April 22, 2002

Dr. Man-Sung Yim Department of Nuclear Engineering 2102 Burlington Engineering Labs Box 7909 Raleigh, NC 27695-7909

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION TOTAL-SYSTEM

PERFORMANCE ASSESSMENT CODE VERSION 4.1J AND USER'S GUIDE

Dear Dr. Yim:

I have enclosed a copy of the U.S. Nuclear Regulatory Commission (NRC) performance assessment code for the potential high-level radioactive waste repository located at Yucca Mountain, Nevada, and the corresponding user's guide. These enclosures are: (1) Total-system Performance Assessment (TPA) Version 4.1J code and (2) version 4.0 user's guide. These represent the most current versions of the code and user's guide that are publically available. The changes from version 4.0 to version 4.1J of the TPA code are relatively minor and the TPA Version 4.0 user's guide includes the important features the latest version of the program.

Development and improvements to the models and parameters contained within TPA Version 4.1 continue, so specific modeling approaches and parameter values are likely to change.

The TPA code and the supporting documentation were developed for use by the U.S. Nuclear Regulatory Commission staff and its contractor; therefore, the code is provided to you with no guarantee it will operate on your computer system and without any commitment to support your use of the software. The user's guide was developed for internal use and has not received the level of review given to NUREG reports.

If you have any further questions regarding the TPA code or its documentation, please contact Christopher Grossman at 301-415-7658 or by electronic mail at cjg2@nrc.gov or me at 301-415-6628 or by electronic mail at jrf2@nrc.gov.

Sincerely,

\RA\

James R. Firth, Element Manager Environmental and Performance Assessment Branch Division of Waste Management Office of Nuclear Material Safety and Safeguards

Enclosures: TPA 4.0 User's Guide

TPA Version 4.1J Code

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Sincerely,

\RA\

James R. Firth
Environmental and Performance Assessment
Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: TPA 4.0 User's Guide

TPA Version 4.1J Code

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