

NMSS/RES MOU STATUS MTG

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NOTE TO: File

FROM: Brian E. Thomas, Project Manager, HLPD

SUBJECT: MINUTES OF MAY 16, 1989 NMSS/RES MOU STATUS MEETING

On May 16, 1989 the NRC's joint NMSS/RES Memorandum of Understanding (MOU) Team on HLW performance assessment modeling activities held its monthly status meeting. Due to the Team members' involvement in SCP review activities, the normally scheduled meeting for the first Tuesday of each month was postponed until this time.

The attendees at this meeting were:

NMSS

R. Ballard, HLGP  
 D. Chery, HLGP  
 N. Eisenberg, HLGP  
 B. Thomas, HLPD  
 S. Coplan, HLGP  
 R. Code11, HLGP

RES

J. Randall, WMB  
 T. Nicholson, WMB

Items addressed in the meeting are provided by the agenda in Attachment 1. The discussions were as follows:

Item #1 -- Review of items from April 4, 1989 meeting.

- a) RES MOU resource - As previously stated in the April 4, 1989 meeting, the technical work on MOU Tasks 2 and 3 and other related performance assessment work will have an overall delay of approximately 1.5 to 2 months. This is due to high priority demands of SCP review activities on both RES and NMSS/HLWM and the unavailability of technical staff to do the work. RES has undertaken efforts to obtain someone with applicable expertise and experience in total system performance assessment modeling and related computer analysis.
- b) Quality Assurance (QA) - Inquiries were made regarding the MOU Team's progress in reviewing the CNWRA's QA plan to determine its applicability to MOU work. The Team discussed the possibility of using both the existing Division's (HLWM) Internal Quality Assurance (IQA) Plan and the Agency's existing QA software requirements (i.e. NUREG/CR-4640 and NUREG-0856-F, etc.). It was decided that the Project manager will pursue the viability of this approach with the HLWM QA Section.
- c) MOU Staff Time Charges - The team discussed the need for the Project Manager to obtain and review a copy of the PPSAS report prior to the next meeting and to evaluate approaches to better control and monitor staff time charges to MOU work.

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Item #2 - Task Leaders' status report on Tasks 1,2 and 3.

a) MOU Task #1 -- INTRAVAL

T. Nicholson reported that the meeting involving the U. S. INTRAVAL participants on INTRAVAL unsaturated test case progress held on April 11-12, 1989 was very productive and beneficial. The team is already undertaking efforts to plan for the next meeting scheduled for Fall 1989.

The Team is currently preparing for the mid-year INTRAVAL workshop and coordination group meeting to be held in Helsinki, Finland on June 12-16, 1989 (see Attachment 1 -- proposed agenda). The expected attendees and their respective areas for participation are as follows:

<u>Attendees</u>	<u>Areas of Focus</u>
1. T. Nicholson (RES)	U. S. NRC representative to coordinating group and Chairman of VOIC
2. T. McCartin (RES)	Modeling results of two-phase flow simulations in a Tuff Drill core, Test Case #II - Apache Leap field and lab core
3. S. Neuman (University of Arizona)	Modeling results explaining both Transport and Spatial Scale Effects
4. P. Davis (SNL)	<ul style="list-style-type: none"> <li>a. Modeling results - statistical analysis of Las Cruces Trench hydraulic data, Test Case #10</li> <li>b. Modeling strategy and data analysis, Test Case #1A</li> <li>c. Modeling strategy and data analysis, Test Case #II</li> </ul>
5. R. Code11 (NMSS)	<ul style="list-style-type: none"> <li>a. Synthetic Migration Experiment, Test Case #6</li> <li>b. Modeling results of transporation two-phase flow in tuff drillcore, Test Case #II</li> </ul>

In preparation for the Helsinki meeting, on Thursday May 4, 1989 the team presented an overview of task 1 work development to Robert Bernero, Director of NMSS and thus completed its milestone for a mid-term management briefing.

The team is also currently evaluating existing sets of test cases related to laboratory and field experiments, and data sets in order to gain familiarity with what was done and to assess applications to the MOU work. The team has received several contractor reports that encompass among other things, discussions on code development activities, including code verification and validation activities (see NUREG-CR5352 from Hydrogeologic Inc.). The reports address codes that are specific to radioactive decay studies and hydrogeologic transport. T. Nicholson will provide a description of the test cases that are being addressed at the next meeting. Due to the volume of the study reports, copies of the cover sheets of reports produced thus far are enclosed in Attachment 2 for your reference.

Additional progress on Task 1 includes a review of the report on problem #6 (i.e., Synthetic Experiment Test Case) of the INTRAVAL study. The problem #6 report pertains to a development of the problem definition and data set and was completed in April 1989, as scheduled. The team's comments on the report were discussed with NAGRA and a draft of those comments is awaiting management review and formal transmittal to the contractor. In addition, a copy of INTRAVAL Progress Report Number 3 which was issued in April 1989 as scheduled, is provided in Attachment 3 for your reference.

The Task 1-INTRAVAL team also mentioned that there is a need to establish dialogue with the Division of Low-Level Waste (LLW) Management because certain test cases and codes currently under study apply to both high and low-level waste. Furthermore, some of the existing codes being used in MOU work were previously funded by RES for LLW. It was agreed that the RES INTRAVAL members will coordinate with LLW on this matter.

- b) MOU TASKS 2 and 3: Although the MOU Team has projected significant delays in performing the technical work, as discussed above, some limited progress has been achieved in the following areas:
- ° In coordination with Sandia National Laboratories, R. Codell is contemplating using the NEFTRAN code in initial Task 2 and 3 assessments. There is possibility that this work can be ready for demonstration within two to three weeks from the date of this meeting (May 16, 1989).
  - ° A draft letter requesting copies of DOE's codes, the AREST code, in particular is still under development pending review by branch management.
  - ° J. Randall and M. Silberberg will be meeting with representatives of SKI regarding a forthcoming workshop on overall performance

assessment to be held in Stockholm, Sweden in June 1989. SKI is the Swedish Nuclear Inspectorate responsible for regulating the management and disposal of radioactive waste. This workshop may provide information beneficial to work on Task 3.

ORIGINAL SIGNED BY

Brian E. Thomas, Project Manager  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste Management

Attachments: As stated

cc: W. Patrick, CNWRA/San Antonio

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G. Arlotto	D. Chery	R. Weller	M. Delligatti
M. Silberberg	J. Randall	T. Nicholson	S. Coplan
N. Eisenberg	P. Justus		

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NAME: BThomas/mac: SCoplan : JRandall : JHolonich : JLinehan : RBallard : MSilberberg

DATE: 06/14/89 : 06/14/89 : 06/29/89 : 06/14/89 : 06/14/89 : 06/22/89 : 06/13/89

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AGENDA FOR MONTHLY RES/NMSS  
MOU MEETING

Date and Place

Thursday June 15, 1989, 2:00 p.m. in OWFN 4-B-13

TOPIC

LEAD

- |   |              |
|---|--------------|
| 1. Items from May 16, 1989 RES/NMSS MOU meeting           | (Open)       |
| 2. Status Report on MOU Work                              |              |
| - Task 1: INTRAVAL  | T. Nicholson |
| - Task 2: Source Term Performance Assessment              | R. Code11    |
| - Task 3: Preliminary Total System Performance Assessment | N. Eisenberg |
| 3. Planning Remaining FY89 MOU Work                       |              |
| - Current schedule of MOU work                            | S. Coplan    |
| 4. Review Action Items                                    | B. Thomas    |

ATTENDEES

BThomas, HLPD, NMSS  
DChery HLG, NMSS  
SCoplan, HLGP, NMSS  
MSilberberg, RES

NEisenberg, HLGP, NMSS  
RCode11, HLGP, NMSS  
JHolonich, HLPD, NMSS

JRandall, RES  
TNicholson, RES  
RBallard, NMSS