



Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
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AUG 17 1994

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U.S. Nuclear Regulatory Commission
Washington, DC 20555

SITE SUITABILITY EVALUATION PROCESS (SCPB: N/A)

This letter responds to your request for additional information regarding the site suitability evaluation process being developed as part of the U.S. Department of Energy's (DOE) Proposed Program Approach (PPA). Please recognize that this process is undergoing internal and external review and may be modified as we proceed. The DOE is holding public meetings on August 27 and August 30, 1994, and is also soliciting written comments from stakeholders.

As you know, the DOE must make positive higher-level findings for the qualifying and disqualifying conditions for each system and technical guideline in 10 Code of Federal Regulations Part 960, prior to recommending the site for repository development. A positive higher-level finding requires the DOE to demonstrate, with high confidence, that a disqualifying condition is not present, or that a qualifying condition is present. A schedule has been developed, a preliminary version of which you have seen in our PPA briefings, that allows us to make these findings as soon as adequate site and design information are available. These findings will be based on a review of available site and design information and an assessment of our confidence regarding whether positive findings are likely to change with additional information. If a positive finding for any qualifying or disqualifying condition cannot be made, either additional information will be obtained and the finding reassessed at a later time, or the site will be eliminated from consideration as a potential repository. This approach is fully consistent with the PPA objectives to provide measures of progress and to reevaluate the level of confidence that is required at each major decision point in the repository program.

In order for the DOE position to be as strong as possible, we intend to subject the technical bases for findings to external peer review prior to performing our compliance assessments. In developing our approach and preliminary schedule, we have

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examined the type of site and design information needed to support compliance assessments for each of the qualifying and disqualifying conditions. This information was then grouped according to related technical disciplines so that a limited number of in-depth peer reviews can be scheduled. Peer reviewers will be asked to evaluate the completeness of the technical bases, including whether the data collection methods were technically sound, whether the data support the technical interpretations, whether alternative interpretations are possible, and to identify further testing that could discriminate between significant alternative interpretations.

We understand your need to determine the appropriate role for U.S. Nuclear Regulatory Commission staff with respect to the DOE's suitability evaluations. As we discussed at our management meeting on July 26, 1994, the technical bases used to support suitability evaluations will also serve as input to the License Application Annotated Outline (AO) and Topical Reports, and will be the subject of discussion during technical exchanges. However, if resources are less than envisioned under the PPA, we will be forced to place highest priority on completing the site suitability evaluation process that will lead to a Technical Site Suitability Determination in 1998.

We believe early feedback from your staff to convey any major concerns regarding the technical information presented in the technical basis reports could be extremely useful to the DOE. The mechanisms by which this feedback could be provided include discussions at technical exchanges, written comments on technical basis reports, and written comments on annual revisions to the AO and Topical Reports that have incorporated the technical bases information.

I am available to discuss these topics further at your request. Please call me at (702) 794-7971.


Stephan J. Brocum
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AMSL:AVG-4672

Malcolm R. Knapp

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