

AFFIRMATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: **SECY-01-0127 - DRAFT FINAL RULE - 10 CFR PART 63,  
"DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTES IN A  
PROPOSED GEOLOGIC REPOSITORY AT YUCCA  
MOUNTAIN, NEVADA**

Approved XX Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

Approve subject to attached comments.

  
\_\_\_\_\_  
SIGNATURE

8/16/01  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes \_\_\_\_\_ No \_\_\_\_\_

## Commissioner Merrifield's Comments on SECY-01-0127

I approve, with modifying comments provided in subsequent paragraphs, the staff's recommendation's contained in SECY-01-0127 for the publication of the final rule for 10 CFR Part 63. I would first like to first commend the staff on their significant efforts in developing this rulemaking package. Under a decidedly stressful situation, the staff produced a timely and high quality final rulemaking package for Commission consideration.

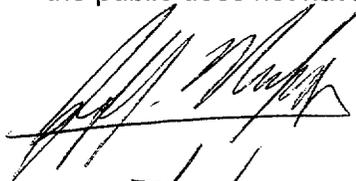
This final rule contains some key differences from the draft proposed rule the Commission issued for public comment on February 22, 1999 (64 FR 8640). Some of these changes resulted from extensive interactions with and comments received from stakeholders. The remainder of the changes resulted from NRC's incorporation of the Environmental Protection Agency's (EPA's) final environmental standards for Yucca Mountain. Although I believe that some of the requirements in the EPA standards are unnecessary and restrictive and not based in the latest scientific information (for example the separate 4 mrem/yr ground-water protection requirement), the NRC is required by law to be consistent with these standards and the staff has done a good job incorporating these standards into the rest of our regulation.

The modifications I am approving to the staff recommendations in SECY-01-0127 are as follows:

1. The final 10 CFR Part 63 rule should use total effective dose equivalent (TEDE) instead of annual effective dose equivalent (annual CEDE) for radiological doses to members of the public. Although under certain circumstances there may be some calculational differences between TEDE and annual CEDE, in the actual implementation of these concepts at Yucca Mountain the calculations of either term should produce essentially the same results. The NRC already uses TEDE in 10 CFR Part 20 of its regulations. I agree with the Chairman that it is inappropriate to use different terms for essentially the same calculations in different parts of our regulations. To use different terms for essentially the same concept in separate regulations could eventually result in inconsistent application of our regulations. I believe it is more appropriate to define the TEDE concept in 10 CFR Part 20 and its implementation methodology in supporting regulatory guidance documents. The current implementing guidance for TEDE uses Federal Guidance Report No. 11 (FGR 11) and may appropriately evolve as methods for calculating doses become more refined with future advances in science. As science advances, the NRC should maintain the flexibility to modify our regulations and methodologies as appropriate.
2. Another issue which has arisen during the review of this paper is the definition of the term "unlikely" and the probability of occurrence of an event that is considered an "unlikely event". I agree with the Chairman's vote in that the staff should initiate a separate rulemaking activity to more clearly define the term unlikely. Qualitative terms such as "unlikely" and "highly unlikely" are commonly used when performing risk analyses and are used when quantitative information is not available or when a more general perspective is used. Assigning a specific quantitative probabilistic number to qualitative words is difficult because the probability of occurrence of a specific "unlikely

event" can vary depending on the situation and the assumptions used in the analyses. Therefore during the separate rulemaking to define the term "unlikely" the staff should evaluate the pros and cons of both a range of values as well as a specific value to define "unlikely".

3. I support the Chairman's vote concerning the revisions to the definition of high-level radioactive waste in 10 CFR Part 63. The Chairman raises valid concerns about the definition as currently contained in Part 63.
4. I agree with the Chairman's concern that section 63.16(d) as currently written can be interpreted to mean that the public will be given the opportunity to comment on NRC comments prior to sending the comments to DOE. Personally, I believe the intent of the staff is that all comments which are sent to DOE will be placed in a public forum to allow the public to comment on them after the NRC comments are sent to DOE. The rule language should be modified to eliminate any ambiguity of when the staff intends to allow for public comment. Although I am fully supportive of actively soliciting public input in our regulatory process, I am not supportive of committing to provide our draft comments to the public for review prior to sending them to DOE officially. The Chairman makes a reasonable case in his vote concerning NRC comments on DOE's Site Sufficiency Review. The staff should provide their comments to DOE in a public manner and both DOE and the general public should then have the opportunity to provide a response to the NRC comments, if appropriate, but the rule should be clarified on this issue so that the public does not have a false impression of our intent.



8/16/01