

Dr. Robert M. Cranwell, Supervisor
Waste Management Systems
Division 6416
Sandia National Laboratories
Albuquerque, NM 87185

MAR 02 1988

Dear Dr. Cranwell:

SUBJECT: COMMENTS ON SNL'S JANUARY 1988 MONTHLY REPORT FOR FIN A-1165

I have received your January 1988 monthly report for FIN A-1165 and have eight comments to make:

- (1) Unexplained and possibly incorrect subtask charges noted in my letter to you of January 21, 1988 have apparently not been addressed. Because of this, it is not possible to evaluate the Task charges for the January 1988 monthly report. Nonetheless, it would appear that (at least) the \$1K charged to Travel under Task 6 is in error. Please respond to these items in writing immediately. Also, ensure that all charges in future monthly reports are adequately explained and are applied to the correct Task. Insofar as possible, ensure that charges are applied in the month that the cost is incurred.
- (2) We had agreed in a telephone conversation that took place during January that the monthly reports would be reorganized to provide a brief report on the status of all deliverables identified in the Statement of Work (SOW) and the Form 189 submitted by SNL for this project. This reorganization did not appear in the monthly report prepared for January 1988. Please telephone me if you have any questions about this, and ensure that all future monthly reports are appropriately reorganized.
- (3) Under Task 1, Licensing Methodology Assistance, you mentioned the meeting of January 20, 1988 between P. Davis, E. Bonano and myself, during which the assignment of SNL and NRC points-of-contact in the various disciplines required for performance assessment was discussed. I have enclosed a marked-up copy of the "responsibility matrix" developed by SNL, with the names and telephone numbers of the appropriate NRC staff provided. Please send me an up-to-date list of SNL contacts with telephone numbers, for distribution to the appropriate staff here. I consider that the establishment and use of these points-of-contact will help ensure that products delivered under FIN A-1165 meet the needs of the NRC.
- (4) NRC staff have reviewed the preliminary outline for the subtask 1.1 interim report that was provided with the monthly report. The outline presents a "top-down" approach to defining the components of performance assessment, with limited detail on the implementation of this approach

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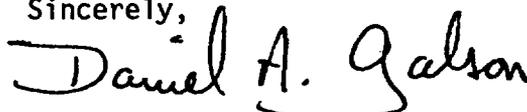
being provided under Section 2.1.1 of the outline. The outline addresses the key regulatory needs for the postclosure period and, as such, is complete for the postclosure period. I am assuming that integration and model linkage within Section 2 will be addressed in Section 3. Please be aware in completing this report that the NRC has previously sponsored a great deal of work that has taken a "bottom-up" approach to identifying and evaluating the significance of parameters and models of use to repository performance assessment. Many of these will be of use to you in completing the subtask 1.1 work. I sent you a copy of NUREG/CR-4161, "Critical Parameters for a High-Level Waste Repository (Volume 1: Basalt, Volume 2: Tuff, Volume 3: Salt)" with my letter of January 13, 1988 (Comments on November 1987 Report for FIN A-1165). I am now enclosing copies of NUREG/CR-4134, "Repository Environmental Parameters and Models for Assessing the Performance of High-Level Waste Packages (Basalt, Tuff, and Salt)", and NUREG/CR-3160, "Parameters and Variables Appearing in Radiological Assessment Codes". Under separate cover, I am also sending a copy of NUREG/CR-3066, "Parameters and Variables Appearing in Repository Siting Models." Other reports may be identified through appropriate use of the NRC points-of-contact. Finally, I still have comments on R. Gyuorowski's draft interim report that I will send you under separate cover.

- (5) A document describing further work under Subtask 3.2 was enclosed with the monthly report. This document preliminarily considers techniques appropriate for estimating probabilities of faulting, seismicity, uplift and subsidence, and volcanism. This document is currently under review by NRC staff, along with the document sent with the December 1987 monthly report that considered resource exploration, climate, thermomechanical effects, and tunneling and mining. I expect to be able to provide you with comments on this preliminary work by about mid-March. For your information and use under this subtask, I have enclosed a copy of a recently published National Research Council report entitled "Estimating Probabilities of Extreme Floods (Methods and Recommended Research)". I have also enclosed a copy of the NRC's recently published draft Generic Technical Position (GTP), "Guidance for Determination of Anticipated Processes and Events and Unanticipated Processes and Events." SNL formally reviewed a prepublication draft of this GTP. While I do not want a further formal review of this GTP, if you or your staff do have major comments on the document, please let me know.
- (6) No activity has yet been charged to Task 4, Maintenance and Management of Performance Assessment Codes. Neil Coleman, NRC Project Manager for FIN A-1158, requested in his letter to you of February 25, 1988 that all code maintenance activities previously charged to A-1158 under Task 2 be charged in future to Task 4 of A-1165. However, as discussed with you on February 26, 1988, I would like to transfer most of the A-1165 funds allotted to Task 4 to Task 5 (1) to cover the overexpenditure on Task 5, and (2) because transfer to the Center for Nuclear Waste Regulatory Analyses (CNWRA) of the code maintenance work may be possible sooner than originally anticipated. Therefore, I should like to request formally that of the \$50K currently allotted for Task 4 in FY88, all but \$5K be transferred to Task 5.

- (7) Neil Coleman indicated to me that it would be my responsibility to respond to SNL with comments on the Waste Management '88 paper submitted with the January monthly report for FIN A-1158, entitled "Quality Assurance and Maintenance of Waste Management Computer Software". I provided you NRC staff comments on this paper in our telephone conversation of February 26, 1988. Briefly, the paper does not clearly identify staff concerns that the code maintenance system developed by SNL for the NRC is only one part of an overall software quality assurance program that must still be developed. The paper presents the SNL program as being the quality assurance program. In most places where the terms "quality assurance" or "QA" are used, it would be more appropriate to use the words "maintenance and configuration management", (as used under Task 4 of the SOW for FIN A-1165). Please ensure that the paper is revised before publication.
- (8) The last point under subtask 4 is that two suspected errors with the SWIFT2 code have recently been brought to the attention of NRC staff. I have enclosed documentation provided the NRC that concerns these two errors. Please address these problems under subtask 4.4. No additional work should be initiated under Task 4 without prior written approval of the NRC Project Manager.

The action taken by this letter is considered to be within the scope of the current contract (FIN A-1165). No changes to cost or delivery of contracted products are authorized. Please notify me immediately if you believe this letter would result in a change to the cost or delivery of contracted products.

Sincerely,



Daniel A. Galson, Project Manager
Operations Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures: As stated

cc w/o enclosure: N. Ortiz, Division 6410, SNL
P. Davis, Division 6416, SNL
E. Bonano, Division 6416, SNL

FROM
SNL

DATE OF DOCUMENT
02-15-88

DATE RECEIVED
02-17-88

NO
WM88019

LTR MEMO REPORT OTHER

XX
ORIG. CC OTHER

TO
D. Galson

ACTION NECESSARY CONCURRENCE DATE ANSWERED
NO ACTION NECESSARY COMMENT BY 03/02/88

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DATE: MAR 0 2 1988

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