

REMARKS BY

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U.S. NUCLEAR REGULATORY COMMISSION

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MR. CHAIRMAN AND MEMBERS OF COMMISSION:

I am John G. Davis, Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. I head one of three statutory offices within the NRC, an independent Federal regulatory agency. Among my responsibilities is the NRC's program required by the Nuclear Waste Policy Act of 1982 (NWPAA). The repository regulatory program constitutes a major portion of NRC resources under the NWPAA. In FY 86, my budget for regulatory oversight of DOE under the NWPAA is about 120 people and about \$18M.

I want to thank you for the opportunity to be here today. I would note again that I represent the U.S. Nuclear Regulatory Commission, the independent Federal regulatory agency having prime Federal regulatory responsibility for the health and safety of the DOE's high level waste repository program under the NWPAA. The only activities within DOE regulated by NRC relate to the disposal of radioactive waste. I believe there is a need for a continuing and growing interchange between the NRC and the States involved in this program either from the standpoint of being a possible repository site or a transportation corridor State. We both need to understand each others views and interests. Our door is always open. I am the senior Federal career manager in NRC with responsibility for the agency's NWPAA programs. As asked in the invitation I will give you an overview of the NRC's program from my management perspective. If you have detailed questions on technical or procedural issues, I will be happy to have answers provided or have appropriate staff come to brief you.

First, I will briefly delineate the roles of DOE and NRC in the high level waste repository program. Under the NWPA, DOE has the responsibility for the planning, siting, construction, operation, and closure of the high level waste facilities. In contrast, NRC, is responsible for the health and safety aspects of the program. At the present time, DOE is in the process of selecting and recommending to the President three sites for characterization. As a regulatory agency, we cannot assist DOE in selecting such sites that we may someday be called upon to consider for licensing.

DOE cannot build a geologic repository for high level radioactive wastes without the Commission's authorization. And if built, the repository cannot be operated until NRC has granted DOE a license. Similarly, the storage of spent commercial reactor fuel prior to disposal is under NRC regulatory authority. Transportation of spent fuel and high level waste is governed by regulations established by the Department of Transportation and NRC, which share Federal regulatory responsibility in this matter.

NRC OVERALL REGULATORY APPROACH

With regard to the repository program, NRC regulatory activities consist of five major periods: The first is prelicensing consultation. The second entails review of DOE's application to construct the facility, followed by a formal adjudicatory licensing hearing and a decision by NRC of whether to authorize construction.

It should be noted that the Commission has a very short time, under the Nuclear Waste Policy Act, in which to make its final decision on whether to authorize construction. Under Section 114(c) of the Nuclear Waste Policy Act, the Commission must make a final decision within three years, with a possible extension to four years, after submission by DOE of an application for construction authorization. This three to four year licensing period for a first-of-a-kind undertaking is short when compared with NRC's past experience in licensing nuclear reactors. It is incumbent upon DOE to provide a complete and high quality license application at the time of submittal; and for the NRC to have an efficient licensing process so that the Commission can make an informed decision in the time mandated under the Nuclear Waste Policy Act. I will return to this matter momentarily.

The third regulatory period for NRC activities, assuming construction is authorized, involves review of DOE's application to operate the facility, followed by an opportunity for a licensing hearing and a decision by NRC of whether to license for operation--that is receipt and possession of high-level radioactive waste in the repository. The fourth period concerns regulation of the operation, and the fifth and final period entails review of the DOE's application to close the facility. An additional opportunity for public hearing is provided at the time of closure.

The NRC safety regulation is a deliberate, open process designed to assure the protection of health and safety and the environment. It is founded in law and expressed in NRC Federal regulations. The NRC rules are designed to implement the applicable EPA general standards of protecting the accessible environment.

The DOE's repository program is critically reviewed by the NRC technical staff. Affected States and Indian Tribes are involved in these reviews. I must emphasize here that in the NRC's regulation of DOE, it is DOE's responsibility to demonstrate that DOE is meeting all requirements. It is not NRC's role to make that primary demonstration, nor to devise a strategy or technique for making it. That is DOE's responsibility, and DOE's alone. We regulate--we do not operate.

At some time, DOE will decide that it has sufficient data to establish that the site selected and the program developed will meet requirements for the repository. DOE will then file an application with NRC for construction authorization. If, after its critical review, the NRC staff agrees that the DOE program will meet requirements, the NRC staff prepares an analysis supporting that opinion and will make recommendations concerning authorization issuance.

A formal adjudicatory hearing is held to examine the DOE program and the NRC staff evaluation. I should underline here that the five-member Commission--not the NRC staff--has the ultimate authority to approve or disapprove DOE's application for a waste repository. The NRC staff makes important technical determinations on whether and under what conditions a license should be issued. Our determinations--just as DOE's--will have to survive the scrutiny in a public hearing of an Atomic Safety and Licensing Board impaneled by the Commission--and ultimately the Commission itself--before any decision can

take effect. In our overall regulatory planning for the repository, hearings are provided for at three critical regulatory decision points: before construction; before loading of the repository; and, before closure.

PRELICENSING CONSULTATION

As I mentioned earlier, the first period in our regulatory plan entails prelicensing consultation. The program now is in the "prelicensing stage" at the approach to site characterization that precedes selection of a site for which to apply to the NRC for construction authorization. The purpose of the prelicensing consultation in this first-of-a-kind undertaking is to provide a basis for identifying and resolving issues early.

Our role during prelicensing consultation is to point out to DOE what will be needed for DOE to demonstrate that a site will meet NRC rules and requirements and, thereby, will meet EPA overall standards. Again, it is not the NRC role to make that primary demonstration nor to devise a strategy or technique for making it. That is DOE's responsibility. We analyze the DOE's program to determine whether, in our independent judgment, we agree that requirements will be met.

The NRC review and licensing process imposes a special rigor to the judgments about the national repository program. Planning and preparation during pre-application review is critical in enabling us to support these judgments in a formal, open, public proceeding. It is this rigor--this necessity for

correctness and demonstrability--that is at the heart of our strategy for extensive preapplication review of DOE's site characterization activities. Essentially, this strategy is to ensure the identification of potential licensing issues as early as possible.

Consistent with our emphasis on early identification of issues, we also have ongoing discussions with DOE as it prepares its Site Characterization Plans, or SCP's. Because DOE has not yet finally chosen the sites it will recommend for characterization, we have been talking with each of the DOE project offices concerned with the three geologic media DOE has been investigating. NRC has on-site representatives at these project offices. Here in Nevada, our representative is Mr. Paul Prestholt.

As I mentioned earlier, one of our greatest challenges in this first-of-a-kind undertaking is to complete our license review within the three to four year period required by the NWPA. Consequently, we have taken many steps toward assuring an efficient and open licensing process. Before I continue, it is imperative that you understand that this efficiency is not designed to cut corners. Instead, it is designed to insure that all of the information needed to make the licensing decision will be complete and of high quality. We are also working to insure that this information will be made available in a timely manner and be readily accessible by all interested parties.

We have focused our attention on three major areas for efficiency in the licensing process; the process itself, the licensing data base, and the ability to close issues.

We have taken steps in revising the licensing process so as to establish procedures tailored to the high level waste licensing framework. This includes minimizing the need for lengthy discovery during the hearing process, minimizing the generation of new records, and tailoring the licensing system and the preapplication process for a federal applicant.

In the second area, we have worked extensively in developing plans for a data base for the high level waste licensing proceeding. NRC and DOE agreed to develop a licensing support system, known as the LSS, to facilitate the licensing hearing for the repository. The LSS is an electronic high level waste document data base that would be used by DOE, NRC, the States, Indian tribes and other parties to the licensing hearings. The goal is to make documents and other pertinent information available well before the license application is submitted, thus reducing the need to rely on discovery and to address the current need by all for timely access to technical information. The NRC is currently developing a rule governing the submission of records and documents into the LSS.

And finally, we have been working diligently at coming to closure on generic and site specific issues. We are developing compliance methodology for 10 CFR Part 60, quality assurance program guidance and providing guidance to DOE and workshops for the States and Tribes. For example, earlier this month, we held a meeting in Las Vegas for the States and Tribes to explain, in detail, our efforts toward streamlining the licensing process.

NRC REVIEW OF DOE DRAFT ENVIRONMENTAL ASSESSMENTS

It is precisely because early identification of issues is so important that NRC, DOE, and the States and affected Tribes must be aggressive about raising issues early. It was with this overall goal in mind that the NRC staff reviewed and commented on the DOE's Draft Environmental Assessments, or EA's, on the potentially acceptable repository sites from which DOE will be recommending sites for characterization. DOE will use site characterization to assess, in more detail, the waste isolation capabilities of a candidate site.

In reviewing the EA's--both Draft and Final, I want to emphasize again that the purpose of our EA review is not to approve or disapprove any particular site. Nor will NRC attempt to rank the sites. As a regulatory agency, we cannot assist DOE in selecting a site that we may someday be called upon to consider for licensing. Rather, our review is to identify technical areas where we believe DOE should give additional attention in performing its site work.

STATE AND TRIBAL PARTICIPATION IN PRELICENSING ACTIVITIES

We think that a necessary element in this program is the need for free and open exchange of information. Access to information and active participation by States, affected Tribes, and other interested parties contribute to the critical oversight necessary for this first-of-a-kind undertaking.

The Nuclear Waste Policy Act gives DOE primary responsibility for funding and working with interested States and Tribes. However, we on the NRC staff intend to continue pursuing close State and Tribal consultations. We see the States and Tribes as valuable participants in our efforts to come to grips with the licensing issues that will have to be settled for safe disposal to become a reality. We look forward to working with the States as mutual contributors to early and comprehensive understandings of the safety issues at each site.

My comments, thus far, have been essentially describing the regulation of the HLW Repository Program. NRC has essentially the same regulatory safety responsibilities for the monitored retrievable storage program although the process for licensing the MRS, if Congress should authorize it, is somewhat different than for the repository.

TRANSPORTATION REGULATION

The NRC shares with the Department of Transportation the regulatory safety responsibility for transportation of the high level waste and commercial spent fuel. Again, we have no operational responsibility but regulate for safety.

Under the NHPA, DOE will be the shipper of the high level waste or spent fuel. DOT and NRC share safety regulation responsibilities. NRC and DOT regulate the transport under an agreement--a Memorandum of Understanding. Basically, the division of responsibility under this MOU is that DOE has responsibility for the conditions of transport--driver qualifications, equipment safety, load

stability, etc.--while NRC has the responsibility to analyze and certify the cask to assure that these highly radioactive materials can be safely transported under normal conditions of transport and will survive accidents.

As far as I know, the "accident survivability" of the transport container for high level radioactive material is unique in the transport of hazardous materials. The NRC rules for containers specify performance requirements, not detailed fabrication specifications. The transporter--in this case DOE--has flexibility in cask design provided it can be demonstrated that the cask meets the NRC performance requirements that provides for safety under accident conditions.

Some years ago the NRC foresaw transportation as an area for public concern. We recognize that large quantities of high level radioactive material probably never come closer to the public than when being moved on public highways and railroads. We undertook a program to satisfy ourselves that we were fully responsive to our safety responsibilities.

For example, one of the studies we initiated is the transportation Modal Study to examine NRC requirements in light of real accidents. Actual severe transportation accidents (not necessarily involving nuclear materials) were cataloged and the forces and conditions examined. The results of the Modal Study will be used to confirm and, if appropriate, improve our performance standards. It will also be used to help explain to the public the relationship between those standards specified in engineering terms and real world severe accidents. We anticipate this study will be published before the end of this year.

CONCLUDING REMARKS

In closing, let me say again that the NRC is an independent Federal regulatory agency. We see ourselves as the public's advocate for safety--that is the reason NRC exists. We have a primary mission of health and safety and protection of the environment--this is our first responsibility.

Although health and safety is our prime and overriding consideration, we cannot be indifferent to priorities other than health and safety that are established by law for the national program. We are interested in the timeliness of the process. We want to avoid delays that may lead to pressures for a rush at the end of the process. The Commission's guidance to the staff has long been that in the absence of unresolved safety concerns, the NRC regulatory program will not delay implementation of the Executive Branch's program. Let me state with certainty, however, that NRC does not intend to sacrifice quality and technical correctness to meet deadlines. We represent the public's interest in safety.

It has been a pleasure to talk with you and, hopefully, to assist you in understanding the NRC's role and responsibility.