

PRESENTATION TO
NUCLEAR WASTE TECHNICAL REVIEW BOARD
ON
SECRETARY OF ENERGY ADVISORY BOARD
TASK FORCE ON
CIVILIAN RADIOACTIVE WASTE MANAGEMENT

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JULY 16, 1991

THE SECRETARY OF ENERGY ADVISORY BOARD

- PROVIDES THE SECRETARY OF ENERGY WITH ADVICE ON A WIDE RANGE OF ISSUES
- SERVES AS THE PRINCIPAL MECHANISM FOR LONG RANGE PLANNING AND ANALYSIS WITHIN THE DEPARTMENT
 - NOT DESIGNED TO RESOLVE CONTEMPORARY ISSUES CONFRONTING THE DEPARTMENT
 - FUNCTIONS MAINLY THROUGH TASK FORCES COMPOSED OF MEMBERS AND SPECIALLY APPOINTED OUTSIDE EXPERTS

RATIONALE FOR THE TASK FORCE ON CIVILIAN RADIOACTIVE WASTE MANAGEMENT

- THE RESOLUTION OF INSTITUTIONAL ISSUES IS CRITICAL TO THE SUCCESS OF EFFORTS TO MANAGE RADIOACTIVE WASTE
- LACK OF PUBLIC TRUST AND CONFIDENCE IN THE DEPARTMENT HAS BEEN REPEATEDLY IDENTIFIED AS AN OBSTACLE TO PROGRESS
- THERE IS A NEED TO
 - UNDERSTAND THE BASIS OF PUBLIC MISTRUST
 - EVALUATE APPROACHES FOR ENSURING THAT THE DEPARTMENT MERITS PUBLIC TRUST AND CONFIDENCE AS IT CARRIES OUT ITS PROGRAMS

TASK FORCE ON CIVILIAN RADIOACTIVE WASTE MANAGEMENT

- **MADE UP OF 11 INDIVIDUALS WITH BACKGROUNDS
IN AT LEAST TWO OF THE FOLLOWING AREAS**
 - **NUCLEAR WASTE MANAGEMENT AND REGULATION**
 - **EXPERIENCE RUNNING ORGANIZATIONS FROM
WHICH HIGH RELIABILITY IS DEMANDED**
 - **FEDERAL AND STATE GOVERNMENT**
 - **ORGANIZATIONAL THEORY AND DESIGN**
- **HELD FIRST MEETING MAY 14, 1991**
- **SCHEDULED TO COMPLETE WORK IN SPRING, 1992**

ANALYTICAL AGENDA FOR THE TASK FORCE

- **IDENTIFY THE FACTORS THAT AFFECT THE LEVEL OF PUBLIC TRUST AND CONFIDENCE IN THE DEPARTMENT'S ACTIVITIES**
- **ASSESS THE EFFECTIVENESS OF ALTERNATIVE FINANCIAL, ORGANIZATIONAL, LEGAL, AND REGULATORY ARRANGEMENTS IN PROMOTING PUBLIC TRUST AND CONFIDENCE**
- **CONSIDER THE EFFECTS ON OTHER PROGRAMMATIC OBJECTIVES, SUCH AS COST AND THE TIMELY ACCEPTANCE OF WASTE, OF THOSE ALTERNATIVE ARRANGEMENTS**
- **PROVIDE THE SECRETARY WITH RECOMMENDATIONS AND GUIDANCE FOR IMPLEMENTING THOSE RECOMMENDATIONS**

ANALYTIC PERSPECTIVE OF THE TASK FORCE

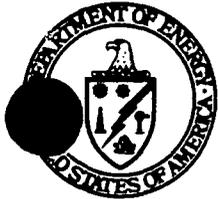
- **BECAUSE THE RADIOACTIVE WASTE MANAGEMENT PROGRAM WILL OPERATE ON AN EXTREMELY LONG TIME HORIZON, A VARIETY OF INSTITUTIONS WILL HAVE TO MERIT PUBLIC TRUST AND CONFIDENCE**
- **THESE INCLUDE:**
 - **POLICY-MAKING ORGANIZATIONS**
 - **TECHNICAL DESIGN/DEVELOPMENT ORGANIZATIONS**
 - **OPERATING ORGANIZATIONS**
- **TASK FORCE RECOMMENDATIONS WILL TAKE THAT VARIETY INTO ACCOUNT**

ACTIVITIES UNDERWAY -- I

- WORKSHOP SPONSORED BY THE NATIONAL ACADEMY OF SCIENCES (CBASSE) TO REVIEW THE STATE OF SOCIAL SCIENCE KNOWLEDGE
- WORKSHOP SPONSORED BY THE NATIONAL ACADEMY OF PUBLIC ADMINISTRATION (NAPA) TO REVIEW "BEST PRACTICES"
- JOINT CBASSE-NAPA WORKSHOP

ACTIVITIES UNDERWAY -- II

- CASE STUDIES OF KEY DEPARTMENTAL ACTIONS THAT AFFECTED, EITHER POSITIVELY OR NEGATIVELY, THE LEVEL OF PUBLIC TRUST
 - EFFORT TO ESTABLISH "LESSONS LEARNED"
 - SIX TO EIGHT CASES TO BE SELECTED
- SPECIFICATION OF THE TASKS THAT EACH TYPE OF WASTE MANAGEMENT ORGANIZATION WILL HAVE TO ACCOMPLISH
- CREATION OF A "POLICY MAP" TO OBTAIN INSIGHTS INTO THE REAL-WORLD CONSTRAINTS WITHIN WHICH THE DEPARTMENT MUST SUSTAIN TRUST AND CONFIDENCE



Secretary of Energy Advisory Board

Washington, DC 20585

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**TERMS OF REFERENCE
SECRETARY OF ENERGY ADVISORY BOARD
TASK FORCE ON CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

INTRODUCTION

The Department of Energy recognizes that the resolution of outstanding institutional issues, such as access to sites, social and economic impacts, and organizational design, is as critical to the ultimate success of the civilian radioactive waste management program as the resolution of outstanding technical issues. No institutional issue commands as much attention and is as widely regarded as pivotal and far-reaching as the question of public trust and confidence. It is, for example, a common theme in reviews by organizations such as the National Academy of Sciences, the Congressional Office of Technology Assessment, and the Nuclear Waste Technical Review Board.

Although numerous oversight and advisory bodies are examining the technical foundations of the program, there is currently little systematic analysis and guidance on developing the institutional framework for managing radioactive waste in a manner that ensures public trust and confidence. Such analysis and guidance would be helpful not only to the existing policy-making organizations that are conducting many of the program's immediate activities but also in the ongoing creation and design of the technical development and operating organizations that will play increasingly critical roles in the program's future. The objective of the Secretary of Energy Advisory Board (SEAB) Task Force on Civilian Radioactive Waste Management is to begin to undertake those institutional analyses and to suggest approaches for establishing public trustworthiness so as to facilitate progress toward the Department's satisfaction of its statutory obligations.

As detailed below, the Task Force should examine what is meant by "public trust and confidence" and describe the conditions that are important for ensuring it. The group should explore what additional steps the program might take to strengthen public trust and confidence in efforts to dispose of radioactive waste. The Task Force should investigate whether attempts to increase public trust and confidence affect other objectives such as timely waste acceptance and cost-effectiveness. Finally, the group should consider how its recommendations and guidance might be implemented.

STUDY OBJECTIVES

The Meaning and Development of Public Trust and Confidence

The phrase "public trust and confidence" is frequently used, but its meaning is rarely articulated with precision. Consequently, misunderstandings among parties with an interest in those ends may arise, and accusations of bad faith may be leveled, leading ironically to reduced trust and confidence. The Task Force should strive to develop a clear understanding of what it means for the radioactive waste management program to have public trust and confidence

extended or withheld. The group should then analyze the factors and processes that cause it to be gained, maintained, lost, and reestablished. Among the questions the Task Force should address are:

- Whose trust and confidence is most critical? Why?
- What are the most important factors affecting the level of public trust and confidence in the program?
- What lessons has the program learned from the past? What can be done to build on past successes and avoid past failures?

Opportunities for Ensuring Public Trust and Confidence

The management of radioactive waste poses a number of challenges, which, in combination, may make the establishment and maintenance of public trust and confidence problematic. Hazardous materials must be processed and transported; the benefits of nuclear power are widely distributed, but many of the costs of waste management are geographically concentrated; political and technical accountability must be sustained over extended periods; a relatively large-scale technological system with a complex institutional infrastructure must be created; some errors may only arise in the far future, and others may be hard to detect. Based on the understanding and insights developed in the first phase of the study and through other means, the Task Force should consider questions such as these:

- How can the challenges that tend to make public trust and confidence in the radioactive waste management program problematic be addressed?
- Under what circumstances, if any, can alternative financial, organizational, and regulatory arrangements for the program promote public trust and confidence?
- Can the organizational structures and processes adopted for similar programs in other nations provide models for increasing the perceived trustworthiness of the U.S. program?

Consequences of Ensuring Public Trust and Confidence

Actions taken to ensure a significant reservoir of public trust and confidence may affect other program objectives such as the timely acceptance of waste, cost-effectiveness, and confidence in the program's schedule. Those other factors must be taken into account as any long-term implementation plan is developed. If trade-offs between conflicting goals have to be made, it is important that the stakes be clarified and the balancing of advantages and disadvantages of various approaches be done explicitly. To inform choices that will have to be made, the Task Force should investigate these questions:

- To what degree would additional efforts to foster public trust and confidence disrupt established program routines and organizational interactions?

- How would efforts to ensure high levels of public trust and confidence influence the timeliness and the cost of the radioactive waste management program?
- To what extent would initiatives to increase public trust and confidence affect or be affected by the regulatory regime for developing and licensing a repository?

Recommendations

Having assessed alternative approaches for ensuring public trust and confidence and having considered in general terms what the central advantages and disadvantages of each might be, the Task Force should present recommendations to the Secretary of Energy. Included in those recommendations should be guidance on what steps can be taken to implement them. In particular, the Task Force should note which actions can be taken under authority already vested in the Department, which actions require new authority, and which actions depend on the cooperation of other governmental and non-governmental entities.

In pursuing these objectives, the Task Force can

- Obtain the advice of recognized experts in organizational design;
- Examine program decisions and policies over the last decade that have strongly contributed to the current level of public trust and confidence;
- Solicit the views of informed and interested individuals both inside and outside of government;
- Secure information from DOE program offices and contractors that helps identify the characteristics of the policy-making, technical design and development, and operating organizations of the radioactive waste management system.