



Department of Energy
Office of Civilian Radioactive Waste Management
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QA: N/A

AUG 20 2001

OVERNIGHT MAIL

C. William Reamer, Chief
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U.S. Nuclear Regulatory Commission
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**TRANSMITTAL OF WASTE PACKAGE DEGRADATION (WAPDEG) SOURCE CODE
VERSION 4.0 – SOFTWARE TRACKING NUMBER STN: 10000-4.0-00**

This letter transmits a copy of the approved and qualified WAPDEG Version 4.0 source code and identification of differences between WAPDEG Version 4.0 and the version of the WAPDEG code used for the Total System Performance Assessment-Site Recommendation (TSPA-SR). The source code and the difference list are provided to the U.S. Nuclear Regulatory Commission (NRC) to fulfill the request of David W. Esh of your staff.

Please note the WAPDEG Version 4.0 includes a known defect that has been detected, evaluated, and documented for any impact to previous and current results. The defect in the WAPDEG code is failure to initiate inside-out corrosion properly for single barrier waste packages. For waste packages with two or more barriers, WAPDEG models inside-out corrosion properly. Previous and current results made use of a waste package modeled with two barriers. The defect does not impact previous or current results. Results available to date verify this conclusion.

Due to the specialized technical nature of the enclosures, we are providing a copy to the NRC only. Please direct any questions concerning this letter or requests for copies of the enclosures to Timothy C. Gunter at (702) 794-1343.

Stephan Brocoun
Assistant Manager, Office of
Licensing and Regulatory Compliance

OL&RC:TCG-1567

Enclosures:

1. CD on WAPDEG Version 4.0
2. Differences Between WAPDEG Revision 4.0
and the WAPDEG Version Used for TSPA-SR

WM-11
NM5507
Encl w/Reld Plw
J. Andersen

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