



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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WM Record # 10

WM Project 16  
Docket No. \_\_\_\_\_  
PDR ✓  
LPDR ✓

Distribution:  
R&B MJB  
HJM MRK  
(Return to W11, 623-SS) Bilhern / Linehan of Johnson  
DPM LHB JOB LBH  
CFR / Giarratana  
FEB 01 1985

MEMORANDUM FOR: Robert E. Browning  
Division of Waste Management

FROM: Tilak R. Verma, Senior On-Site  
Licensing Representative  
Salt Repository Project (SRP)

SUBJECT: SRP SITE REPORT FOR THE WEEKS OF  
JANUARY 21, 1985 AND JANUARY 28, 1985

1. Attended the Salt Repository Exploratory Shaft Design Interface Meeting in Houston, Texas, on January 24th and 25th, 1985. The meeting had a very busy agenda, which included presentations from DOE/SRPO, ONWI, Fluor, Parsons-Redpath, Parsons Brinckerhoff, and Golder. I gave a brief presentation on OLR's role in prelicensing consultation. Copies of the agenda and the list of attendees are attached. My reason for attending the meeting was to become informed on the status of ESF and the in-situ testing program for the Salt Repository Project. The meeting focused on the design requirements imposed on ESF by the in-situ testing program being developed by Golder Associates for ONWI.

The meeting was quite informative, however, my impression was that communication among the contractors has been lacking and that the integration work is rather weak.

DOE work schedules and milestones provided to the contractors for guidance are very optimistic at best. I noted that there are only eight-nine months available for in-situ testing work.

Fair amounts of data from WIPP and Asse Mine are being used for baseline in ESF design work and in developing in-situ test plans.

A copy of the meeting and notes developed by DOE and their prime contractor, ONWI is attached. I plan to brief the cognizant staff from RP and EG Branches.

2. Received a copy of "Annotated Outline for Site Characterization Plans" from SRPO. It is my understanding that it has also been made available to RP Branch for their comments. I am in the process of reviewing it and will send my marked up copy to the RP Branch.

Tilak R. Verma  
Tilak R. Verma  
Licensing Representative  
Salt Repository Project

8502280210 850201  
PDR WASTE  
WM-16 PDR

5715B

cc: M. Bell J. Linehan  
J. Bunting R. Johnson  
H. Miller P. Prestholt  
M. Knapp R. Cook  
L. Barrett

## AGENDA

## DESIGN INTERFACE MEETING

AT PB/PB-KBB OFFICES - HOUSTON, TEXAS

JANUARY 23-24, 1985

SCHEDULED  
START\***WEDNESDAY, JANUARY 23, 1985**

- 8:00 am ● Opening remarks by SRPO - introduction of participants
- 8:15 am ● Summarize the work activities scheduled in FY 85 and FY 86 that relate to the ESF (up to 30 minutes each)

SRPO  
ONWI-SCPO  
PB/PB-KBB  
Fluor/MK  
Golder  
PR  
NRC

GENERAL DISCUSSION OF THE WORK ACTIVITIES TO DETERMINE OVERLAPS, COMPATIBILITY, TIMELINESS, ETC.

- 11:00 am ● Design configuration control and its role in communication between participants Cottle
- 1:00 pm ● ESF design process PB/PB-KBB
- 2:00 pm ● Status of ESF impact study Fluor
- 2:15 pm ● ESF hoisting systems PB/PB-KBB
- 3:00 pm ● ESF permitting and statutory compliance Kopp

**THURSDAY, JANUARY 24, 1985**

- 8:00 am ● Open discussion on the in situ test program and how it relates to the ESF design process
- 1:00 pm ● Summarize action items, discuss agenda items for February 20, 1985 meeting

\* Assume 10 minutes break each hour starting at 50 minutes in the hour

CONFERENCE NOTES

CONFIRMATION OF: Meeting

CONFERENCE NOTE NO:

RECORDED BY: H. D. Kopp

DATE AND TIME: 01/23-24/85

WBS: 6.0

LOCATION: Parsons Brinckerhoff/PB-KBB  
Offices; Houston, Texas

SUBJECT: Design Interface Meeting

ATTENDEES: See Attachments 1 and 2

ITEM NUMBER	DESCRIPTION OF DISCUSSION	ACTION
1.	The first ESF design interface meeting was held at the offices of Parsons-Brinckerhoff/PB-KBB in Houston. The meeting was conducted in accordance with the agenda (Attachment 3) and included participants from SRPO, ONWI, Parsons-Redpath, PB/PB-KBB, Golder, Fluor/M-K, NRC, USGS, and Weston.	
2.	The purpose of this first meeting was to identify problems and establish a means of tracking the problems through resolution. An action item list will be the informal means of tracking problem resolution status and will be reviewed at subsequent design interface meetings. This list will not substitute for formal contractual direction when required.	
3.	This conference note will not attempt to summarize the presentations by all meeting participants or the discussion of agenda topics. Meeting participants were provided handouts of all material presented with additional copies of handouts available by contacting Dennis Kopp of ONWI.	

CONFERENCE NOTES (Continued)

ITEM NUMBER	DESCRIPTION OF DISCUSSION	ACTION
4.	<p>Actions identified as needed for ESF design are shown on the Action Item List (Attachment 4). Action Items of significant importance for which additional explanation is useful are summarized below:</p> <ul style="list-style-type: none"> <li data-bbox="188 793 1268 1017">a. Review of the Preliminary Design (Action Item 14h) - The completion of the preliminary design will not be a well-defined stopping point in the design process. Rather, it is a progress issue of the design as it exists on July 5, 1985; when a single salt site is recommended to the President. The preliminary design review will be performed only on the chosen site instead of all three preliminary designs.</li> <li data-bbox="188 1049 1252 1240">b. ESF Document Review Plan (Action Item 25) - A review plan must be developed to define documents which are to receive review by multiple participants. The review plan should also define the mechanism for performing the review including time allowance, transmittal between participants, and comment resolution.</li> <li data-bbox="188 1272 1219 1368">c. Issue Initial Configuration Baseline (Action Item 28) - The initial configuration baseline is a narrative description of what the ESF design will include and is organized by WBS.</li> <li data-bbox="188 1400 1235 1559">d. Extent of Shaft Mapping (Action Item 32) - An agreement must be reached as to the extent of exploratory shaft mapping such that the shafts are sunk expeditiously to support in situ testing and at the same time provide the geological data necessary for repository shaft design.</li> </ul>	

DESIGN INTERFACE MEETING  
JANUARY 23, 1985  
PB/PB-KBB Offices - Houston, Texas

<u>Attendee</u>	<u>Affiliation</u>
Steve Webster	DOE
Bob Waters	DOE
R. S. Kingsley	ONWI
I. R. Cottle	ONWI
Dennis Kopp	ONWI
John Treadwell	ONWI
H. N. Kalia	ONWI
Jack Fitch	Fluor
Jerry Fredrickson	Fluor
John Byrne	Golder
Harry Gleser	PB/PB-KBB
Bob Nolin	PB/PB-KBB
J. R. Schmedeman	PB/PB-KBB
Manny Comar	PB/PB-KBB
David Winsor	PB/PB-KBB
Austin I. Cooley	PB/PB-KBB
Mahmood B. Mirza	PB/PB-KBB
Peggy Duyka	PB/PB-KBB
Bruns Loran	Parsons-Redpath
Frank Hood	Parsons-Redpath
J. W. Burgess	Parsons-Redpath
Randy Lentell	Woodward-Clyde/PB/PB-KBB
Rick Nelson	Woodward-Clyde/Fluor
Jim Montgomery	Weston/Jacobs
William Ives	Weston/Williams Brothers
Paul McKie	Morrison-Knudsen

Attendee

Affiliation

Vincent C. Lepardo  
Virginia Treworgy  
Albert M. La Sala, Jr.  
Tilak R. Verma  
Siegfried Poppen

Parsons Brinckerhoff/PB-KBB  
Parsons Brinckerhoff/PB-KBB  
USGS - Columbus, Ohio  
NRC - Columbus, Ohio  
TMCi

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John Treadwell	ONWI
H. N. Kalia	ONWI
I. R. Cottle	ONWI
Jerry Fredrickson	Fluor
Jack Fitch	Fluor
John Byrne	Golder
J. R. Schmedeman	PB/PB-KBB
David Winsor	PB/PB-KBB
Harry Gleser	PB/PB-KBB
Bob Nolin	PB/PB-KBB
Mahmood Mirza	PB/PB-KBB
Austin I. Cooley	PB/PB-KBB
Manny Comar	PB/PB-KBB
Bruns Loran	Parsons-Redpath
Frank Hood	Parsons-Redpath
Jack Burgess	Parsons-Redpath
Randy Lentell	Woodward Clyde (PB/PB-KBB)
Rick Nelson	Woodward-Clyde (Fluor)
Jim Montgomery	Weston/Jacobs
Bill Ives	Weston/Williams Brothers
Paul McKie	Morrison-Knudsen

Attendee

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Vincent C. Lepardo  
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Parsons Brinckerhoff/PB-KBB  
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Parsons Brinckerhoff/PB-KBB  
USGS - Columbus, Ohio  
NRC  
TMC

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ESF ACTION ITEMS

Action Items	Responsible Participants	Action Date	Status/Comment
<p>NOTE: The following action item list summarizes the ESF activities that should be performed by various project participants. Its purpose is to provide a continuing format for future statusing and discussion and should not be constituted as defining contractual direction.</p>			
1. Schedule next meeting.	All participants	24 January 1985	Next meeting will be in Columbus on March 13
2. Comments to action item lists.	All	28 January 1985	Comments received by January 30, 1985 were incorporated
3. Issue meeting notes to participants.	ONWI	4 February 1985	
4. Surface and underground infrastructure support for test program must be defined including schedule.	ONWI	March 1985	Includes power, compressed air, ventilation, etc.
5. Define underground space requirements for test program.	ONWI	11 February 1985	Provide criteria for subsurface layout

<u>Action Items</u>	<u>Responsible Participants</u>	<u>Action Date</u>	<u>Status/Comment</u>
6. Preliminary draft of ESF Functional Design Criteria submitted for review by project participants.	ONWI	4 February 1985	
7. Final draft of ESF Functional Design issued for use.	ONWI	June 1985	Baselined project document
8. Determine ESF design classification.	ONWI	April 1985	Fluor impact study provides key input
9. Develop ESF Site Management Plan.	To be determined	To be determined	
10. Continue permit and statutory compliance activity planning.	ONWI	As required	Revise as appropriate guidance is provided
11. Draft In Situ Test Plan.	ONWI	1 April 1985	Draft requested by Fluor and PR by February 1985
12. Develop test plan for shaft instrumentation.	ONWI	1 June 1985	Preliminary plan input to be provided by Fluor and PB/PB-KBB

Action Items	Responsible Participants	Action Date	Status/Comment
13. Develop initial Data Acquisition Plan.	ONWI	1 June 1985	Comments by participants to follow plan
14. PB/PB-KBB design data needs:	SRPO with others as necessary	1 April 1985	
a. Final shaft coordinates		5 September 1985	
b. Topography		1 April 1985	
c. Standard stratigraphic column		5 September 1985	
e. Access for: Road Alignment Study Power Supply Study		No later than 5 July 1985	
f. Permission for state agency contacts		April 1985	
g. Authorization to proceed with Option No. 6		January 1985	To review permit data base
h. Review of the Preliminary Design of the chosen site		All participants	5 July 1985
15. Shaft construction method recommendation.	Fluor	To be determined	
16. Aquifer treatment.	Fluor	To be determined	
17. ESF Impact Report (2-12 ft shafts ESF)	Fluor	3 March 1985	

<u>Action Items</u>	<u>Responsible Participants</u>	<u>Action Date</u>	<u>Status/Comment</u>
18. Underground excavation process system.	Fluor	To be determined	Study of underground excavation materials handling system
19. Empirical pillar design methods.	Fluor	To be determined	
20. Local roof support problems.	Fluor	To be determined	
21. Aquifer seal and shaft lining technology.	Fluor	July 1986	
22. Subsurface layout.	Fluor	March 1986	
23. Generic contract package boiler plate.	P-R	To be determined	Completed reference subcontract 2020 Purchase contract only
24. ESF Construction Cost Plan and Construction Technical Baseline.	P-R	15 February 1985	
25. ESF Document Review Plan.	To be determined	To be determined	Needed for QA traceability
26. Function Criteria for ESF hoist design.	ONWI	February 1985	Requires SRPO procurement approval. P-R requested all data for planning.

<u>Action Items</u>	<u>Responsible Participants</u>	<u>Action Date</u>	<u>Status/Comment</u>
27. Procedure for ESF design configuration control.	ONWI	March 1985	
28. Issue initial configuration baseline.	PB/PB-KBB	April 1985	To be used as the basis for configuration control
29. EDBH Test Plan.	ONWI	To be determined	
30. Codes and standards for repository design classification.	Fluor	July 1985	For ESF information
31. Review Detailed Design Criteria.	All participants	March 1985	Developed by PB/PB-KBB
32. Determine extent of shaft mapping.	To be determined	To be determined	
33. Review ESF shaft location with NRC.	To be determined	To be determined	
34. Decision on vertical extent of shaft lining.	To be determined	To be determined	