

August 10, 2000

Dr. B. John Garrick, Chairman  
Advisory Committee on Nuclear Waste  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

**SUBJECT:** RESPONSE TO ADVISORY COMMITTEE ON NUCLEAR WASTE LETTER  
DATED JUNE 29, 2000, ON THE SUBJECT OF THE U.S. NUCLEAR  
REGULATORY COMMISSION'S EVALUATION OF THE U.S. DEPARTMENT  
OF ENERGY'S SITE RECOMMENDATION CONSIDERATION REPORT

Dear Dr. Garrick:

I am responding to your letter, dated June 29, 2000, that provided the Advisory Committee on Nuclear Waste's (ACNW's) comments on the draft strategy for the U.S. Nuclear Regulatory Commission (NRC) sufficiency review. The ACNW provided three comments and described its approach to conducting an independent review of the documents and activities associated with the U.S. Department of Energy's (DOE's) site suitability decision. The NRC staff will work with the ACNW during the sufficiency review to keep the ACNW informed about the progress of its review efforts and to facilitate those of the ACNW. The staff response to each of the ACNW's comments is presented below.

**Comment 1.** The ACNW plans to follow closely how the staff integrates its sufficiency review with the development and application of the Yucca Mountain Review Plan (YMRP) and with activities to resolve issues. The ACNW requests that the staff provide an example of how it plans to evaluate a specific Process Model Report for sufficiency, using the staff's sufficiency strategy, accompanying guidance, and the YMRP.

**Response 1.** The staff is developing guidance that will implement the sufficiency review strategy and is tentatively scheduled to brief the ACNW on this guidance in November 2000. During this presentation, the staff will discuss the approach that it is using for the sufficiency review, illustrate this approach with an example, and describe further how the sufficiency review is being integrated with the YMRP and efforts to resolve issues. In addition, the staff will continue to keep the ACNW apprised of its efforts related to the sufficiency review, development of the YMRP, and issue resolution.

**Comment 2.** The ACNW wants to gain a better understanding of how the staff prioritizes open issues, using the process for resolving key technical issues while considering an issue's importance to performance and to DOE's Repository Safety Strategy. Specifically, the ACNW is interested in the extent to which the number and priority of open items will influence the NRC staff's sufficiency evaluation of DOE's Site Recommendation Consideration Report.

**Response 2.** As you are aware, the NRC's statutory obligation for the review of the DOE's Site Recommendation Consideration Report is governed by the requirement in the Nuclear Waste Policy Act of 1982 (NWPA) for the NRC to develop preliminary comments on the sufficiency of DOE's at-depth site characterization analyses and waste form proposal for inclusion in a possible license application. As a result, the NRC's sufficiency review is to provide preliminary comments addressing where the DOE stands with reference to assembling or developing the information that will be needed for a license application. The standard for determining whether the DOE information and analyses appears to be sufficient for a license application is different from the standard applied during a licensing review, where we would make a definitive determination of compliance with regulatory requirements based on a substantially complete license application. Also relevant to the NRC's sufficiency review are the staff's nine key technical issues (KTIs) important to post-closure repository performance and the staff's activities in pre-licensing consultations with the DOE to resolve the KTIs prior to the DOE's submission of any license application. The sufficiency review will take advantage of the staff's efforts to resolve issues and will provide the staff with an opportunity to reassess the status of relevant issues and further focus on what is needed to reach resolution, given the substantial amounts of new information and analyses assembled by the DOE in support of the site suitability decision. However, as previously noted, resolution of the KTIs is a staff goal prior to DOE's license application. Therefore, notwithstanding all staff's efforts in issue resolution, the KTIs may not be resolved by the earlier time of site recommendation. As the staff continues the sufficiency review, it will keep the ACNW informed about how the review is being conducted and how issue closure and prioritization are progressing. This should allow the ACNW to learn how the open items influence the sufficiency review.

**Comment 3.** During the NRC staff presentation to the ACNW, the concept of using conservatism as a counterbalance to uncertainty was discussed. The ACNW is skeptical about the use of "conservatism" to compensate for uncertainty in performance analysis, especially because overestimating consequences is not necessarily conservative. This topic may be one that the ACNW and the NRC staff should explore together so that the basis for positions on this issue is better understood.

**Response 3.** The staff generally agrees with the Committee's view that using conservatism as a counterbalance to uncertainty may overestimate consequences. A better mutual understanding of the issues and possible differences in perspective will benefit both the staff and the ACNW, and help to make the staff's sufficiency review more effective. In particular, the staff is interested in discussing with the Committee appropriate means of dealing with

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uncertainties revealed by a realistic analysis as we develop preliminary comments on sufficiency. The staff will work with the ACNW on this topic concurrent with the ongoing sufficiency review.

Sincerely,

***/RA by Frank J. Miraglia Acting For/***

William D. Travers  
Executive Director  
for Operations

cc: Chairman Meserve  
Commissioner Dicus  
Commissioner Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
SECY

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