Department of Energy
Washington, DC 20585

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Mr. John Linehan, Chief
Project Management and Quality
Assurance Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Linehan:

This letter is in response to your request of August 11, 1988 for information on the DOE Technical Data Bases pertinent to the siting of the repository at Yucca Mountain and how the NRC might access them. On September 28, 1988, the Yucca Mountain Project Office (YMPO) requested a status briefing from the major Project participants and invited Mr. Paul Prestholt of the NRC to attend.

Our response to your request is given in terms of the three data management levels which the YMPO has established for the Project.

1. The first level is the Reference Information Base (RIB). The RIB is prepared by Sandia National Laboratories (SNL), Albuquerque, as a hard copy document and is distributed as a controlled document. As the central Project source of baselined technical data and information, the RIB provides information for use in Project activities, summarizes the output from Project activities, and identifies sources of more specific and detailed data. Changes to the RIB are controlled by configuration management procedures and distributed periodically as sets of hard copy document revision pages. PC-based word processing software (MASS-11) is used to generate RIB text and page forms, which are combined with hard copy graphics to produce the printed document. While we could provide the MASS-11 files, we believe your needs will be better served by being on the controlled document distribution list for RIB updates as they are produced at periodic (quarterly) intervals.

2. The second level, the Site and Engineering Properties Data Base (SEPDB), is the central data base for the Project site characterization data. All Project participants supply data to the SEPDB as the data are gathered, reviewed and approved for use by the participant organizations. The data in the SEPDB are available to organizations both within and external to YMPO (subject to Project Manager approval). The SEPDB is administered by SNL and is maintained as a relational data base (INGRES) on a VAX computer.

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As for NRC access to the SEPDB, we would suggest the following.

a) At present, a catalog showing types and quantities of information in the SEPDB is generated annually. If specific information in the catalog is of interest, requests for data base products can be made to the SEPDB administrative staff at SNL. Data base products satisfying these interests can then be promptly generated in either hard copy or electronic format as appropriate. This is the preferred means of accessing the current SEPDB content.

b) If needed by the NRC, DOE could provide interim status updates on the SEPDB content on a quarterly basis, in addition to the more detailed, annual catalog.

c) Because of SNL computer security constraints, dial-in access to the SEPDB is not possible. DOE can, however, generate a magnetic tape of the data base on a periodic basis, if necessary. This tape would have to be incorporated into an NRC data base management system, which operates the same version of INGRES as SNL.

3. At the participant level, YMPO is establishing Local Records Centers (LRCs) and preparing procedures for processing technical data and information from the participants into the RIB and SEPDB. The participants are at different stages of development and implementation of their internal systems. A participant system that is of sufficient maturity to serve as an example is the Data Records Management System (DRMS) at SNL.

At SNL, technical data is stored in the DRMS and periodically released to the SEPDB during the course of data gathering activities. A record documenting the technical approval and transmittal of data to the SEPDB is supplied to the LRC. The data records from all SNL data collection activities are maintained on a computer indexing system, which is used to prepare a quarterly catalog of the status of DRMS data sets (a copy of which is made available to the NRC). Upon request to the Project Manager, the records themselves can be made available. Upon the conclusion of a data gathering activity, the complete data set is closed out (i.e., QA and other reviews are completed) and the data set is submitted to the LRC at SNL. Once entered into the SEPDB, data that is to be controlled as part of the technical baseline is summarized and interpreted for processing (through a SEPDB data base product) as a change to the RIB.

In the long term, the Licensing Support System (LSS) will provide on-line search capabilities to the records, headers, and images as defined in the proposed rule. The LRC's and the YMPO Central

Record Facility are being set in place now and procedures are being developed in order to collect and index data in accordance with this rule.

In the short term, I am confident that we can establish procedures for ensuring that you receive the data products described above in a timely fashion. These products can also be made available to the State of Nevada if they so wish.

Please contact Barbara Cerny of the OCRWM staff at 202-586-5792 or FTS 896-5792 if you have any questions.

Sincerely,

Ralph Stein

Ralph Stein
Acting Associate Director for
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