



# Lawrence Livermore National Laboratory

PDR - (1)  
LPDR - WM-10 (2)  
WM-11 (2)  
WM-16 (2)

NUCLEAR SYSTEMS SAFETY PROGRAM  
L-196

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July 7, 1987

Mr. Michael E. Blackford, MS-623ss  
Project Officer, WMGT  
Geology/Geophysics Section  
Technical Review Branch  
Division of High-Level Management  
Office of Nuclear Materials Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

WM-RES  
Record File  
A0297  
LLN

WM Project: 10, 11, 16  
Docket No. \_\_\_\_\_  
PDR ✓  
LPDR ✓ (B, N, S)

\*Blackford \*Jean-ticket  
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SUBJECT: Monthly Management Letter Report No. 11  
Progress for the Month of June 1987  
NRC FIN A-0297  
Technical Assistance in the Identification and  
Evaluation of Seismo-Tectonic Issues Related to  
Repository Site Characterization Plans

Dear Mr. Blackford:

This is our Monthly Management Letter Report No. 11 under the subject  
NRC FIN Number A-0297.

1. PROGRESS - JUNE 1987

General:

A new contract negotiation was initiated with Robert D. Bentley, a  
professor of geology at Central Washington University, to further augment  
the LLNL team.

BWIP:

Our review of a preliminary version of Draft SCP for the BWIP site is  
a continuing effort, as steps toward a formal review and evaluation of this  
DOE document once received. Sections of this draft document are being  
examined in light of our literature background as well as those references  
found in the EA document.

In accordance with the NRC task letter dated 22 June 1987, we  
initiated procedures to bring Robert D. Bentley into the LLNL team in time  
for the forthcoming DOE/NRC data review sessions at the Hanford site.

NNWSI:

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In close interactions with the NRC lead geologist (C. Abrams), we  
initiated a geomorphic examination of the Yucca Mountain HLW site at and

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near the locations of the proposed shaft and ramp openings. Our examination includes for the potential for erosion, debris dam formation, and/or other geomorphic changes and the possible resultant entrance of surface water. This work (by C. Rus Purcell) is making good progress; we expect to submit our draft on Purcell's findings in the next reporting period.

Our informal review of sections from a preliminary Draft SCP for the NNWSI site has been continuing.

#### SALTS:

Conditions which promote dissolution in the Deaf Smith Site, Palo Duro Basin, Texas are not clearly understood. Such factors as hydrogeology, structural geology, geochemistry, geomorphology, and climatic conditions are important considerations. In light of the regulatory framework (10 CFR 60, 40 CFR 191 and 10 CFR 960), we feel that NRC establish its technical positions on the evaluation of post-Permian salt dissolution for the site. During this reporting month, we examined DOE descriptions of these factors found in the EA document.

#### 2. PLANS FOR NEXT MONTH

Our work on a geomorphic examination of the NNWSI site at and near the location of the proposed shaft and ramp openings will be completed.

Our study of relevant sections in the Final EA's for the BWIP, NNWSI and Salt (Deaf Smith and Swisher Counties) sites will continue.

Our informal review of sections in Draft SCP's (a preliminary version) for the BWIP and the NNWSI sites will continue for the next few months.

A joint DOE/NRC data review meeting is tentatively scheduled for 10-14 August 1987.

#### 3. ESTIMATED PROJECT FINANCIAL STATUS

See ATTACHMENT A. The Attachment A will become available in late July 1987. We will submit it when it becomes available.

#### 4. LIST OF CONSULTANTS/SUBCONTRACTORS

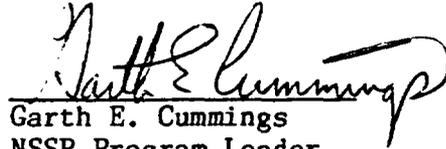
D. B. Slemmons and Associates  
Robert D. Bentley  
Richard W. Galster  
Charles (Rus) Purcell  
Robert J. Wright

5. PROJECT CONCERNS

None.



Dae H. (Danny) Chung  
Project Leader



Garth E. Cummings  
NSSP Program Leader

cc: K. Anderson, LLNL/NSSP  
M. Ciraulo, DOE/SAN  
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P. S. Justus, NRC/WMG  
J. S. Trapp, NRC/WMG