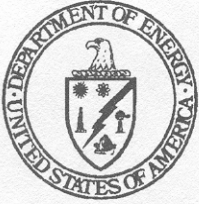




U.S. Department of Energy
Office of Inspector General
Office of Audit Services

Audit Report

Report on Management Controls
Over the Licensing Support
Network for the Yucca Mountain
Repository



Department of Energy
Washington, DC 20585

May 20, 2004

MEMORANDUM FOR THE DEPUTY DIRECTOR FOR THE OFFICE OF REPOSITORY
DEVELOPMENT

FROM: Lawrence R. Ackerly, Division Director *Lawrence R. Ackerly*
National Nuclear Security Administration Audits Division
Office of Audit Services
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Management Controls Over the
Licensing Support Network for the Yucca Mountain Repository"

BACKGROUND

Decades of nuclear weapons and commercial power production have left a large legacy of spent nuclear fuel and radioactive waste. In 2002, Congress approved construction of the first geological waste repository in Yucca Mountain, Nevada, to dispose of this waste. Prior to construction, the Nuclear Regulatory Commission (NRC) must grant the Department of Energy (Department) a license to construct the facility. Before beginning the license application process in December 2004, the Department is required to publicly disclose all relevant documents by posting them on the Department's public website which is accessible through the NRC-sponsored, internet-based Licensing Support Network (Network). To satisfy current schedule requirements, the Department must certify that relevant documents have been posted to the Network and made available for public review by June 2004. The Office of Civilian Radioactive Waste Management (OCRWM) is responsible for all aspects of the license application process.

The NRC Network is designed to expedite the Yucca Mountain Project license application process by providing interested parties with the ability to access relevant documents electronically. Once the Department's documents are posted and indexed, the NRC will make all documents available for public review. Other interested parties, such as the State of Nevada and affected units of local government, will then have 90 days to make pertinent documents available on the Network. Each step of the process must be accomplished sequentially--starting with the Department's documents. Therefore, delays by the Department could jeopardize a series of events that must occur before the license application process can begin. Given that the initial licensing process is an important first step in the Yucca Mountain Project, we initiated this audit to determine if the Department's portion of the Network will be ready for initial certification and available for public review by June 2004.

RESULTS OF AUDIT

Our audit disclosed that the Department had made significant progress in preparing licensing related information for public disclosure on the Network. Specifically, we noted that it had:

- Captured an estimated 87 percent and processed 71 percent of all relevant documents;
- Developed software to screen documents for privileged and Privacy Act information; and,
- Revised its management structure to improve accountability for the Network.

While OCRWM has overcome certain organizational impediments and is optimistic that it will complete the initial certification by June 2004, a number of obstacles may prevent it from doing so. In particular, a majority of the documents must still be screened for privileged and Privacy Act information; procedures for processing several million electronic mail documents must be finalized; and an agreement to provide the documents to the NRC for indexing must be completed.

It is important to note that in Fiscal Year 2004, the House Committee on Appropriations directed the Department to submit the license application to the NRC no later than December 31, 2004. The House Report stressed that problems with the submission would cause unacceptable delays in the start of repository operations, which would not only increase the Federal government's liability on commercial spent fuel, but also impact the ability of the Department to remove defense-related high level radioactive waste and spent nuclear fuel from other sites in the Department complex. Not beginning the licensing process by established deadlines may also affect the government's ability to meet legally enforceable cleanup milestones at those sites.

While progress has been substantial, in our judgment, if the Department is to meet the House-imposed license application deadline, all of the Network related tasks must be completed as expeditiously as possible. Since we began our audit, a number of important phases of the effort have been initiated or completed, but more remains to be done. In that connection, we have made several recommendations designed to help ensure that the Department can move forward with the licensing process.

MANAGEMENT REACTION

The Deputy Director for OCRWM's Office of Repository Development generally concurred with the report's finding and recommendations and has initiated corrective actions to minimize the delays associated with populating the Network. These corrective actions are scheduled for completion before June 2004. Management's comments in their entirety are included as Appendix 3.

Attachment

cc: Director, Office of Civilian Radioactive Waste Management
General Counsel, Office of the General Counsel

REPORT ON MANAGEMENT CONTROLS OVER THE LICENSING SUPPORT NETWORK FOR THE YUCCA MOUNTAIN REPOSITORY

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LICENSING SUPPORT NETWORK

Background

The Department identified a number of steps that had to be accomplished prior to making its documents available on the Network. Initially, relevant documents have to be identified and captured from each of its organizations and contractors. Then, the documents must be reviewed for legibility; a bibliographic header must be added; and each document has to be screened to ensure that sensitive unclassified, Privacy Act, or privileged information is not released to the public. Once relevant documents are processed through these steps, they are posted to the Department's website.

Once posted to the Department's website, the documents will be made available for indexing by the NRC. The NRC will then search the information for key words and build indices into the Network. After indexing is complete, the documents will be available to the public. Although the Department plans to submit its license application in December 2004, the NRC will not begin the license application proceedings unless all documents are available for public review through the Network for at least six months.

Capturing, Processing, and Screening Documents

As of March 10, 2004, the Department estimated that it had captured 87 percent and processed 71 percent of the relevant documents. Nearly all documents had been captured including those in the records management system, which is a database of program records; electronic files; and, electronic mails. In particular, personnel associated with the Yucca Mountain Project had reviewed 1.4 million of the Department's 6.4 million electronic mail documents and anticipated finishing its review by June 2004. Finally, OCRWM developed the software needed to screen all documents for privileged and Privacy Act information and began processing in late February 2004. OCRWM anticipates that all documents will be screened for privileged and Privacy Act information before the initial certification date. While most paper documents had been captured, efforts related to databases and computer programs remained incomplete.

Management Structure

In August 2003, at the start of our audit, we observed that organizational impediments had the potential to impact completion of the Department's Network goals. In particular, we observed that management responsibility for the effort was shared by two separate organizations. The Office of the General Counsel served as the primary technical point of contact and directed interactions with the Network contractor. OCRWM was responsible for integrating the Department's efforts to the overall licensing strategy, interacting with

the NRC, and providing access to the Yucca Mountain project records, personnel, and facilities. During the audit, OCRWM management informed us that it was modifying the management structure to correct these weaknesses as part of a baseline change proposal.

Availability of Documents to the NRC

Based on recent plans, the Department did not intend to make documents available to the NRC until the June 2004 certification date. However, in February 2004, the NRC requested access to the documents in advance of the initial certification date. Since NRC needs access to the documents to begin the indexing process, the earlier the documents are provided to the NRC, the faster the documents can be available to the public. While tentative agreement was reached with the NRC to start making the documents available, the details of such an agreement have yet to be finalized. Should they be able to finalize terms of the agreement in the short-run, OCRWM officials estimated that they could start providing documents to the NRC for indexing in April 2004.

Remaining Challenges

Despite significant movement, the Department still faces a number of obstacles in preparing the Network for initial certification and ensuring that documents are available for public review by June 2004. Specifically, the majority of the documents have yet to be screened for privileged and Privacy Act information. In February 2004, the Department implemented a newly designed software package and began processing documents; however, it had not yet evaluated whether the system was effective and was properly identifying information that should not be disclosed. Further, OCRWM had not developed a plan addressing how databases and computer programs would be captured and processed.

Additionally, about 6.4 million electronic mail documents have not been processed, of which 3.1 million belong to personnel currently associated with the Yucca Mountain Project. The Department initially planned to use software to eliminate irrelevant items. However, after it developed and tested the software, it determined that the software was not functioning as intended. Because of these problems, officials determined that personnel still associated with the Yucca Mountain Project must manually review their electronic mail documents for relevancy and initiated this process in late February 2004. These manual reviews, daunting due to the sheer volume of information that must be processed, have the potential to delay the posting process.

Department officials told us that they were still trying to improve the effectiveness of the software in hopes of using it to process the remaining 3.3 million electronic mail documents.

Finally, the Department still needed to provide its documents to the NRC for indexing. As of February 2004, program officials anticipated that they would start providing documents to the NRC in April 2004. Since the NRC can only index about 150,000 documents per week however, it could take between 5 and 13 months to index the Department's 3 million to 8.5 million documents. Unless the Department takes additional action to improve delivery to the NRC for indexing, the availability of the documents to the public could be delayed until as late as May 2005. Ultimately, the inability of the Department to meet the deadline for Network posting could adversely affect the completion of the license application by the House-imposed deadline.

RECOMMENDATIONS

We recommend that the Deputy Director for OCRWM's Office of Repository Development minimize the delays associated with populating the Network by:

1. Evaluating the effectiveness of the Privacy Act screening software and determining if it is a viable tool for document processing.
 - If so, fully implement the software for use on the remaining documents.
 - If not, identify and implement an alternative method for screening the documents for Privacy Act information.
2. Completing the implementation of the software to process the electronic mail associated with the Yucca Mountain Project.
3. Developing a plan and begin processing information maintained in other relevant databases and computer programs.
4. Finalizing the agreement regarding document availability and indexing with the NRC.

**MANAGEMENT
REACTION**

The Deputy Director for OCRWM's Office of Repository Development generally concurred with the report's finding and recommendations and has initiated corrective actions to minimize the delays associated with populating the Network. These corrective actions are scheduled for completion before June 2004. Management believes the Department will have between 3 to 4 million documents for the Network; however, management will provide the NRC with a revised estimate within the next few weeks. Management's comments are included in Appendix 3 in their entirety.

AUDITOR COMMENTS

Management's actions, should, when implemented, address the challenges discussed in our report.

Appendix 1

OBJECTIVE

Our objective was to determine if the Department's portion of the Network will be ready for initial certification and available for public review by June 2004.

SCOPE

The audit was performed between August 2003 and March 2004, at the Office of Repository Development in Las Vegas, Nevada. We also interviewed personnel from the OCRWM, Office of the General Counsel, and the Department of Justice in Washington, DC. The scope was limited to the Department's activities associated with the Network.

METHODOLOGY

To accomplish the audit objective we:

- Obtained and reviewed the Nuclear Waste Policy Act, as amended; Code of Federal Regulations; and other guidelines and requirements related to the Network;
- Reviewed planning documents and status reports for the Network program;
- Reviewed findings from prior audits regarding the Network;
- Interviewed program and contract personnel;
- Assessed internal controls and performance measures established under the Government Performance and Results Act of 1993; and,
- Analyzed performance, timelines, and target completion dates.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Specifically, we tested controls with respect to the Department's planning process for meeting the June 2004 initial certification date. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We did not rely on computer processed data to accomplish our audit objective.

We coordinated the contents of the audit with management throughout the audit. As a result of the coordination, management waived an exit conference.

Appendix 2




Department of Energy
Office of Civilian Radioactive Waste Management
Office of Repository Development
1551 Hillshire Drive
Las Vegas, NV 89134-6321

QA: N/A

APR 30 2004

MEMORANDUM FOR: Rickey R. Hass (IG-34)

FROM: W. John Arthur, III 
Deputy Director

SUBJECT: Response to Office of Inspector General (OIG) Draft Audit Report, Management Controls over the Licensing Support Network (LSN) for the Yucca Mountain Project

Enclosed is the Office of Civilian Radioactive Waste Management's comments on the OIG draft audit report entitled "Management Controls over the Licensing Support Network (LSN) for the Yucca Mountain Project." If you have any questions in this regard, please contact Harry E. Leake at (702) 794-1457.

OPM&I:HCW-1197

Enclosure:
Comments on the Office of Inspector General (OIG)
Licensing Support Network (LSN) Draft Audit Report

cc w/encl:
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Records Processing Center = "4"

Appendix 2 (continued)

Comments on the Office of Inspector General (OIG) Licensing Support Network (LSN) Draft Audit Report

The Office of Civilian Radioactive Waste Management (OCRWM) appreciates the comments provided by OIG concerning the management controls over the LSN. It should be pointed out that OCRWM has estimated that it would provide between 3 and 4 million documents to the OCRWM LSN, and a revised estimate for the initial LSN Certification will be provided the NRC within the next few weeks.

The following sections provide the actual or planned corrective actions with pertinent target dates for each recommendation.

Recommendation 1.

Evaluate the effectiveness of the Privacy Act screening software and determine if it is a viable tool for document processing.

- If so, fully implement the software for use on the remaining documents.
- If not, identify and implement an alternative method for screening the documents for Privacy Act information.

Response

Concur: Analysis has shown the software is effective at identifying privileged and Privacy Act information within its functional limitations. Consequently, it was implemented on March 4, 2004, and the manual privileged and privacy review is going forward. Additionally, both electronic searches and user review are being used to identify the privileged and Privacy Act information.

Recommendation 2.

Complete the implementation of the software to process electronic mail associated with the Yucca Mountain Project.

Response

Concur: We have been working to address this area of concern through a variety of methods, including manual and electronic processing.
Estimated Completion Date: May 15, 2004.

Appendix 2 (continued)

Recommendation 3.

Develop a plan and begin processing information maintained in other relevant databases and computer programs.

Response

Concur: A Concept of Operation for the handling of potentially relevant databases and software programs has been developed and is in the management approval process. The amount of documentary material within this category is 115 databases and 900 software programs. The draft OCRWM LSN Project Execution Plan calls for the relevant databases and software programs to have a bibliographic header created and all of the manual reviews for privacy and sensitive unclassified information to be completed by May 28, 2004. The processing of the databases and software programs is not expected to present a problem to OCRWM in meeting the June 23, 2004, LSN certification date.

Recommendation 4.

Finalizing the agreement regarding document availability and indexing with the U.S. Nuclear Regulatory Commission (NRC).

Response

Concur: The U.S. Department of Energy (DOE) has met and discussed with the NRC the NRC's desire to obtain early release of DOE material to the OCRWM LSN. The NRC has created a new LSN Guideline, *Guideline 23 Access Control Prior to Initial Certification*, to control access to materials and indices related to pre-certification loading/indexing, and OCRWM has provided comments on this Guideline to the NRC.
Estimated Completion Date: May 11, 2004.

Appendix 3

PRIOR REPORTS

Office of Inspector General Reports

- *Management Challenges at the Department of Energy* (DOE/IG-0626, November 2003). The report identified that while the Department has made great strides in addressing the inherent risks in the environmental cleanup, it has not consistently met its goals or integrated its programs for site cleanup and waste disposal. The report also identified that the Department has been criticized for many years for weaknesses in its project management. For example, the Department lacks sufficient control over its projects, ultimately resulting in projects with cost and schedule overruns. In addition, the Department lacks consistency and continuity of applying project management principles, risk management, and contingency.
- *Review of Alleged Conflicts of Interest Involving a Legal Services Contract for the Yucca Mountain Project* (DOE-OIG-I01IG001, November 2001). The Office of Inspector General reviewed the contract the Department awarded to a law firm to assist the Department during the license application process. The law firm had not disclosed lobbying and non-lobbying work that was potentially a conflict of interest.

General Accounting Office Reports

- *Major Management Challenges and Program Risks - Department of Energy* (GAO-03-100, January 2003). This report addresses the major management challenges facing the Department as it works to carry out its multiple and highly diverse missions. The General Accounting Office (GAO) found that the Department continued to have difficulty keeping some of its major projects on schedule and within budget. For example, the Department's original 1992 baseline for the Yucca Mountain Project estimated a total project cost of \$6.3 billion and a completion date of October 2001 for submitting the license application. According to the Department's latest estimate, the license application will not be submitted until December 2004, with an estimated cost of almost \$8.4 billion.
- *Technical, Schedule, and Cost Uncertainties of the Yucca Mountain Repository Program* (GAO-02-191, December 2001). This audit report determined that the Department lacks information for the license application and their license application milestone date was not supported by the program's baseline. GAO said the Department was unlikely to achieve its goal of opening the repository by 2010 and the Department did not have a reliable estimate of when and at what cost such a repository could be opened.

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