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QA: N/A

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OVERNIGHT MAIL

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**TRANSMITTAL OF REPORT ADDRESSING KEY TECHNICAL ISSUE (KTI)
AGREEMENT ITEM TOTAL SYSTEM PERFORMANCE ASSESSMENT AND
INTEGRATION (TSPAI) 3.03**

This letter transmits the report entitled, *Response to TSPAI Agreement 3.03*, to satisfy the subject KTI agreement. KTI Agreement Item TSPAI 3.03 addresses the technical basis for the U.S. Department of Energy's (DOE) representation of stress corrosion cracking (SCC) in the drip shield and waste package. The agreement is as follows:

TSPAI 3.03 - "Provide the technical basis for crack arrest and plugging of crack openings (including the impact of oxide wedging and stress redistribution) in assessing the impact of SCC of the drip shield and waste package in revised documentation (ENG1.1.2 and ENG1.4.1)."

"DOE will provide the technical basis for crack arrest and plugging of crack openings (including the impact of oxide wedging and stress redistribution) in assessing the stress corrosion cracking of the drip shield and waste package in an update to the Stress Corrosion Cracking of the Drip Shield, Waste Package Outer Barrier, and the Stainless Steel Structural Material AMR (ANL-EBS-MD-000005) in accordance with the scope and schedule for existing agreement item CLST 1.12."

Sensitivity studies were performed to show the relative importance of specific representation of drip shield crack openings to meeting the individual protection or groundwater protection performance objectives. These sensitivity studies show that the specific representation of drip shield crack openings are not important to the determination of whether the individual protection or groundwater protection performance objectives would be met.

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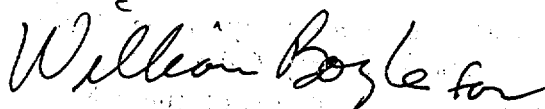
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The technical basis for the representation of stress corrosion cracks, including the effects of crack arrest or plugging of crack openings (including the impact of oxide wedging and stress redistribution) are not considered important to performance with regard to the postclosure performance objectives. Thus, the enclosed risk information is proposed as an alternative approach to meeting this agreement and for the closure of KTI Agreement Item TSPAI 3.03 as discussed at the April 15-16, 2002, U.S. Nuclear Regulatory Commission/DOE Technical Exchange and Management Meeting on KTIs.

Agreement Items Container Life and Source Term 1.12 and General (GEN) 1.01(09), (10), and (21) are associated with drip shield SCC. These agreements are explicitly referenced in KTI Agreement Item TSPAI 3.03, or have been mapped to this agreement because of the similarity in subject (e.g., drip shield SCC). Although similar arguments can be made to address these agreements, the proposed DOE resolution in this letter does not explicitly address these agreements, except for the applicable portion of KTI Agreement Item GEN 1.01(21). The portion of GEN 1.01(21) addressed by this letter is the potential for SCC initiation/arrest in the waste package. Dispositioning of the remaining agreements will be included in the Fiscal Year (FY) 2003 and FY 2004 KTI planning efforts.

This letter contains no new regulatory commitments. Please direct any questions concerning this letter and its enclosure to Mark C. Tynan at (702) 794-5457 or Timothy C. Gunter at (702) 794-1343.



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

OL&RC:TCG-1326

Enclosure:
Response to TSPAI Agreement 3.03

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