



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

AUG 06 1984

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MEMORANDUM FOR: Joseph O. Bunting, Chief  
Policy and Program Control Branch  
Division of Waste Management

FROM: Neil J. Numark  
Integration Section  
Policy and Program Control Branch

SUBJECT: REPORT ON TRIP TO ATTEND AMFM PANEL MEETING

On July 29 to 31, 1984, I attended the sixth meeting of the Department of Energy's Advisory Panel on Alternative Means of Financing and Managing (AMFM) Radioactive Waste Facilities, which was held in Portland, Oregon.

The discussions focussed on evaluating the suitability of selected government and corporate entities for waste management purposes, based primarily on 13 tests which the Panel developed of a "dedicated" waste management organization. These tests are listed in Enclosure 1. The tests are being applied to 10 organizational types identified by the Panel. These are listed in Enclosure 2, along with a list of example organizations of each type which have been profiled and examined by the Panel. The Panel is dividing into work committees to complete these evaluations for discussion at the next meeting, scheduled for August 25 to 27 in San Antonio. Members of the Panel made it clear that they are willing to recommend organizational changes which would require legislation to implement.

Chairman O'Scannlain requested preliminary views of each of the individual Panel members on the organizational alternatives. Based on the discussion that followed, it appeared that most members favor either an independent federal agency or commission or some type of government corporation. Several members felt that different types of organizations should be considered for the different phases of the program.

Limited attention was given to financing options; Panel members have yet to meet with investment bankers to discuss possible alternatives to the 1 mill/kwh fee system, and how such alternatives might fit in with the various organization options being considered. This will be taken up in subsequent meetings. Also discussed briefly were results of the Panel's meetings and discussions with officials from waste management organizations in European countries.

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A report outline was distributed and discussed, and is provided in Enclosure 3 (revised at the Portland meeting). The first three chapters of the report have been drafted and were also distributed. The Panel intends to submit its report to the Secretary by October 15. Since the drafting of the report is well underway, the Panel does not intend to receive further briefings, such as from Mr. Davis. If we have additional concerns to express, however, I would recommend sending a letter to the Panel Chairman for their consideration.

Howard Perry is no longer the DOE liaison official to the AMFM Panel. Harold Brandt has taken over this role. Aside from DOE, the Panel staff and myself, there were only a couple of local reporters in attendance at the Portland meeting and no public comments.

I am preparing an information paper for the Commission to brief them on the AMFM Panel's activities and upcoming staff actions to review the report. In my view we will need outside assistance to evaluate the impact of organizational alternatives on NRC's regulatory responsibilities.

Finally, a biography of the AMFM Panel members is provided in Enclosure 4.

*Christine Hatley for*  
Neil J. Numark  
Integration Section  
Policy and Program Control Branch

Enclosures:

1. AMFM Tests of Dedicated  
Waste Management  
Organization
2. Types of Organizations being  
Considered by AMFM Panel  
and Examples
3. Draft Report Outline
4. Biography of the AMFM  
Panel Members

AMFM TESTS OF A DEDICATED WASTE MANAGEMENT ORGANIZATION

1. Mission-oriented
2. Ability to maintain credibility with all stakeholders
3. Stability and continuity of process
4. Programmatic authority (including funding)
5. Accessibility
6. Responsiveness
7. Political accountability
8. Immunity from political interference
9. Financial accountability (auditability)
10. Technical excellence
11. Ability to stimulate cost effectiveness (including incentives)
12. Ease of transition between program phases (siting, construction, operation)
13. Ease of transition to any new organization from the current organization

TYPES OF ORGANIZATIONS BEING CONSIDERED BY AMFM PANEL AND EXAMPLES

<u>Category</u>	<u>Types of Organization</u>	<u>Examples Panel Has Profiled</u>
Subordinate to Cabinet Level Office	1. Present organization (OCRWM)	-----
	2. Subcabinet office	Bureau of Reclamation EPA Superfund Office
	3. Administration responsible to a cabinet department	Rural Electrification Admin. Bonneville Power Administration Army Corps of Engineers
Equal to Cabinet Level Office	4. Federal executive agency	NASA
	5. Independent Federal commission	AEC
Government Corporation	6. Government-owned and controlled corporation	Synfuels Corporation TVA US Postal Service
	7. Mixed government/private corp.	Amtrak
	8. Government-chartered private corp.	COMSAT
Private Corporation	9. Utility-type private organization	Ohio Valley Elec. Corp. Middle South Utilities
	10. Private corporation	Waste Management, Inc. Westinghouse

Outline Accepted by Panel 6/28/84

DRAFT REPORT OUTLINE

I. Introduction

A. Background

Statement of nuclear power/waste status including mention of defense wastes

B. Panel creation and mission

1. NWPA
2. OCRWM
3. Panel mission
4. Panel organization and approach
  - a. Briefings
  - b. Subcommittees
  - c. Issue papers
  - d. Open public meetings
  - e. Decision-making process

II. Financing considerations

- A. Utility fee structure
- B. Waste fund management
- C. OMB/Congressional process
- D. Incentives for efficiency

III. Organizational considerations

- A. Characteristics of waste management
  1. Service business
  2. Monopoly
  3. Capital intensive
  4. Negative mission
  5. Distinct phases

B. Objectives

1. Technical competence (safety)
2. Public confidence
3. Adequate financing
4. Cost effective management
5. Timely completion
6. Safe transportation

C. Organizational tests

1. Mission-oriented
2. Ability to maintain credibility with all stakeholders
3. Stability and continuity of process
4. Programmatic authority (including funding)
5. Accessibility and responsiveness
6. Internal flexibility to allocate and reallocate organizational resources (including ability to hire and fire)
7. Political accountability
8. Financial accountability (including auditability)
9. Technical excellence
10. Ease of Transition Between Phases

D. Organizational alternatives

1. Present organizational structure
2. Sub-Cabinet office
3. Administration responsible to a Cabinet department
4. Federal executive agency
5. Independent federal commission
6. Government-controlled corporation
7. Mixed government-private corporation
8. Government-chartered private corporation
9. Utility-type private organization

#### IV. Findings and conclusions

##### A. Design criteria approach

1. Matrix evaluation (mechanical/quantitative)
2. Judgemental (qualitative analysis)

##### B. Results of the analysis

#### V. Transitional considerations

#### VI. Recommendations

#### VII. Appendices

##### A. Activities of panel

##### B. European experiences

##### C. Profiled organizations

##### D. Technical appendices (extracted from our trip and brochures)

1. Definition (wastes)
2. Facilities

##### E. Briefings/papers/public input

##### F. Issues not addressed by panel

1. Technical
2. Institutional
3. Economic
4. Transportation
5. Incentives
6. Other



Introducing the  
ADVISORY PANEL ON  
ALTERNATIVE MEANS OF  
FINANCING AND MANAGING  
RADIOACTIVE WASTE  
FACILITIES (AM/FM PANEL)



#### **Mission of the AM/FM Panel**

The Advisory Panel on Alternative Means of Financing and Managing Radioactive Waste Facilities was asked by the Secretary of Energy in December 1983 to conduct a study pursuant to Section 303 of the Nuclear Waste Policy Act of 1982 (Public Law 97-425). The mission of the Panel is to study and report to the Secretary its findings and recommendations with regard to alternative approaches to financing and managing the construction and operation of civilian radioactive waste management facilities.

The main thrust of this study is to identify and evaluate existing and potential organizational structures and financing mechanisms for the safe, long-term isolation of high-level radioactive wastes and spent nuclear fuel with a high degree of public confidence. Consideration shall be given to existing and new Federal agencies, special Boards or Commissions, quasi-governmental entities, private corporations or consortiums, and combinations thereof. The Panel's report will include analysis of the advantages and disadvantages of alternative approaches.

*It should be clearly understood that the AM/FM Panel is NOT involved in the siting of radioactive waste repositories or other nuclear facilities. Nor will its report to the Secretary of Energy make any recommendation as to the pros and cons of one repository site or locale as compared to others.*

### **Nuclear Waste Policy Act of 1982**

Since the advent of commercial nuclear power reactors nearly 30 years ago, there has been mounting concern about the growing volume of high-level radioactive wastes in the United States. By mid-1984 there were 80 nuclear power plants in operation and another 40 licensed for construction. It is estimated that, by the end of this century, about 800,000 cubic feet of spent nuclear fuel assemblies (containing some 50,000 metric tons of heavy metal) will have accumulated in the U.S.

Responding to this situation, President Reagan signed the Nuclear Waste Policy Act of 1982 on January 7, 1983. This legislation provides for the orderly development of repositories for the disposal of high-level radioactive waste and spent nuclear fuel and for related purposes. The Act requires the Department of Energy (DOE) to site, license and operate such repositories in a manner that "will provide a reasonable assurance that the public and the environment will be adequately protected. . ." It also establishes a series of milestones whereby the first repository will be in operation by 1998.

Within DOE the Office of Civilian Radioactive Waste Management has prime responsibility for siting, licensing, constructing and operating geologic repositories for the safe, environmentally acceptable disposal of radioactive waste. This program is financed from fees paid by utilities operating nuclear reactors, with a

current fee of 1 mill per kilowatt-hour of nuclear-generated electricity sold by the utilities.

Both the Nuclear Waste Policy Act and the DOE program guidelines provide for broad public involvement in formulating and carrying out the repository program. Special attention is given to States and Indian tribes which are potentially impacted by candidate repository sites.

### **Section 303 of the Act**

Because of its relevance to the AM/FM Panel, it is worth excerpting a portion of Section 303 of the Act, which section is entitled "ALTERNATIVE MEANS OF FINANCING." In part, this section requires the Secretary of Energy to "undertake a study with respect to alternative approaches to managing the construction and operation of all civilian radioactive waste management facilities, including the feasibility of establishing a private corporation for such purposes. . ."

### **Formation of the AM/FM Panel**

To conduct the Section 303 study, the Secretary chose to establish an (unpaid) advisory body comprising 13 highly-qualified citizens from throughout the United States. Accordingly, the Advisory Panel on Alternative Means of Financing and Managing Radioactive Waste Facilities was officially appointed on December 16, 1983, and held its first meeting in January 1984. The Panel's report and recommendations should be transmitted to the Secretary of Energy before the end of the year.

#### **Panel Members' Backgrounds**

The members of the Panel represent a diversity of experience, geography, and professional/institutional interests and expertise. Following are brief backgrounders on these individuals, starting with Diarmuid F. O'Scannlain, who was designated by the Secretary to serve as Chairman of the AM/FM Panel.

**Diarmuid F. O'Scannlain** of Portland, Oregon, is a senior partner in the law firm of Ragen, Roberts, O'Scannlain, Robertson & Neill. Except for a brief period of public service, he has been a practicing attorney engaged in corporate and regulatory law practice for the past 21 years. In 1971-73 he served as Public Utility Commissioner of Oregon, and as Director, Oregon Department of Environmental Quality, in 1973-74. He was a member of the Oregon Nuclear and Thermal Energy Council in 1971-74. Mr. O'Scannlain was invited to serve on the Reagan Administration's Department of Energy Transition Team in 1980-81, and subsequently was team leader on the Energy Task Force of the President's Private Sector Survey on Cost Control (Grace Commission). He is a member of the Republican National Committee. Mr. O'Scannlain graduated from St. John's University and earned his J.D. degree from Harvard Law School in 1963.

**E. Linn Draper, Jr.** of Beaumont, Texas, is Senior Vice President - External Affairs for Gulf States Utilities Company, as well as serving as Vice President - Nuclear Technology and as Technical Assistant to the Chairman of

the Board. Prior to joining the firm in 1979 he was Director of the Nuclear Engineering Program at the University of Texas for some 10 years, and served as a consultant to Federal and State agencies, utilities and industrial concerns. An author of numerous technical publications, he is currently a member of the Nuclear Committee of the Texas Energy Advisory Council and the Conservation Commission of the World Energy Conference. He received a B.S. in chemical engineering from Rice University and a Ph.D. in nuclear engineering from Cornell University in 1970.

**Brig. Gen. Mahlon E. Gates, USA (Ret.)** of San Antonio, Texas, is Senior Vice President - Operations for Southwest Research Institute. During his more than 40 years of Federal service, he was a combat commander in Burma in World War II and served as Commanding General, U.S. Army Support Command, and Director of Construction in Vietnam in 1966-67. Between the two wars he occupied key military positions in Europe and Iran, and in the Office of the Joint Chiefs of Staff. His involvement in the nuclear field began with his assignment to the Corps of Engineers' Manhattan District, Oak Ridge, Tennessee, in 1945-47. He subsequently held important posts involving military nuclear applications, the last being for 10 years as Manager, Nevada Operations Office, U.S. Department of Energy, from which he retired in 1982. He is a graduate of the U.S. Military Academy at West Point and the University of Illinois where he received his MSCE in 1948.

**Rodman D. Grimm** of Washington, D.C., is President of DGR Investment Corporation and has 20 years of experience in securing, organizing, managing, and financing large projects in both the government and private sectors. Having assisted in preparing agency, OMB and Congressional budget submissions for the Energy Research and Development Administration, he participated in the organization and activation of the Department of Energy. He was an active member of the Reagan Administration's Transition Team, including preparing policy papers on energy, environment and deregulation and assisting the Synthetic Fuels Corporation transition. He has a broad range of successful experience in energy marketing and consulting, large project financing, domestic and foreign marketing, and environmental consulting.

**Bruce W. Johnson** of Seattle, Washington, is presently Chief Operating Officer of Sealaska Corporation, a diversified enterprise which stemmed from the Alaska Native Claims Settlement Act. He founded Chem-Nuclear Systems Inc. in 1971 and served as its top official until it was acquired by Waste Management Inc. in 1983. Chem-Nuclear dealt extensively with the treatment, packaging, transportation and storage of radioactive wastes, and was a major contractor in the Three Mile Island clean-up. Mr. Johnson has been active with the Atomic Industrial Forum and has presented a number of papers on the nuclear fuel cycle. Prior to entering the nuclear field, he held important

positions with ITT Rayonier and The Boeing Company. He is a director of several business firms and associations and holds B.A. and M.B.A. degrees from the University of Washington.

**Barbara Keating-Edh** of Modesto, California, is President and Chief Operating Officer of CONSUMER ALERT, a nationwide membership organization engaged in research, education and legal activities based on free market principles. A public speaker, writer and public interest activist, she was the 1974 candidate for the U.S. Senate for the Conservative Party in New York, and campaign manager and special assistant to U.S. Senator James L. Buckley in 1975-77. She served as Secretary of the New York State Conservative Party and as a director of the American Conservative Union in 1975-80. She was appointed by President Reagan to head the Administration's transition team for the Consumer Product Safety Commission in 1980, and presently serves on the Administrator's Toxic Substance Advisory Committee of the Environmental Protection Agency. She has participated in statewide consumer affairs initiative campaigns in New York and California.

**Dr. Terry R. Lash** of Springfield, Illinois, is Deputy Director of the Illinois Department of Nuclear Safety. This agency is responsible for nuclear emergency planning, radioactive monitoring, and the regulation of radioactive wastes and waste shipments within Illinois. A former

consultant on nuclear and energy policy. Dr. Lash held key positions with the Scientists' Institute for Public Information in New York City, The Keystone Center near Dillon, Colorado, and the Natural Resources Defense Council in San Francisco. He has served on numerous government and scientific advisory committees and has gained national recognition in the area of radioactive waste management. A graduate of Reed College, he earned M.Ph. and Ph.D. degrees from the Yale University Department of Molecular Biophysics and Biochemistry in 1967 and 1970.

**Melvin Sampson** of Wapato, Washington, has been an elected member of the Tribal Council of the Yakima Indian Nation since 1971. Because of its close proximity to the U.S. Hanford Reservation, the Yakima Indian Nation has for many years taken a keen interest in the Hanford nuclear installations and radioactive waste management programs. Mr. Sampson has been a leading tribal authority and spokesman in this regard. He serves as Tribal Chairman of the Legislative and Health, Employment, Welfare, Recreation and Youth Activities Committee and as a member of the tribes' Special Tax Committee. In addition to his affiliations with various civic organizations and Indian rodeo associations, he has represented Indian health and social service interests on a number of national and regional policy and advisory boards.

**Dr. S. Fred Singer** of Charlottesville, Virginia, is Visiting Professor at George Mason University in Fairfax, Virginia, and is presently on leave as Professor of Environmental Sciences and member of the Energy Policy Studies Center of the University of Virginia. A geophysicist, he has held important academic posts and consultant positions with government and industry. A former Deputy Assistant Secretary of the Interior and Deputy Assistant Administrator of the Environmental Protection Agency, he currently serves on the State Department Science Advisory Committee on Oceans and International Environmental and Scientific Affairs, the White House Acid Rain Peer Review Panel, and as Vice Chairman of the National Advisory Committee on Oceans and Atmosphere. He holds A.M. and Ph.D. degrees in physics from Princeton and a D.Sc. (honorary) from Ohio State University.

**David W. Stevens** of Olympia, Washington, is Special Assistant for Energy and Natural Resources to Governor John Spellman of Washington State. He represents the Governor on the State Board of Natural Resources, chairs the State Oil and Gas Conservation Committee, and chairs the Northwest Regional Compact on Low-Level Radioactive Wastes. He also serves on the State Working Group on High-Level Radioactive Waste Management and with the Energy and Environment Committee of the National Governors' Association. In 1977-79 he was Director

of the Association's Energy Facility Siting Project. Prior to that assignment he served for 4 years as Special Assistant to Governor (now Senator) Daniel J. Evans of Washington State. Mr. Stevens holds a Master's degree in public administration from the University of Washington.

**Sidney M. Stoller** of New York City is Chairman and Chief Executive Officer of the S. M. Stoller Corporation. This international nuclear power consulting firm, originally founded as a private practice by Mr. Stoller in 1959, has consulted on more than half of the nuclear power commitments in the United States, as well as having served foreign utilities and U.S. and foreign government agencies. A chemical engineer and a licensed professional engineer, Mr. Stoller has over 40 years of engineering experience, more than 35 of which are in the nuclear field. He joined Vitro Engineering Company in 1948 to contribute to the design and construction of the first post-war irradiated fuel processing plant at Hanford. As Vice President of Engineering with Vitro, he had important responsibilities on a number of pioneering nuclear projects, including the early power reactors, Naval reactors, and waste handling facilities. He has numerous professional affiliations and publication credits.

**Larry J. Wallace** of Indianapolis, Indiana, is a practicing attorney in that city. He was Chairman of the Public Service Commission of Indiana from

1974 to 1984. Previous positions in local and State government include a term in the Indiana House of Representatives. Mr. Wallace is immediate past President of the National Association of Regulatory Utility Commissioners and has been Chairman of its Executive Committee and of its Legislative Affairs and Electricity Committees. He has served on the Board of Directors of the National Regulatory Research Institute and the Advisory Councils of the Electric Power Research Institute and Institute for Nuclear Power Operations. He has an A.B. degree in economics and an LL.B. degree from Indiana University.

**Arnie Wight** of Amherst, New Hampshire, has been a member of the New Hampshire State Legislature since 1977 and has national recognition in the nuclear legislative field. His service with the Legislature includes chairing its Science and Technology Committee and task forces on radioactive waste management and economic development. Active in the National Conference of State Legislatures, he holds posts on its Energy Committee and its National Advisory Committee on Development of State Legislative Policy. He previously held management positions with Nashua Corp. and Rohm and Haas Company. He has served his local community as Town Meeting Moderator and Village District Moderator for nearly 30 years. He holds a B.S. degree in chemical engineering and business administration from Massachusetts Institute of Technology.



#### **Open Public Meetings**

Every meeting of the Panel is open to the public and provides an opportunity for public queries and comments. Pursuant to the provisions of the Federal Advisory Committee Act (Public Law 92-463), an advance notice of each meeting is published in the *Federal Register*. This notice includes the date, time, and location of the meeting, as well as a tentative agenda.

The designated contact with respect to public participation is Harold H. Brandt, U.S. Department of Energy, Office of Civilian Radioactive Waste Management, 1000 Independence Avenue SW., Washington, D.C. 20585, telephone (202) 252-1652. Written statements may be filed with Mr. Brandt either before or after a meeting. Members of the public who wish to make oral statements pertaining to agenda items should contact Mr. Brandt at least 5 days prior to a given meeting, and reasonable provision will be made to include the presentation on the agenda.

Transcripts of Panel meetings are available for public review and copying at the Freedom of Information Public Reading Room, 1E-190, Forrestal Building, 1000 Independence Avenue, SW., Washington, D.C., between 8:30 a.m. and 4:00 p.m., Monday through Friday, except Federal holidays.