UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 19, 2008

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-08-0172

TITLE: DENIAL OF PETITION FOR RULEMAKING PRM-50-87 CONCERNING CONTROL ROOM HABITABILITY RADIOLOGICAL DOSE REQUIREMENTS AS GOVERNED BY REGULATIONS SPECIFIED IN APPENDIX A TO 10 CFR PART 50 AND IN 10 CFR 50.67

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of December 19, 2008.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:
1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner Jaczko
Commissioner Lyons
Commissioner Svinicki
OGC
EDO
PDR

SECY NOTE: To be made publicly available 5 working days after dispatch of the letter.

VOTING SUMMARY - SECY-08-0172

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X					12/10/08
COMR. JACZKO	X			X		12/3/08
COMR. LYONS	X					11/24/08
COMR. SVINICKI	X			X		12/15/08

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on December 19, 2008.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN KLEIN

SUBJECT: SECY-08-0172 – DENIAL OF PETITION FOR RULEMAKING PRM-50-87 CONCERNING CONTROL ROOM HABITABILITY RADIOLOGICAL DOSE REQUIREMENTS AS GOVERNED BY REGULATIONS SPECIFIED IN APPENDIX A TO 10 CFR PART 50 AND IN 10 CFR 50.67

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached ___ None XX

SIGNATURE

12/10/08

DATE

Entered on "STARS" Yes ✓ No ___

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER JACZKO

SUBJECT: SECY-08-0172 – DENIAL OF PETITION FOR RULEMAKING PRM-50-87 CONCERNING CONTROL ROOM HABITABILITY RADIOLOGICAL DOSE REQUIREMENTS AS GOVERNED BY REGULATIONS SPECIFIED IN APPENDIX A TO 10 CFR PART 50 AND IN 10 CFR 50.67

Approved X **Disapproved** _____ **Abstain** _____

Not Participating _____

COMMENTS: **Below** X **Attached** ___ **None** ___

The staff should clarify the first sentence of the second paragraph on page 24 of the Federal Register notice.

SIGNATURE

12/3/08

DATE

Entered on "STARS" **Yes** X **No** ___

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER LYONS

SUBJECT: SECY-08-0172 – DENIAL OF PETITION FOR RULEMAKING PRM-50-87 CONCERNING CONTROL ROOM HABITABILITY RADIOLOGICAL DOSE REQUIREMENTS AS GOVERNED BY REGULATIONS SPECIFIED IN APPENDIX A TO 10 CFR PART 50 AND IN 10 CFR 50.67

Approved X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached ___ None X

Peter B. Lyons
SIGNATURE

11/ 24 /08
DATE

Entered on "STARS" Yes X No ___

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER SVINICKI

SUBJECT: SECY-08-0172 – DENIAL OF PETITION FOR RULEMAKING PRM-50-87 CONCERNING CONTROL ROOM HABITABILITY RADIOLOGICAL DOSE REQUIREMENTS AS GOVERNED BY REGULATIONS SPECIFIED IN APPENDIX A TO 10 CFR PART 50 AND IN 10 CFR 50.67

Approved XX Disapproved _____ Abstain _____

Not Participating _____

COMMENTS: Below XX Attached ___ None ___

I approve subject to the attached edits.

SIGNATURE

12/15/08

DATE

Entered on "STARS" Yes ✓ No ___

the commercial nuclear electrical power generation industry, in STS change traveler TSTF-448, Revision 3. NRC published a Notice of Availability of the SER in the Federal Register on January 17, 2007 (72 FR 2022). Generic Letter (GL) 2003-01, dated June 12, 2003, is available on ADAMS (ML031620248).

Comment: In response to the petitioner's proposed guidance, NEI provided the following comments:

- The control room ventilation system should isolate on the detection of high radiation or toxic gas intake. NEI commented, "A good many control rooms in the industry already operate in this manner. Conversely, there are some plants that do not have automatic initiation of the emergency mode. Making this a requirement could result in an undue (and expensive) modification/backfit. For those plants susceptible to toxic gas intrusion, automatic initiation is typically the case (although not specifically implemented in all cases). If required, this also could result in undue (and expensive) modifications."
- The control room should have a minimum of one foot of concrete shielding (or equivalent) on all surfaces. NEI commented, "It is unlikely that all control room have one foot of concrete shielding on all surfaces. This requirement could result in undue (and expensive) modifications. A similar concern applies to the technical support center, which may also be affected by this requirement."
- SCBAs and KI tablets should be readily available for operator use. Operators should maintain training in SCBAs. NEI commented, "The use of these methods has merit, but additional evaluation of their effects is necessary. The medical complications of ingesting KI would have to be evaluated for all CR personnel. The use of SCBA credit would require specific training for which operators will need to demonstrate the ability to conduct their safety related functions while wearing a SCBA for several hours."

- Procedures should be developed to ensure control room purging is considered when the outside concentration is less than the inside concentration. NEI commented, "Although this appears to be a good practice, it can't be credited in the operator dose analysis. The timing of purging could be critical based on the timing of the release and the release pathway. Therefore, this recommendation may not have any practical merit."

The petitioner stated that because of the low risk significance of being outside the control room habitability program guidelines, a plant shutdown would not be required in this condition; rather, the program could specify that timely actions should be taken to return the plant within the guidelines. If not complete within 30 days, a special report would be sent to the NRC with a justification for continued operation and a proposed schedule for meeting the guidelines. NEI commented, "This is a valid point that the industry supports."

The petitioner stated that as an alternative to total removal of dose guidelines from the regulations, most of his concerns could be resolved if the dose criteria were based solely on the whole body dose from noble gases that he believes is the only possible dose impact that may result in control room evacuation. NEI commented, "It is not clear that the noble gas contribution would be limiting in all cases. However, this may be the case if KI were allowed to be credited.

Response: These comments have been addressed in Section III of this document.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

OFFICE OF THE
SECRETARY

Raymond A. Crandall
3313 Stafford Ct.
Florence, SC 29501

Dear Mr. Crandall:

I am responding to your letter of May 17, 2007, by which you submitted to the U.S. Nuclear Regulatory Commission (NRC) a petition for rulemaking (PRM) concerning control room habitability radiological dose requirements as governed by regulations specified in Appendix A, "General Design Criteria for Nuclear Power Plants" to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the *Code of Federal Regulations* (10 CFR Part 50) and 10 CFR 50.67, "Accident Source Term." You requested to delete the 5 rem whole body dose limit specified in General Design Criterion (GDC) 19, "Control Room" Appendix A to 10 CFR Part 50 and the 0.05 sievert (Sv) (5 rem) total effective dose equivalent (TEDE) limit specified in both GDC 19 and 10 CFR Part 50.67(b)(2)(iii). We docketed your petition PRM-50-87 and published a notice of receipt and request for public comment in the *Federal Register* on July 12, 2007 (72 FR 38030). The comment period for PRM-50-87 closed on September 25, 2007.

We received two public comments on the petition, one from Mr. Walston Chubb, and one from Mr. James H. Riley on behalf of the Nuclear Energy Institute (NEI).

Based upon our review of the petition and comments received, we have determined that the conclusions upon which you rely do not substantiate a basis to eliminate the control room radiological dose acceptance criteria from current regulations as requested. The performance-based control room dose criterian is designed such that an acceptable level of control room habitability will be maintained even under the maximum credible accident scenario. We further determined that providing an acceptable level of control room habitability for design basis events is necessary to provide reasonable assurance that the control room will continue to be effectively manned and operated to mitigate the effects of the accident and protect the public health and safety. Accordingly, we are denying the PRM.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

The Honorable Barbara Boxer
Chairman, Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

Enclosed for your information is a *Federal Register* notice denying a petition for rulemaking (PRM) filed by Mr. Raymond A. Crandall on May 17, 2007, and docketed by the Nuclear Regulatory Commission (NRC) on June 22, 2007 (Docket No.PRM-50-87). The NRC published a notice of receipt and request for public comment in the *Federal Register* on July 12, 2007 (72 FR 38030). The 75-day public comment period ended on September 25, 2007.

In his petition, the petitioner requested that the NRC amend the regulations that govern domestic licensing of production and utilization facilities to eliminate the specific criteria related to the radiological doses for control room habitability at nuclear power plants. The petitioner stated that the current deterministic radiological dose requirements for control room habitability have resulted in several negative safety consequences, including an increased risk to public safety. He requested that the NRC delete the 5 rem whole body dose limit, and the 0.05 sievert (Sv) (5 rem) total effective dose equivalent (TEDE) limit specified in Appendix A, "General Design Criteria for Nuclear Power Plants" to Title 10, Part 50, "Domestic Licensing of Production and Utilization Facilities," of the *Code of Federal Regulations* (10 CFR Part 50) and 10 CFR 50.67, "Accident Source Term." Based upon review of the petition and comments received, the NRC has determined that the conclusions upon which the petitioner relies do not substantiate a basis to eliminate the control room radiological dose acceptance criteria from current regulations as requested. The enclosed notice will be published in the *Federal Register* within the next few days.

Sincerely,

Rebecca L. Schmidt, Director
Office of Congressional Affairs

Enclosure:
Federal Register Notice

cc: Senator James M. Inofe