

**Remarks by
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Program Status and Outlook

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INTRODUCTION

Thank you for the opportunity to speak to the Board today about the program. You will be hearing from several members of my staff on topics you have asked us to address at this meeting. I will use my time this morning to give you a brief overview of the program status and outlook, and then to address the "viability assessment," a major strategic concept that I believe requires clarification. I am seeking your assistance in communicating the concept to the broader community of interest.

BACKGROUND

When I last addressed the Board, the program was in transition. During the past nine months, we have revised our program plan to manage our 1996 funding reduction and to regain a strategy that is consistent with the realities of the budget and with the Administration's policy for the program. We published the revised program plan in May of 1996. It was supported by the President's Fiscal Year 1997 budget request, and it has been endorsed by the Congress in the subsequent Appropriations Act.

During the past year, we have continued to make substantial progress in constructing the exploratory studies facility despite the disruption of the downsizing required to manage the unanticipated funding reduction. Because of the reduction, we were not able to optimize our Fiscal Year 1996 activity. The need to manage cash flow on a daily basis and the uncertainties of termination costs required us to forgo or delay some expenditures that would have resulted in greater production. The tunnel boring machine has, however, passed through the repository level and the turn toward the south portal. Although we will gain important information in the last mile of tunneling, which is in the East-West direction, the greater emphasis now will be on the penetration of the Ghost Dance Fault, the heater tests, and other aspects of data collection in the repository formation. We completed the main access and observation drift for the heater alcove and we began a small-scale (single-element) heater test on August 26. Construction of the two alcoves that will provide access to the Ghost Dance fault is also in progress.

CURRENT STATUS

Budget

In the Fiscal Year 1997 appropriation, Congress provided \$382 million for the program and stipulated that no oversight funds are to be provided to the State of Nevada or affected units of local government. This amount is \$18 million less than the Administration's request, of which \$11 million is associated with support for the State and Counties. The Congress instructed that the remaining reduction of \$7 million is to be taken from program management and cooperative agreements, and it will be. It will not impact the program plan, but it will impact other aspects of our activities, such as institutional work, and we will have to manage the program with much less contractor support. You should be aware that we are, at the same time, reducing Federal staff. We have been able to meet our Fiscal Year 1996 staffing target without involuntary separations, but meeting the lower 1997 target is likely to require an involuntary reduction-in-force.

Interim Storage

Congress adjourned without completion of legislation addressing the near-term management of spent nuclear fuel. This means, of course, that there is no authorization for siting a specific interim storage facility. In my judgement, completed legislative action on this issue is unlikely in the first year of the next Congress.

Any future scenario of interim storage or disposal, however, will require a national transportation effort. Consequently, the program will continue developing its market-driven waste acceptance, storage, and transportation approach that relies on a procurement process to acquire these services. This activity will provide a forum that will help to resolve many of the policy and institutional issues confronting orderly initiation of transportation. It will also enlighten the policy makers regarding the realities of this unprecedented logistical undertaking.

We will also complete a topical safety analysis report for a generic interim storage facility. The interactions with the Nuclear Regulatory Commission regarding this report will also provide an important issue resolution forum.

Yucca Mountain

The \$382 million spending level will allow us to meet the Fiscal Year 1997 milestones described in our revised program plan. Some of the key milestones include:

Tunnel Construction

- Excavating the remainder of the exploratory studies facility main, U-shaped, five-mile loop and constructing all major underground test alcoves.

- Penetrating the Ghost Dance Fault, a major geologic feature of the repository setting, first by drilling and then by tunneling.
- Completing construction of the South Portal.

Core Science

- Collecting data from near-field single element thermal mechanical (heater) test.
- Installing the majority of instrumentation needed for the drift-scale heater test.
- Initiating hydrologic testing in the first (north) and second (south) Ghost Dance fault alcoves.

Design and Engineering

- Completing waste package and repository Phase I designs for the viability assessment.
- Completing a Thermal Loading System Study to provide technical basis for thermal loading decision.
- Issuing the repository concept of an operations report.

Institutional and NEPA Activities

- Reinitiating repository Environmental Impact Statement activities.

Regulatory and Performance Assessment

- Issuing the final rule amending the repository siting guidelines (10 CFR 960).
- Initiating total system performance assessment for the viability assessment.
- Initiating support activities to regain a target to file a license application in 2002.

Nuclear Waste Policy Act Site Approval Process

Now I will invite your attention to an aspect of our strategic plan that seems to require more discussion. That is, the concept of a "viability assessment" in 1998.

[see figure 1]

This slide illustrates the decision process leading to the development of the repository. Most of the fundamental requirements for this process are set forth in statutes - the Nuclear Waste Policy Act, as amended, and the more recent requirements of the Fiscal Year 1997 Energy and Water Appropriations Act.

The Nuclear Waste Policy Act designates the Secretary's site recommendation to the President as the Department's principal programmatic decision point for proceeding with repository development. This decision point is a final agency action and will be subject to judicial review. In our revised program plan, we expect to achieve the site recommendation milestone in 2001. It is important to remember that the Secretary's responsibility prior to that decision is to evaluate the site. The Act provides that the Director, and thus the program, shall carry out this function. The Act also provides that, "If the Secretary at any time determines the Yucca Mountain site to be unsuitable for development as a repository, the Secretary shall (A) terminate all site characterization activities at such site; (B) notify the Congress, the Governor and legislature of Nevada of such termination and the reasons for such termination; . . ." and within six months recommend a new path forward.

Although the diagram presumes continuing progress to a license application and beyond, the Secretary currently is in the position of being the first judge of site suitability and may stop the action with a negative decision at any point, and without external concurrence. The Secretary does not become an advocate of the proposed repository until a positive site recommendation decision is made.

Site Approval Process

[see figure 2]

The Act details the requirements for the site recommendation. Prior to any decision to recommend the Yucca Mountain site, the Act requires that the Secretary hold public hearings in the vicinity of the site and notify the State of Nevada of the proposed recommendation. The Act also requires the Secretary to provide a comprehensive statement of the basis for the site recommendation and specifies the nature of the information that must be submitted to the President and made available to the public. This information includes a description of the proposed repository and waste form or packaging, and a discussion of the data from the site characterization activity relating to the safety of the site.

The Act also requires the formal participation of external parties. The Department must seek the comments of Nevada and other affected governments on the proposed recommendation. In addition, the Nuclear Regulatory Commission must provide preliminary comments on the sufficiency of the site characterization analyses for inclusion in a license application. The Department must also complete the required public process for development of a repository

environmental impact statement consistent with the National Environmental Policy Act (NEPA), as modified by the specific direction provided in the Nuclear Waste Policy Act.

If, following the Secretary's recommendation, the President considers the Yucca Mountain site to be qualified to apply for a construction authorization, the President will submit a recommendation of the site to Congress along with the information provided by the Secretary. The President's recommendation to Congress will be effective 60 days after it is submitted, unless the State of Nevada submits a notice of disapproval to Congress. If a notice of disapproval is submitted, the site will be disapproved unless Congress passes a resolution approving the site that becomes law. If the site is approved, the Secretary must submit an application for a construction authorization to the Nuclear Regulatory Commission not later than 90 days after the date the site designation is effective.

There are, of course, very specific requirements that must be met for the license application to be docketed by the Commission, and the Commission will be the arbiter of the application's adequacy. Subsequently, we will have to support our application throughout a licensing process that is certain to include adversarial intervenors and possible litigation.

Viability Assessment

It is clear that the site recommendation represents a solemn and consequential decision point. The adequacy of the judgement and the required supporting documentation are not established only by the standards of the program. They must also meet the formal requirements of the Act and survive the scrutiny of external participants in an extended public decision process.

The viability assessment is not the same thing. If it were, we would simply make the site recommendation decision 34 months earlier and save \$850 million. Rather, the viability assessment is a step along the way. It is a management tool for the program and a major informational input to the policy process.

Based upon the decade or more of data gathering, analysis and conceptualization that have already been done, and by placing emphasis upon the most significant remaining issues, we can, by September of 1998, compile a comprehensive description of the design and operational concept for the repository. We can assess the performance of that concept in the geologic setting. We can accompany that conceptual presentation with a cost estimate and a plan for completing the license application.

In my opinion, such a comprehensive description of the proposal is essential for the rational completion of the site recommendation. It will focus the final years of the site investigation and facility design on the important uncompleted work and the unresolved issues, and it will provide all participants with a frame of reference for their evaluation of the project.

We will not be finished with our evaluation of the site in 1998 and the Secretary will not be in a position to make a positive site recommendation. Consideration of the comprehensive concept will, for the first time, put many singular data points into a comprehensive perspective that we do not now have. This could, of course, become the occasion for a negative decision by the Secretary. If the compilation of the viability assessment does not result in a negative decision, however, no decision will be made, except the decision we make every morning to continue the site investigation.

The viability assessment will give all participants a better comprehension of the repository venture and the significance of the data then available. It will also give policy makers information about the probability that a repository is a viable undertaking. The President has stated that this information should be available before the siting of an interim storage facility is decided upon.

The Congress has required the viability assessment to be completed in September of 1998, as set forth in the revised program plan. As required by the appropriations act, the viability assessment will include four components:

- “(1) the preliminary design concept for the critical elements for the repository and waste package;
- (2) a total system performance assessment, based upon the design concept and the scientific data and analysis available by September 30, 1998, describing the probable behavior of the repository in the Yucca Mountain geological setting relative to the overall system performance standards;
- (3) a plan and cost estimate for the remaining work required to complete a license application; and
- (4) an estimate of the costs to construct and operate the repository in accordance with the design concept.”

As we implement this plan, it is important that the distinctions between the viability assessment and the site recommendation be appreciated and preserved. Each has a purpose. I contend that each can appropriately serve its purpose. If, however, we turn the viability assessment into a final “go” or “no-go” decision, then either it will be premature or else it cannot be completed as planned. The viability assessment is required for two purposes: first, to guide the completion of the work required for a site recommendation; and, second, to provide policy makers with a better estimate of the viability of a repository in the time frame required for decision making.

There seems to be a psychological need on the part of many to convert the viability assessment into a formal, final decision. That has not been done in any formal document, but it keeps recurring in casual conversation and in informal written commentary. Those of us who are obliged to spend serious time on the program must try to keep the distinction clear. If we do not,

we may find that misunderstandings on the part of policy makers have become expectations and that those expectations have distorted the character of the decision process. I seek the Board's assistance in keeping the distinctions clear.

CONCLUSION

The Program has put forth and is implementing a credible plan that maintains the momentum toward a national decision on the geologic disposal option. With continued adequate funding and an updated regulatory framework for the site recommendation decision, we can meet the schedule we have established for the decision process.

Thank you for the opportunity to brief the Board. I would be happy to answer any questions you may have.

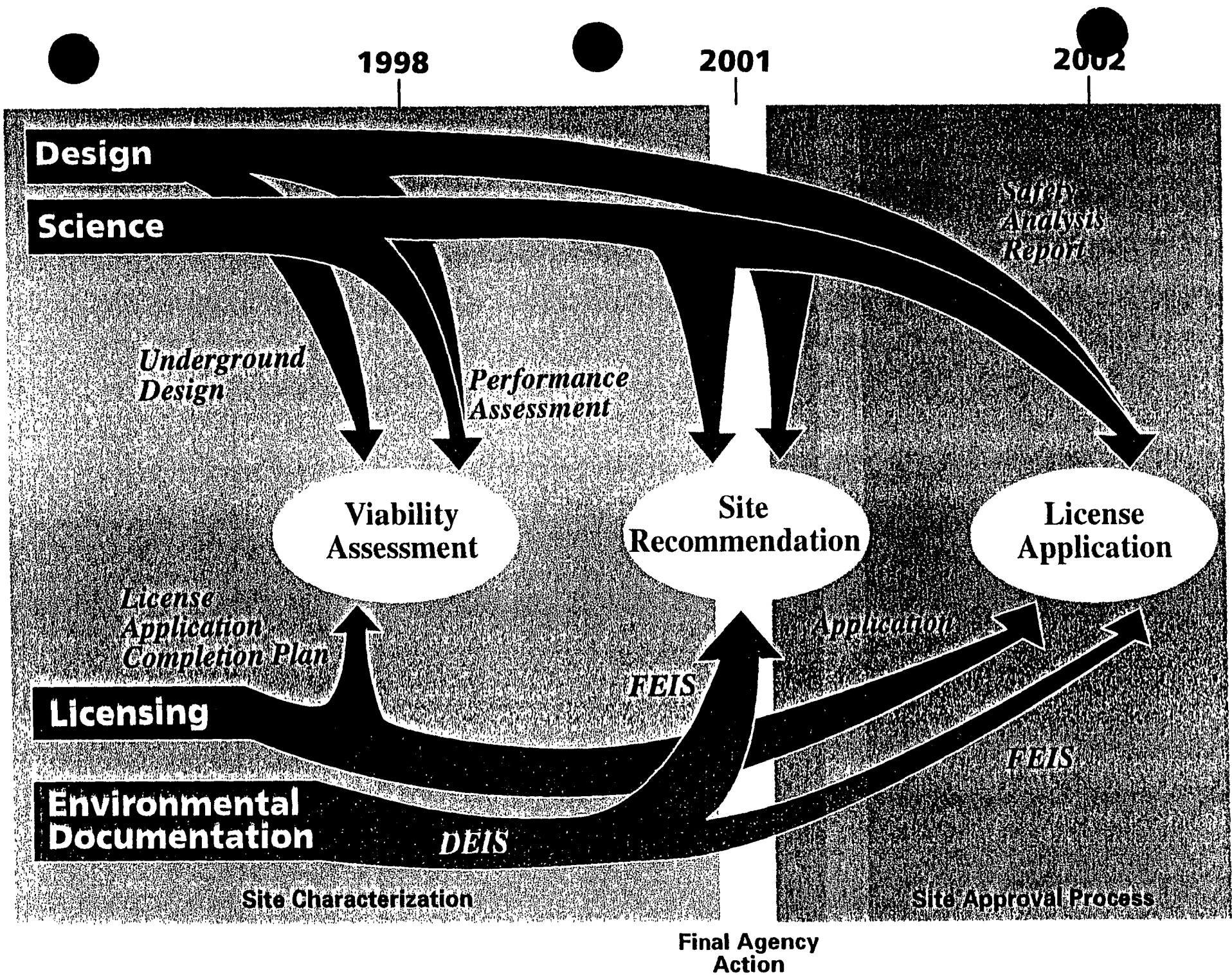


Figure 1

NWPA Site Approval Process

Secretary holds public hearings

Secretary notifies Nevada 30 days before recommendation is made to President

For site recommendation, the Secretary must:

- Describe proposed repository
- Describe waste form or packaging proposed for use at repository
- Explain relationship between waste form or packaging and geologic setting
- Discuss data from site characterization relating to safety
- Prepare final environmental impact statement

As part of recommendation--

- Federal agencies will comment on environmental impact statement
- Nuclear Regulatory Commission will make preliminary comments regarding sufficiency of site characterization and waste form
- Governor and legislature of any state or governing body of any affected Indian tribe may provide comments
- Secretary will respond to comments from affected parties
- Secretary may include other appropriate information
- Nevada may submit an Impact Report

Site Recommendation

- President recommends site to Congress
- Nevada may submit notice of disapproval within 60 days
- If no notice submitted, site is approved
- If notice is submitted, Congress must pass joint resolution approving the site