	IEHB	RPRP
NAME	GMencinsky	RPedersen	KGibson	PRay
DATE	12/21/04	12/22/04		12/21/04

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