UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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MEMORANDUM FOR: '86 APR 14 A10:11 Robert E. Browning, Director
Division of Waste Management

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

WM Record File 106
WM Project 16
Docket No
PDR ✓
LPDR ✓

SUBJECT: SRP SITE REPORT FOR THE MONTH OF MARCH, 1986

Distribution:
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PEB MJB JTC
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1. QUALITY ASSURANCE: I have received and reviewed "Readiness Review Plan for start of Title II Design of ESF in Salt." The Plan will form the basis for the Readiness Review and lists the following guidelines:

   - The ESF will be licensable and will become an integral part of the Nuclear Waste Repository in salt construction and operation.
   - The Readinss Review will verify that SRP requirements relating to ESF, including the design criteria, have been identified and are reflected in the design.
   - The Readiness Review should provide an independent verification that the ESF designs are constructible with a minimum of design and field changes. The review will cover a multitude of checks on such items as long-lead procurements, craft sequence methods, choice of materials, complexity and safety arrangements.
   - The Readiness Review will be conducted to verify that the basic underground testing requirements will be satisfied.
   - The Readiness Review will be conducted to assess the ESF for potential hazards and the provisions to mitigate them.

   In March 25 and 26, 1986, SRPO, with auditors from ONWI and the Texas Bureau of Economic Geology, conducted an audit of Bendix, Grand Junction, Colorado. A copy of the audit report (Attachment I) is attached for your information. Several findings were issued. Bendix does most of SRP's geochemical analyses.

2. REPOSITORY ENGINEERING: Received a copy of the "Final Preliminary Design Report", dated March, 1986. This detailed report was prepared by Parsons Brinckerhoff/PB-KBB, the AE for ESF design. The report discusses preliminary designs for constructing two exploration shafts using conventional drill-and-blast methods and outlines, the preliminary design, construction schedules, construction cost estimates, impact of limited design information, and environmental and permitting considerations.

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Through discussions with the SRPO staff involved with ESF design, I have obtained two documents that relate to ESF construction. These two documents are attached (Attachment II) for you information.

A meeting was held at the Parsons Brinckerhoff/PB-KBB offices to resolve design approach differences between the ESF and Repository A/E design firms. the meeting was held in Houston on March 4-6, 1986 and I was unable to attend due to lack of travel funds. However, it was a very important meeting from ESF design point of view and I have been able to obtain the meeting minutes (Attachment III).

Another meeting of similar nature was held in Boston on March 12-13, 1986, and I was unable to attend due to lack of travel funds. A copy of meeting documentation is attached (Attachment IV).

On March 18 and 19, 1986, an ESF/Repository Integration Meeting was held here in Columbus. I attended the meeting as a NRC observer. Some of the handouts and viewgraphs are attached for your information (Attachment V). I have already discussed this material with Salt Team Members in RP and Engineering Branches.

3. HYDROLOGY-GEOCHEMISTRY: I have received a draft "Asse Brine Migration Test Report" prepared by A.J. Coyle, J. Eckert and H. Kalia of ONWI, dated February, 1986. We should formally request a copy of this report and should get it reviewed. I have talked to Walt Kelly about the availability of this report.

SRP is in the process of setting up a panel of experts to evaluate technical program plan in geochemistry. I plan to get the names of the panel members for Walt Kelly's information.

I have received a copy of a draft report by TBEG - "Stratigraphy and Influence of Porosity on Groundwater Flow in the Wolfcamp Prime Aquifer, Palo Duro Basin, Texas Panhandle."

ONWI is recommending that the dissolution zone wells (Harmon No. 1, Detton No. 2, Mansfield No. 2 and Sawyer No. 2) be plugged by the end of this fiscal year. Computer codes, FE3DGW, VERTPAK and NETFLO, along with their documentation are available from SRP.

Another TBEG report, "A Three-Dimensional Groundwater Flow Model for the Palo Duro Basin, Texas", by R. Senger, et al., is also available.

A report by the Woodward-Clyde Consultant, "Status Report: Geochemical Interactions between Groundwater and Paleozoic Strata, Gibson Dome Area, Southeastern Utah", is also available. "Hydrologic Testing in the Salt-Dissolution Zone of the Palo Duro Basin, Texas Panhandle" by TBEG is available.

2. Activities related to SRP-WIPP interaction have intensified lately. Technical staff from PB/PB-KBB, ONWI, Fluor, MK and SRPO has visited WIPP underground testing and discussed WIPP experience for possible application at the Salt site. My request to join SRP visit to WIPP was turned down by the SRPO. There is a Quarterly Information Exchange Meeting on May 21-22, 1986 in Albuquerque, which I have been invited to attend.

3. ONWI has prepared a plan presenting a methodology and procedures for the transfer of technology developed at WIPP to the SRP. I requested a copy of the plan and will discuss it with you soon after reviewing it.

4. The Amarillo Nuclear Waste Repository Study Committee released its report on March 25, 1986. The report is generally favorable toward DOE characterizing the Deaf Smith site, and asks for several assurances from DOE related to independent oversight, protection against damages, and consideration of moving the site off prime farmland.

5. SRPO (Licensing and Systems) staff plans to attend licensing hearing for the Braydwood Nuclear Station in Joliet, Illinois, as part of their training effort.

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Enclosures:
As Stated

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