

101.2 LPDR Wm-10 (2)

WM Record File 1012

WM Project 10
Docket No. _____
PDR
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DARWIN NO. 1

- 1 -

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OUTGOING TELEPHONE CONVERSATION RECORD

TIME: 3:15 pm

DATE: December 10, 1986

NAME OF PERSON CONTACTED : Darwin Marjanemi

ORGANIZATION: DOE, BWIP, RICHLAND, WA. TELEPHONE NO: FTS 444-7059

SUBJECT: SUGGESTED SUITE OF SUBJECTS FOR PROPOSED GEOLOGY/GEOPHYSICS DATA REVIEW AT BWIP, RICHLAND, WASHINGTON

SUMMARY: As a follow-up to the DOE/NRC discussion of December 4, 1986 at the Richland, Washington Hydrology Data Review suggesting a future Geology/Geophysics Data Review, a suite of ten issues (see attachment), was presented to Mr. Marjanemi for DOE's consideration. It was made clear to DOE that this list is preliminary, with DOE's comments/suggestions for additional topics being solicited by NRC.

Tentatively, DOE suggested a three day session be considered for early April with possibly two days of data review and one day of discussion relative to observations.

ACTION REQUIRED: Transmittal of this information to appropriate NRC personnel

PERSON DOCUMENTING CONVERSATION: Harold E. Lefevre, WMGT

ACTION TAKEN: Telephone conversations issued. DWM BWIP team notified of DOE interest in holding a Geology/Geophysics Data Review.

SIGNATURE: *Harold E. Lefevre* TITLE: Project Manager
HAROLD E. LEFEVRE Geology/Geophysics
Geotechnical Branch

DATE: 18 December 1986

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BWIP - WMG

PROPOSED ISSUES FOR DISCUSSION AT A
SITE-SPECIFIC GEOLOGY-GEOPHYSICS MEETING

A recent (December 4, 1986) discussion with DOE officials at Richland, Washington relative to a potential agenda (topics) to be considered for a future meeting (more likely a data review) included a broad spectra of issues. Because of severe time constraints (primarily related to SCP and Work Plan activities) DOE envisions the possibility of a one-month "window of availability" within the next 3 to 6 months. This date would appear to be compatible with the suggested WMG date of Spring, 1987. Among those issues identified at the DOE/NRC discussion were (1) current field studies in the Snively Basin and Vantage areas, (2) local and regional geophysical activities, (3) compilation of seismicity data, (4) leveling and trilateration surveys, (5) advances in stratigraphy and structure, (6) soil-rock sampling procedures and analyses, (7) recognition and identification of stratigraphic units, (8) stratigraphic and structural modeling, (9) sensitivity of engineered structures to seismic design and (10) identification and age-dating of coals found in the Rattlesnake Hills Well and within the RRL

The purpose of the meeting would be for the early identification and potential early resolution of issues of considerable significance to the BWIP site. Since the DOE has already expressed an interest in convening such a site-specific meeting/data review, the prospects of actually conducting the meeting are good.

Based upon the above DOE/NRC discussion, from the NRC perspective a suite of issues will most likely be drawn from the following:

1. Geophysical surveys - Types of activities such as geophysical surveys which will be utilized to characterize the site and resolution capabilities of these methods.
2. Microseismicity - Characteristics of microearthquake swarms and significance for repository isolation and performance.
3. Macroseismicity - Significance of macroseismic activity on pre and post closure performance and the possibility of a need for a reassessment of the seismic potential of the Yakima Fold Belt.
4. Basin deformation - Significance of potential basin deformation on repository performance during both pre and post closure including consideration that the rate and style of deformation has not been uniform over the past 14.5 million years as stated in the Final EA, but is episodic.

5. Tectonic models - Tectonic model definition including significance of tectonic breccias, geophysical anomalies and microseismicity within the Cold Creek Syncline (and adjacent to the RRL), and the relationship to repository performance.
6. Detachment faulting - Consideration of a detachment fault and effects including possible attendant imbricate splays on repository performance.
7. Cold Creek Hydrologic Barrier - Significance of northerly-trending features such as the Cold Creek Hydrologic Barrier and the May Junction monocline and the relationship of such zones to active (late Pleistocene-early Holocene) tilting/shearing of deposits by northerly-trending wrench faults identified by Anderson and Tolan (1986, GSA Abstract).
8. Volcanic Activity - Significance and impact of potential volcanic activity on repository performance - specifically surface facilities.
9. Rattlesnake Hills Well Issues - Age identification of coal and tectonic faulting suggested by an affected Tribes consultant (CERT).
10. Identification of Stratigraphic Units - Procedures used by the DOE in the identification of both basalt and suprabasalt units should be assembled.

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OFFICIAL CONCURRENCE AND DISTRIBUTION RECORD

FOR: VARIOUS NRC PERSONNEL
 FROM: H. E. LEFEVRE
 SUBJECT: SUGGESTED AGENDA ITEMS FOR PROPOSED DOE/NRC GEOLOGY DATA REVIEW
 DATE: December 18, 1986

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CONCURRENCES

ORGANIZATION/CONCUREE	INITIALS	DATE CONCURRED
WMGT, HELeFevre	<u><i>HEL</i></u>	December 18, 1986