

January 25, 2001

MEMORANDUM TO: Cynthia A. Carpenter, Chief  
Generic Issues, Environmental, Financial  
and Rulemaking Branch  
Division of Regulatory Improvements Programs, NRR

FROM: Joseph L. Birmingham, Project Manager/**RA**  
Generic Issues, Environmental, Financial  
and Rulemaking Branch  
Division of Regulatory Improvements Programs, NRR

SUBJECT: SUMMARY OF JANUARY 11, 2001 MEETING WITH THE NUCLEAR  
ENERGY INSTITUTE REGARDING CONTROL ROOM HABITABILITY

On January 11, 2001, representatives of the Nuclear Energy Institute (NEI) Control Room Habitability (CRH) Task Force met with staff of the Nuclear Regulatory Commission (NRC) at the NRC's offices in Rockville, Maryland. The purpose of the meeting was to discuss NRC comments on Appendix C of NEI 99-03, "Control Room Habitability Assessment Guidance" and associated issues. The staff's comments were organized in a series of appendices with each appendix discussing the assumptions for evaluating the radiological consequences of a specific type of accident at a light water reactor. Attachment 1 is a list of those attending the meeting.

In a previous discussion with the Task Force, they agreed that using language similar to the guidance in Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," would be beneficial. The staff presented their comments in this manner (Attachment 2). The staff pointed out that the comments were still in development and the numbering of the sections was under revision. Overall, the Task Force agreed with the NRC draft comments. Most of the Task Force's comments were suggested clarifications to the wording.

A significant portion of the meeting was spent discussing methods for calculating atmospheric dispersion for control room habitability design basis accident dose assessments. To facilitate the discussion, the staff had provided a draft feasibility study to the Task Force (Attachment 3). The draft study discussed potential adjustments to the ARCON96 computer code (Ramsdell and Simonen 1997). ARCON96 was developed as an alternative to the Murphy-Campe methodology (Murphy and Campe 1974). The potential adjustments discussed address two issues that arose after the release of ARCON96, namely, making calculations for (1) stack releases and (2) high velocity vent releases. For elevated releases, one potential adjustment would consider that, under some meteorological conditions, effluent that would otherwise essentially pass well above the control room air intake could be drawn into the intake. With respect to the high velocity vent release issue, the Task Force reiterated their point that high velocity vent releases may have significant plume rise which would reduce the amount of effluent drawn into the control room air intake. The staff agreed, but noted the difficulty of calculating the plume rise for varying meteorological conditions and for different plant configurations, and determining the potential influence of the plant building complex on the

Carpenter

- 2 -

effluent release. The draft study proposed methods for calculating the plume rise and the effect on the relative concentration (X/Q) values for a range of wind speed and atmospheric stability classes. Subsequent to the meeting, the Task Force provided comments on the draft study to NRC (Attachment 4).

After discussing the draft study, the meeting was adjourned.

Project No. 689

Attachments: As stated

cc w/atts: See list

Carpenter

- 2 -

effluent release. The draft study proposed methods for calculating the plume rise and the effect on the relative concentration (X/Q) values for a range of wind speed and atmospheric stability classes. Subsequent to the meeting, the Task Force provided comments on the draft study to NRC (Attachment 4).

After discussing the draft study, the meeting was adjourned.

Project No. 689  
Attachments: As stated  
cc w/atts: See list

Distribution: Mtg. Summary w/ NEI on NEI 99-03 January, 11, 2000

PUBLIC        SPSB R/F  
ACRS         RGEB R/F  
OGC

EMail

SCollins/RZimmerman  
BSheron  
JJohnson  
GHolahan/TCollins  
RBarrett  
MReinhart  
PBoehnert, ACRS  
MSatorious, EDO  
FCoffman, RES  
DMatthews/SNewberry  
CCarpenter  
SWest  
JBirmingham  
P Wen  
JHayes  
SLaVie  
MBlumberg  
JLee  
LBrown  
MHart

G:\RGEBJLB\CRH MSUM NEI 1-11-01.WPD

OFFICE	RGEB	SC:SPSB	RGEB
NAME	JBirmingham:	MReinhart	SWest
DATE	01/23/2001	01/24/2001	01/25/2001

OFFICIAL RECORD COPY

cc: Mr. Ralph Beedle  
Senior Vice President  
and Chief Nuclear Officer  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Ms. Lynnette Hendricks, Director  
Plant Support  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Alex Marion, Director  
Programs  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Kurt Cozens  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. David Modeen, Director  
Engineering  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Dennis Adams  
Nuclear HVAC Utilities Group  
ComEd  
1400 Opus Place  
Downers Grove, IL 60515

Mr. Anthony Pietrangelo, Director  
Licensing  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Jim Davis, Director  
Operations  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Mr. Robert R. Campbell, President  
Nuclear HVAC Utilities Group  
Tennessee Valley Authority  
1101 Market Street, LP4J-C  
Chattanooga, TN 37402-2801

## List of Attendees For CRH Meeting, January 11, 2001

<b>NAME</b>	<b>ORGANIZATION</b>
Kurt Cozens	Nuclear Energy Institute
Mark Blumberg	NRR/DSSA/SPSB
John Hayes	NRR/DSSA/SPSB
Steve LaVie	NRR/DSSA/SPSB
Michelle Hart	NRR/DSSA/SPSB
Leta Brown	NRR/DSSA/SPSB
Joseph Birmingham	NRR/DRIP/RGEB
John Cotton	Entergy
Christer Dahlgren	Consumers Energy
Tom Mscisz	Exelon
Syed Ahmed	Dominion Generation
Gerard Gryczkowski	CCNPPI
R. Brad Harvey	Duke Engineering
Stephen P. Schultz	Duke Entergy
Altheia Wyche	SERCH Licensing/Bechtel
Millan Straka	Sci/NOSIS