

## Department of Energy

Office of Civilian Radioactive Waste Management  
Yucca Mountain Site Characterization Office  
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QA: N/A

JUL 29 2002

### OVERNIGHT MAIL

Janet R. Schlueter, Chief  
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Office of Nuclear Materials Safety  
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U.S. Nuclear Regulatory Commission  
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### TRANSMITTAL OF REPORT ADDRESSING KEY TECHNICAL ISSUE (KTI) AGREEMENT ITEMS CONTAINER LIFE AND SOURCE TERM (CLST) 5.06 AND 5.07

This letter transmits a report entitled *Agreements CLST 5.06 and 5.07*, which the U.S. Department of Energy (DOE) believes provides the basis for completion of the subject agreements. These agreements are as follows:

CLST 5.06 - "Provide a 'what-if' analysis to evaluate the impact of an early criticality assuming a waste package failure."

"DOE stated that it would provide the requested analysis prior to LA. Actual schedule to be provided pending DOE planning process."

CLST 5.07 - "Provide sensitivity analyses that will include the most significant probability/consequence criticality scenarios."

"DOE stated that it would provide the requested analyses prior to LA. Actual schedule to be provided pending DOE planning process."

CLST Subissue 5 focuses on the methodology and modeling used by DOE in the evaluation of the potential for criticality events internal to the waste package during the postclosure period. Agreements CLST 5.06 and 5.07 concern information regarding the consequences of a potential postclosure criticality event. Resolution of these agreements was originally planned to be addressed through Analysis and Model Reports prepared in support of the License Application. However, as discussed during the April 15-16, 2002, U.S. Nuclear Regulatory Commission (NRC)/DOE Technical Exchange and Management Meeting on KTIs, the information in the enclosure, addressing the basis for closure of these agreement items, is being submitted to facilitate an early NRC staff review. This approach for addressing these agreement items has been discussed with your staff.

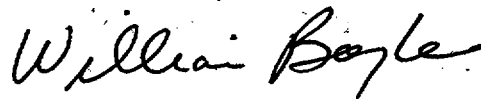
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Consistent with the methodology documented in the *Disposal Criticality Analysis Methodology Topical Report* (YMP/TR-004Q, Revision 01), DOE plans to address these two KTI agreements by demonstrating that the probability of criticality is below the regulatory threshold and that based on 10 CFR 63.114(d), consequence evaluation of criticality can be screened out in the same manner as other low probability events.

CLST 5.06 is also included as part of the DOE response to NRC comments General 1.01 (Items 21 and 64). The information presented in the enclosure also addresses this issue as it pertains to CLST 5.06.

This letter contains no new regulatory commitments. Please direct any questions concerning this letter and its enclosure to Timothy C. Gunter at (702) 794-1343 or Paige R.Z. Russell at (702) 794-1315.



Joseph D. Ziegler  
Acting Assistant Manager, Office of  
Licensing and Regulatory Compliance

OL&RC:TCG-1523

Enclosure:

*Agreements CLST 5.06 and 5.07*

cc w/encl:

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