

THE IMPLEMENTATION OF THE NUCLEAR WASTE POLICY ACT OF 1982

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ABSTRACT

This paper reviews the status of implementation of the Nuclear Waste Policy Act of 1982. The general conclusions are that the Act is a good one, although not perfect, and that it can be implemented on schedule if there can be better interaction between the Federal, State and Tribal entities with less resort to time consuming litigation. A review is made of the progress to date as it appears to the U.S. DOE.

INTRODUCTION

The purpose of this paper is to analyze and review the implementation of the Nuclear Waste Policy Act of 1982. It is the conclusion of this "state-of-the-program" paper that meeting the congressionally-mandated goal of beginning to dispose of high-level radioactive waste and spent fuel before the end of this century remains achievable. Barring unforeseen delays, the first repository will be in operation prior to the time when a large number of the Nation's commercial nuclear power plants run out of pool storage capacity and during the careers of many of us who currently share the responsibility for solving this national problem.

The Congress selected for the Nation a course to proceed with siting, licensing and construction of the first repository on a track that assures rigorous achievement of quality while streamlining the environmental review and legal process to assure that the first receipt of spent fuel begins by 1998.

During these first three years, the Department of Energy has been on-time, or slightly early, in releasing drafts of all the documents mandated by Congress including the siting guidelines, the Mission Plan and the Environmental Assessments for the first repository. At the same time, DOE has been late in finalizing these documents due to extended comment and review periods, some of which were not contemplated by Congress but which were elected to encourage public involvement and to enhance the highest technical quality.

Even with this extended public involvement, States, Indian Tribes and some members of the public believe the program is moving too rapidly and is not sufficiently involving them in the numerous technical siting decisions that are early elements in the program.

In reviewing the record of the first three years, it has become clear that there is a tension between the need to sustain the momentum woven into the Act and the need to involve the public in the decision-making process. Given a cooperative approach to reaching reasonable and timely decisions, this could be a creative tension. Given opposition to preliminary siting decisions that have been made in the first and second repository programs, this tension between progress and process can encourage confrontation that inhibits, rather than stimulates, State and Tribal involvement. Involvement is both demanded and eschewed.

Nonetheless, three years after passage of the NWPA--legislation that was a landmark in

bipartisanship--there remains a consensus in this country and internationally--on two fundamental technical points: that deep, geologic disposal is the soundest solution and that the tools exist for providing reasonable assurances that the various geological media being studied in the United States, Canada and Western Europe can contain radioactive waste for thousands of years. The completion of Environmental Protection Agency standards in August 1985 enhances our confidence that multi-generational public health and safety can be assured.

With those prefatory comments in mind, let me review the progress we have achieved as a nation during the past three years.

First, to an extent unmatched in other nations, the United States has put in place and begun applying necessary guidelines, standards and procedural requirements. The siting guidelines, which became effective in December 1984, establish pre- and post-closure qualifiers and explicit disqualifiers against which all repository sites are comparatively judged in the context of EPA and Nuclear Regulatory Commission standards and regulations.

Compare this program with other controversial waste disposal programs, most notably Superfund and RCRA, and the high degree of public involvement in developing the technical framework and decision-making criteria is readily apparent.

Second, the Mission Plan, published in July 1985, describes in detail the substantive program--the authorized waste disposal system, an improved performance system including a Monitored Retrievable Storage facility, and contingency plans. As important as the first volume of the Mission Plan, are the two support volumes which include all public comments received and a detailed analysis of how they were responded to. Every year, the Mission Plan will be reviewed and areas requiring revision noted.

Third, in addition to development of this comprehensive program overview, the Office of Civilian Radioactive Waste Management (OCRWM) has made progress during these first three years in reducing the number of states involved in the program in preparation for the next phase of siting activity. When created after passage of the NWPA, the siting program for the first and second repositories involved potential sites in 23 States, and numerous Indian Tribes. Soon, with the technical support provided by these States and Tribes, we hope to reduce by half the number of states in which we are carrying out activities for the first repository, from 17 States to seven.

Few, if any, programs in American history have involved so many States and other parties in so controversial a siting process. With siting activity focused on 10 States, OCRWM, working largely through its Project Offices, will be able to be more responsive to State, Tribal and local needs and requests, by focusing its attention on area and site-specific imperatives.

By the end of 1986, the first site characterization plans for the first repository program--involving expenditures of \$700 million to \$1 billion at each of three sites--will be complete as will the area characterization plans for the second repository, involving more modest work in 12 crystalline rock bodies. These plans, developed with State and Tribal input, will inaugurate formal field work which will begin in earnest in 1987.

A fourth major accomplishment during the first three years of the NWPA has been the further refining of the characteristics of the total waste disposal system and, based on that, a proposal to improve the performance of the system by constructing a Monitored Retrievable Storage facility. Rather than being viewed as a fallback, the MRS to be proposed to Congress would be an integral part of the repository based system focused on providing essential functions with flexibility and, hence, increased confidence in meeting the mandate of the Act which requires acceptance of spent fuel to begin in 1998. The MRS, if approved by Congress, could be in operation as early as 1996.

Fifth, progress has been made on defining the system for transporting radioactive waste. Aside from a limited number of R&D shipments, designed to primarily test new storage technologies, OCRWM will not begin moving large volumes of spent fuel and high-level waste until the late 1990s. This provides an unusual opportunity for States, Tribes and public interest groups located in areas through which waste will potentially be transported, to work together with DOE to develop an advanced transport system that builds on the strengths of the current system and applies new technologies and management philosophies.

As one State official recently wrote in a letter, transportation is an area "where conflicts that have plagued other aspects of the repository program need not occur". There is a substantial area of commonality in the transportation arena among DOE and the States. During the past year there have been a number of promising developments--States have been provided routing models, courtesy communications have been provided States through which R&D shipments pass, a Transportation Business Plan has been issued, an Institutional Plan has been nearly completed. More importantly, progress has been made towards consensus on a clear definition of the issues that require resolution, and there has been meaningful progress on resolving some of the issues.

Sixth, a decision has been made--with public input--about the disposition of most of the Nation's defense waste. A cost formula is now being developed to pay for the acceptance of this waste into the repository system.

Seventh, a comprehensive management program has been established that include systems engineering function, tighter cost controls, clear allocation of program functions and a quality assurance program.

As important as are these substantive steps, is the improvement in mutual understanding with the States and Tribes. Considerable time has been invested

by the States and Tribes and by OCRWM in discussing the meaning of "consultation and cooperation" (C&C). From those intensive discussions, which have led to quarterly meetings which the States and Tribes take turns chairing, has come a better and more timely flow of information from DOE, a greater sensitivity to the limits of State and Tribal involvement, and an appreciation of the need, once we enter site characterization of striving for completion of formal C&C agreements.

The Act assumes formal C&C agreements will be negotiated to develop working rules and conflict resolution mechanisms, among other things. Negotiation of C&C agreements was to be triggered by the beginning of site characterization. The State of Washington, followed by the Yakima and Umatilla Indian Tribes, chose to initiate negotiations prior to a decision on whether the Hanford site was to be characterized. These negotiations, which continue, have been of value in developing experience in this important area.

Other States have chosen not to negotiate agreements at this time but some have indicated increased interest in doing so.

From these meetings, and from C&C negotiations, has come a much improved flow of program information, more frequent discussions of issues and a greater commitment on both sides to avoiding surprise actions.

While our mutual understanding and communication has improved, when one turns from looking back at our successes to reviewing some of the disappointments during the first three years of the implementation of the NWPA, a major problem is the continued difficulty in resolving disagreements.

While recognizing that some parties are formally opposed to repository siting, another regret during this first three years of the program has been the reticence on the part of some States to join with DOE to reinforce our mutual efforts to assure that the public interest can be better served. A DOE initiative, for example, to jointly develop educational programs aimed at improving public knowledge was rejected.

The States and Tribes have expressed disappointment with DOE for not providing sufficient opportunity for early involvement in policy formulation and decision-making. During the past three years, DOE has made efforts to provide opportunities through formal comments periods, more frequent meetings, and more timely circulation of material. Obtaining public comment on the draft Environmental Assessments and on the draft Area Recommendation Report, for example, was not required by the Act.

Despite these improvements to provide sufficient opportunity for input, the States and Tribes tend to remain dissatisfied, DOE continues to feel that while States and Tribes want more opportunities to discuss issues, they are not eager to participate in the formulation of decisions which require commitments from them.

While the technical contributions of the States and Tribes have been valuable, we have not yet forged a stable working relationship between OCRWM and the State and Tribal technical teams. In the case of WIPP, a stable, professional working relationship between DOE and the State of New Mexico's Environmental Evaluation Group has evolved to benefit both parties.

The resort to litigation is another disappointment. In some cases, litigation has been the result of disagreements which DOE and the State involved have not been able to resolve despite a public review process and serious discussions with State officials. In a few instances, however, litigation was filed by States even though there had been no formal effort to discuss or resolve differences. While litigation is not unexpected, adequate alternative dispute resolution mechanisms have not emerged.

While these institutional problems are troublesome, they do not constitute program failures. Incremental improvements in relations with the States and Tribes continue to be made based on both DOE and State and Tribal initiatives. The stability of the DOE program and many of the State and Tribal programs has encouraged the development of closer professional relationships and a greater understanding of the constraints each side faces.

With the collective wisdom of three years experience behind us, we can now venture answers to a number of important questions. Among the questions and suggested answers:

1) Is the NWPA being successfully implemented by DOE and the States and Tribes? Answer: "Yes"

2) Should the NWPA be amended or replaced? Answer: While we can all envision some changes that could improve the Act, the answer is "No". The consensus that led to the passage of the NWPA remains intact.

3. Does OCRWM deserve a passing grade in its efforts to work closely and responsibly with the States and Tribes? Answer: "Yes, but needs continued improvement".

4) Do the States and Tribes deserve a passing grade in their efforts to work closely and responsibly with DOE? Answer: "Yes, but need continued improvement".

Fundamental to all we do in the OCRWM program is a focus on continued improvement. By managing for quality, sustaining an aggressive schedule, and working closely with affected parties, the OCRWM program finds itself under continual pressure to improve. Slowing down the program is preferred as a way to encourage improvement but inertia usually leads to a decline in morale and commitment and a concomitant decline in quality. Congress, we believe, was right in establishing a schedule that is based on rigor and discipline.

This is a program that is often discussed in superlatives. It has been called the most expensive single program in history, the most controversial, and the longest. Is it really superlative in any of these ways? True, the disposal of very long-lived, high-level radioactive waste is expensive, controversial and long-term. Yet, radioactive wastes are but one of modern civilization's very large-scale production of toxic products and wastes.

All of us are beneficiaries of the products of which these wastes are remnants. All of us are, therefore, trustees. We remain blessed that, unlike other wastes which have been poorly managed, the task we face is not a remedial one. We are presented with an opportunity to do the job right with the only appropriate superlative being the measure of the quality by which we share that responsibility.