## **Center for Nuclear Waste** Regulatory Analyses

6220 CULEBRA ROAD • P.O. DRAWER 28510 • SAN ANTONIO, TEXAS, U.S.A. 78228-0510 (210) 522-5160 • FAX (210) 522-5155

> July 8, 1998 Contract No. NRC-02-97-009 Account No. 20-1402-471

U.S. Nuclear Regulatory Commission ATTN: Philip S. Justus Office of Nuclear Material Safety and Safeguards Two White Flint North Mail Stop 7 C6 Washington, DC 20555

Subject:

Constant Thickness Deformation Above Curved Normal Faults (IM 20-1402-471-733)

Reference:

(1) Transmittal letter-McKague to Justus dated June 19, 1997

(2) Acceptance letter-Justus to McKague dated July 9, 1997

## Dear Dr. Justus:

Enclosed is IM 20-1402-471-733 entitled Constant thickness deformation above curved normal faults. This milestone was originally submitted June 19, 1997 as IM 20-5708-471-733. In the July 9, 1997 acceptance letter NRC staff suggested "...that substantial and significant simplifications to at least two equations could be made...". The inputs of Drs. Budhi Sagar and Lee Abramson on the development of the equations have been incorporated into this version of the manuscript. In addition comments by the Journal of Structural Geology peer reviewers have been incorporated into the current version of the manuscript. Resolution of the journal reviewers' comments, in general, required clarification of the logic used by the authors. A short section on fault trajectory prediction using a minimum deformation approach was added to this version of the manuscript.

If you have any questions please contact Dr. David Ferrill at (210) 522-6082 or me at (210) 522-5183.

9808070220 980708

PDR

aumo Mi-Kazue H. Lawrence McKague

Manager, Geology and Geophysics

/adm Enclosure

cc:

J. Linehan

D. DeMarco

B. Stiltenpole

B. Meehan

J. Greeves

M. Weber

J. Austin

M. Bell

J. Thoma

D. Brooks

K. Stablein

W. Patrick **CNWRA Directors**  CNWRA Elem. Mgrs.

S. Boyanowski (SwRI Contracts)

NH15/1 426.1 Wm-11

A. Morris

D. Ferrill

J. Stamatakos

D. Sims

D:\McKague\Letmem\lm069804lm

Washington Office • Twinbrook Metro Plaza, #210 •12300 Twinbrook Parkway • Rockville, Maryland 20852-1606

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