

A1165

LPDR Wm-10 (2)
Wm-11 (2)
Wm-16 (2)

426.1/SW/86/12/04 ✓

- 1 -

WM-RES
WM Record File
A1165
SNL

WM Project 10, 11, 16
Docket No.

PDR ✓
LPDR ✓ (B, A, S)

DEC 11 1986

Distribution:

(Return to WM, 623-SS)

Dr. Robert Cranwell
Sandia National Laboratories
Division 6431
P.O. Box 5800
Albuquerque, NM 87185

Dear Dr. Cranwell:

As discussed during our September 30, 1986 meeting, the NRC would like assistance under FIN A1165 in the following three areas:

1. To review the Aerospace final report.
2. To revise the Task III report, and
3. To initiate a study of the treatment of uncertainties.

The statement of Work for FIN A-1165 states that "The objective of Task I is to provide technical assistance to NRC in the development and implementation of the overall licensing assessment methodology. Under Task I, the NRC would like Sandia to review the Aerospace Inc. final report for FIN A-4165 entitled "Demonstration of Methodology for Waste Package Performance Assessment". This review should include an identification of areas needing further work and an evaluation of output generated by Aerospace models and determine compatibility with input requirements of Sandia models.

In the Statement of Work, the Task II objective is to report to NRC what others are doing in the area of nuclear waste management performance assessment so that NRC can avoid duplication of efforts, benefit from data and insights others may have, and provide direction to DOE. As discussed in our meeting of September 30, 1986, the NRC would like Sandia to initiate a study of the treatment of uncertainties as applied in the HLW program. Under Task II, the NRC would like Sandia to categorize uncertainties relevant to performance assessment of HLW repositories, identify the available methodology for dealing with these uncertainties, and make recommendations for additional work in uncertainties to assure the adequate treatment of uncertainties in the HLW program. The final report for this task may be used as basis for GTP or rulemaking.

The objective of Task III of FIN A-1165 is to identify and analyze quantitative techniques for assigning probabilities of occurrence to potentially disruptive events which may affect repository performance to determine the adequacy of the technique, including strengths and weaknesses of each method. Under Task III, based on the comments received on the draft probability report, the extensive discussions during the September meeting, and the overall document length, the NRC requests that the final report be separated into two volumes. Volume I will identify the probability techniques available and present the results of Sandia's analysis. Volume II will provide the detailed summary of specific

8704240326 861211
PDR WMRES EXISANL
A-1165 PDR

3760

87010008(5)H

probabilistic methodologies applicable in each of the technical areas as applied to the high level waste repository.

With the exception of the study of uncertainties, the NRC would like the proposed tasks to be scoped out as soon as possible. Each scoping document should provide a detailed description of the task objectives, outline the means of achieving the objectives, estimate the cost, estimate the schedule and define the personnel working on the project. These scoping documents should be submitted no later than January 15, 1987 and will be used by the NRC to assure that each task is clearly defined. If you have any questions in this regard please give me a call. The scoping document for the study of uncertainties has already been received as requested in the meeting of September 30, 1986.

The action taken by this letter is to be considered within the scope of the current contract (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 change to cost or delivery of contracted products.

Sincerely,

Original Signed By:

Sandra L. Wastler, Project Manager
Repository Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure:

Aerospace Report No. WPR-86(6810-01)-01
(Demonstration of Methodology for WPPA)
September 1986 *Already in the DCS
Under OA1165*

cc: Nestor Ortiz

OFFICIAL CONCURRENCE AND DISTRIBUTION RECORD

LETTER FOR: Robert Cranwell
 FROM: Sandra Wastler
 SUBJECT: NRC REQUESTING ASSISTANCE UNDER FIN A1165 (1) REVIEW
 AEROSPACE FINAL REPORT (2) REVISE TASK III REPORT, AND
 (3) INITIATE A STUDY OF THE TREATMENT OF UNCERTAINTIES
 DATE: DEC 11 1986

DISTRIBUTION

WM/SF 426-1 JBunting, WMPC JGreeves, WMEG SCoplan KStablein Swastler & r/f	NMSS RF PJustus, WMGT WMRP r/f JKennedy RCook PDR	RBrowning, WM MKnapp, WMLU CF RJohnson PPrestholt LPDR (B,N,S)	MBell, WM JLinehan, WMRP RBoyle PHildenbrand JGiarratana
---	--	---	--

CONCURRENCES

ORGANIZATION/CONCUREE	INITIALS	DATE CONCURRED
WM/RP Swastler	<u>SW</u>	86/12/09
WMRP SCoplan	<u>SC</u>	86/12/11

Rec'd & MAILED
 12-17-86 B.L.C.
 2:42 P.M.