

ITASCA 8/3/87

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Mr. Roger Hart  
ITASCA Consulting Group  
P.O. Box 14806  
Minneapolis, MN 55414

Dear Mr. Hart:

ITASCA should perform the following work under the contract entitled,  
"Technical Assistance for Design Reviews" (NRC-02-85-002, FIN D1016).

TASK ORDER 001

Meetings:

1. ITASCA should send two senior engineers to a meeting to discuss the creep model in FLAC and the Stress3d code during August, 1987 in Silver Spring, Maryland (note: a trip was approved for July 22 and 23 for one senior engineer to discuss stress3d and the rock burst potential at BWIP point paper).

Document Reviews

Itasca should review the following NNWSI documents.

- 1) "Thermomechanical Analysis of Underground Excavations in the vicinity of a Nuclear Waste Isolation Panel", C.M. St. John, SAND84-7208.
- 2) "Sensitivity Analyses of Underground Drift Temperature, Stresses, and Safety Factors to Variation in the Rock Mass Properties of Tuff for a Nuclear Waste Repository Located at Yucca Mountain, Nevada" B.L. Ehgartner, SAND86-1250.
- 3) "Analysis of Horizontal Waste Emplacement Boreholes of a Nuclear Waste Repository in Tuff", K.Arulmoli and C.M. St. John, SAND86-7133.
- 4) "Thermal Analysis of Spent Fuel Disposal in Vertical Emplacement Boreholes in a Welded Tuff Repository", C.M. St. John, SAND84-7207
- 5) "Investigation of Excavation Stability in a Finite Repository", C.M. St. John, S.J. Mitchell, SAND86-7011
- 6) "Reference Thermal and Thermal/Mechanical Analyses of Drifts for Vertical and Horizontal Emplacement of Nuclear Waste in a Repository in Tuff", C.M. St. John, SAND86-7005
- 7) "Near Field Mechanical Calculations Using a Continuum Jointed Rock Model in the JAC Code", R.K. Thomas, SAND83-0070

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WM Project: WM-10, 11, 16

PDR yes

(Return to WM, 623-SS)

WM Record File: D1016

LPDR yes

8709090150 870803  
PDR WMRES EECITAS  
D-1016 PDR

WM-RES  
WM Record File  
D1016  
ITASCA

WM Project 10, 11, 16  
Docket No. \_\_\_\_\_

PDR ☒  
LPDR ☒ (B, A, S)

Distribution:

(Return to WM, 623-SS)

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The review of each document should take no more than 3 person days. Instructions for the reviews can be found in the attached note (Tiktinsky to Nataraja, 7/28/87).

The action taken by this letter is considered to be within the scope of the current contract NRC-02-85-002. No changes to costs or delivery of contracted products are authorized. Please notify me immediately if you believe this letter would result in changes to costs or delivery of contracted products. I can be reached on (301) 427-4649.

Sincerely,

**ORIGINAL SIGNED BY**

David H. Tiktinsky  
Technical Review Branch  
Division of High-Level Waste Management  
Office of Nuclear Material Safety  
and Safeguards

cc: M. Little, NRC