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See remarks below ☐

FROM Ray Walters

DATE 10-2-73

REMARKS


If your schedule permits, we would
value your counsel, comments, etc. on
the attached draft "mini-Green Book"
on DENR/ERDA/NEC.

**SPECIAL
SERVICE**

9/27/73

Organizing To Meet The Nation's
Energy and Natural Resources Challenge

The President's Proposals For Reorganizing
The Energy and Natural Resources Programs
Of The Federal Government



Presidential
Seal

October, 1973

"It has become increasingly obvious that reorganization is imperative, and nowhere more clearly so than in the areas of natural resources and related energy matters."

- From the President's Statement
on Energy and Natural Resources
June 29, 1973

"While energy is one of our Nation's most pressing problems, and while the preservation and effective use of our natural resources is an imperative policy goal, it is presently impossible to administer these related objectives in a coordinated way. Our ability to manage our resources and provide for our needs should not be held hostage to old forms and institutions."

- From the President's Message
to Congress, September 10, 1973

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INTRODUCTION

In his Statement on Energy and Natural Resources of June 29, 1973, the President stated

America faces a serious energy problem.

While we have only 6 percent of the world's population, we consume one-third of the world's energy output. The supply of domestic energy resources available to us is not keeping pace with our ever-growing demand, and unless we act swiftly and effectively, we could face a genuine energy crisis in the foreseeable future.

To counter this growing problem, the President announced a series of immediate actions:

- ° a new Energy Policy Office to bring Presidential-level leadership and coordination to the formulation of Federal energy policies; John A. Love, Governor of Colorado, was named to head this new agency.

- ° legislation calling for a major overhaul of Federal machinery operating the Government's energy and natural resources programs;
- ° a five-year \$10 billion program of research and development to accelerate the search for increased supplies and improved sources of energy;
- ° a nation-wide energy conservation drive to reduce the personal consumption of energy by five percent and the Federal Government's consumption by seven percent.

These measures complement each other and, taken together, offer a brightening prospect for securing near-term relief and long-run solutions to the Nation's growing energy problems.

This booklet focuses on the President's proposals to reform the Federal Government's energy and natural resources machinery, in which he has called for the creation of (1) a Cabinet-level Department of Energy and Natural Resources; (2) an independent Energy Research and Development Administration; and (3) a separate regulatory Nuclear Energy Commission. It explains briefly the underlying rationale and proposed organization of the new agencies and should facilitate understanding and discussion of the President's proposals as they are being considered by the Congress.

OVERVIEW

In his Energy and Natural Resources Statement of June 29, 1973, the President said

" . . . the organization of the Federal Government to meet its responsibilities for energy and other natural resource policies has not changed to meet new demands. The Federal Government cannot effectively meet its obligations in these areas under the present organizational structures, and the time has come to change them."

The President's proposal for overhauling the machinery managing Federal energy and natural resources programs has been introduced in the House of Representatives as H.R. 9090 and in the Senate as S. 2135. Hearings have been opened in the Government Operations Committees of both the House and Senate and the bill is undergoing the active consideration of the Congress and the public. The bill provides for the establishment of:

"

The Department of Energy and Natural Resources (DENR) -- a Cabinet-level department comprising the major Federal programs dealing with our physical environment and concerned with the balanced conservation and development of the Nation's limited natural resources. DENR

will bring together into a single department many major programs having similar purposes which are now scattered among five Cabinet departments and two agencies.

The Energy Research and Development Administration (ERDA) -- a new independent agency having central responsibility for Federal research and development in all forms of energy, including fossil fuels, nuclear power, and new sources of energy. ERDA would become a broad-based, all-purpose energy R&D agency comprising the skills and resources necessary for increasing and improving the Nation's energy sources in the critical years ahead.

The Nuclear Energy Commission (NEC) -- a separate regulatory commission composed of AEC's licensing, regulatory and related safety and environmental responsibilities. In contrast to the AEC, the NEC will not have a responsibility for developing nuclear energy and will thus be able to focus solely on the vital task of licensing and regulating the use of commercial nuclear power generation in conformance with acceptable standards of public and environmental safety.

The proposed reorganization of the energy and natural resources programs is based on proposals originally advanced by the President in March, 1971 and on other legislation that has been under consideration by the Congress from time to time over the past two decades.

The Department of Energy and Natural Resources is based on the President's proposal early in 1971 to establish a Department of Natural Resources. During hearings on the bill, substantial bipartisan support was received from witnesses testifying on the general merits of the bill. While the DNR proposal has been receiving the consideration of the Congress, the Administration -- impelled by the growing energy problems of the Nation -- has consulted further with the Congress and has generally continued to revise and improve the original proposal. Substantial light has now been shed on the organizational needs of our natural resources programs, and a sound basis has been laid for proceeding with the current DENR proposal.

Likewise, the essence of the current proposals to transfer the AEC's functions to ERDA and NEC have received the earlier scrutiny of Congress. In 1956, the Joint Committee on Atomic Energy considered legislation that would reorganize the AEC into two separate groups -- one for R&D and production, the other for licensing and related regulatory functions. Since that time, the matter of separating these two areas of responsibility has been the subject of additional study by the Joint Committee.

Drawing upon this wellspring of Congressional consideration and expertise, the time seems propitious for decisive action

in this critical area. Testifying at the opening of hearings on the proposed reorganization, OMB Director Roy L. Ash stated

We now have the opportunity, working together, to take an historic and much needed step to establish the organizational framework which the Federal Government so desperately needs to safeguard our resources while we meet our needs in the area of energy and natural resources.

It is in a spirit of bipartisanship that the President proposes this vitally needed legislation, and I know it is his earnest desire that the Congress act on this measure -- not from the standpoint of politics, but on the basis of merit. By so doing, the bill as enacted and, I trust, ultimately the people of this Nation will be the better for it.

PROPOSED ENERGY AGENCIES

THE PRESIDENT

DEPARTMENT OF ENERGY AND NATURAL RESOURCES

(ENERGY ACTIVITIES ONLY *)

from Interior:

- Energy Data and Analysis
- Energy Conservation
- Research and Development
- Oil and Gas
- Bureau of Mines (except Energy Research Centers and Synthane Plant)
- Mining Enforcement and Safety Administration
- Power Marketing Administrations
- Other energy activities

from AEC

- Uranium and Thorium Assessment Functions

from DOT:

- Oil and Gas Pipeline Safety

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

from AEC:

- Reactor Development
- Nuclear Materials Production
- Physical Research
- Biomedical and Environmental Research
- Military Applications
- Controlled Thermo-nuclear Research
- Non-Nuclear R&D
- Other Non-Regulatory Functions

from Interior:

- Office of Coal Research
- Energy Research Centers and Synthane Plant of Bureau of Mines
- Underground Power Transmission R&D

NUCLEAR ENERGY COMMISSION

5-Man Commission

All of AEC's Regulatory, Licensing, and Related Environment and Safety Functions

* DENR will also administer land, recreation, water resources, oceanic, atmospheric and earth sciences, Indian and territorial functions.

JUNE 1973

THE PROPOSED
DEPARTMENT OF ENERGY AND NATURAL RESOURCES

"I believe the need for reorganization is especially acute in the natural resource area. I have urged and I urge again the creation of a Department of Energy and Natural Resources to permit us to deal with these questions in a more comprehensive and more effective manner."

- From the President's Message
to Congress, September 10, 1973

THE PROPOSED
DEPARTMENT OF ENERGY AND NATURAL RESOURCES

The President is again calling upon Congress to enact his proposals for bringing together Government's many scattered programs dealing with energy and natural resources into a new and comprehensive Department of Energy and Natural Resources.

Never has the need been greater for swift, affirmative action to strengthen the Government's capability for effective management of the Nation's natural resources. Under present trends, by the year 2000, U.S. demand for primary minerals will quadruple, energy requirement will triple, and water consumption may be over four-fifths of the entire national streamflow; in the remaining quarter of this century, the United States will use more critical resources than it has consumed throughout its entire history. These are the basics, the raw materials of our highly sophisticated, consumer-oriented, and rapidly growing society.

Increasingly, however, our high standard of living is bought at the price of a damaged environment and degraded quality of life. Somehow, in future years, the surging need for raw materials must be met without sacrificing

our national commitment to the protection and enhancement of the environment and other natural assets. This task is made infinitely more difficult by the laws of nature governing the ceaseless interaction of the elements and the inter-dependent chain of life. These inter-relationships create tough problems, impose hard choices, and require the wisest of management if the Nation's resources are to be utilized without despoiling its ecological system and natural assets. Achieving a balance among these competing factors calls for the most effective stewardship that can be devised.

Unfortunately, our understanding of the problems is not matched by a Government organization capable of fully resolving them. Heavy Federal responsibilities in this critical area are scattered among several Cabinet departments and independent agencies. As a result, programs that are basic to sound natural resources management cannot be effectively coordinated for maximum impact. Such fundamental concerns as land use, water supply, minerals assessment, forestry practices, weather and natural hazards research, recreation activities, and energy source analysis -- all represent areas in which present policies, objectives and follow-through activities are splintered, often conflicting, and sometime even nonexistent.

Thus, we have a situation where the stewardship for the whole and interdependent environment is segmented and placed under several independent Federal offices. It is hardly surprising, then, that the following kinds of problems are becoming more commonplace:

- not necessarily bad* ° an upstream watershed project of one department threatens to slow the flow of water downstream to a reclamation project of another department; X
- ° an electric power project on a remote river is halted and deadlocked by two other agencies working to keep the same area wild;
- ° policies and practices governing timber production and conservation, grazing rights, fire prevention, and recreational activities differ between the Government's two largest public land management agencies, often creating confusion and red tape for the users of these services;
- ° earth resources analysis, forecasting of streamflows, weather modification and other geophysical studies are pursued by two

separate departments, thus causing duplication of many resources and inhibiting the benefits to gain if the programs were combined under unified leadership and direction.

Problems of this kind persist despite Herculean efforts by the many competent and committed Federal employees carrying out these programs. No amount of zeal and dedication, however, can overcome the fragmentation and corresponding weaknesses in the present organization. The Nation can no longer tolerate this structure if a critical balance is to be struck that maintains our standard of living while protecting our quality of life.

Mission and Role of DENR

The new department will be responsible for the balanced conservation, management, and utilization of the Nation's renewable and non-renewable resources in harmony with our commitment to protect and enhance the Nation's environment and quality of life. DENR will bring together and provide leadership and direction for all Federal activities most directly concerned with the discovery, assessment, preservation, development, utilization, future adequacy, and enjoyment of natural resources, including energy sources.

More specifically, it will be the function of DENR -- by providing national leadership and establishing effective

working relationships with private organization, institutions, State and local governments, and other Federal agencies:

- ° To foster the conservation, management and utilization of natural resources, including energy sources, based on studies and analyses of supply and demand and alternative measures for meeting such demands.
- ° To help assure maintenance of the ecological balance necessary to sustain human unique plant and animal life systems.
- ° To conduct scientific research and to encourage development of natural resource technology to conserve and efficiently utilize natural resources with minimum impact on the environment.
- ° To explore and survey the earth, the atmosphere, and the oceans and to assess their physical characteristics.
- ° To provide physical and economic data, maps, charts, and hazard warnings, and other information regarding the earth, atmosphere, and oceans.

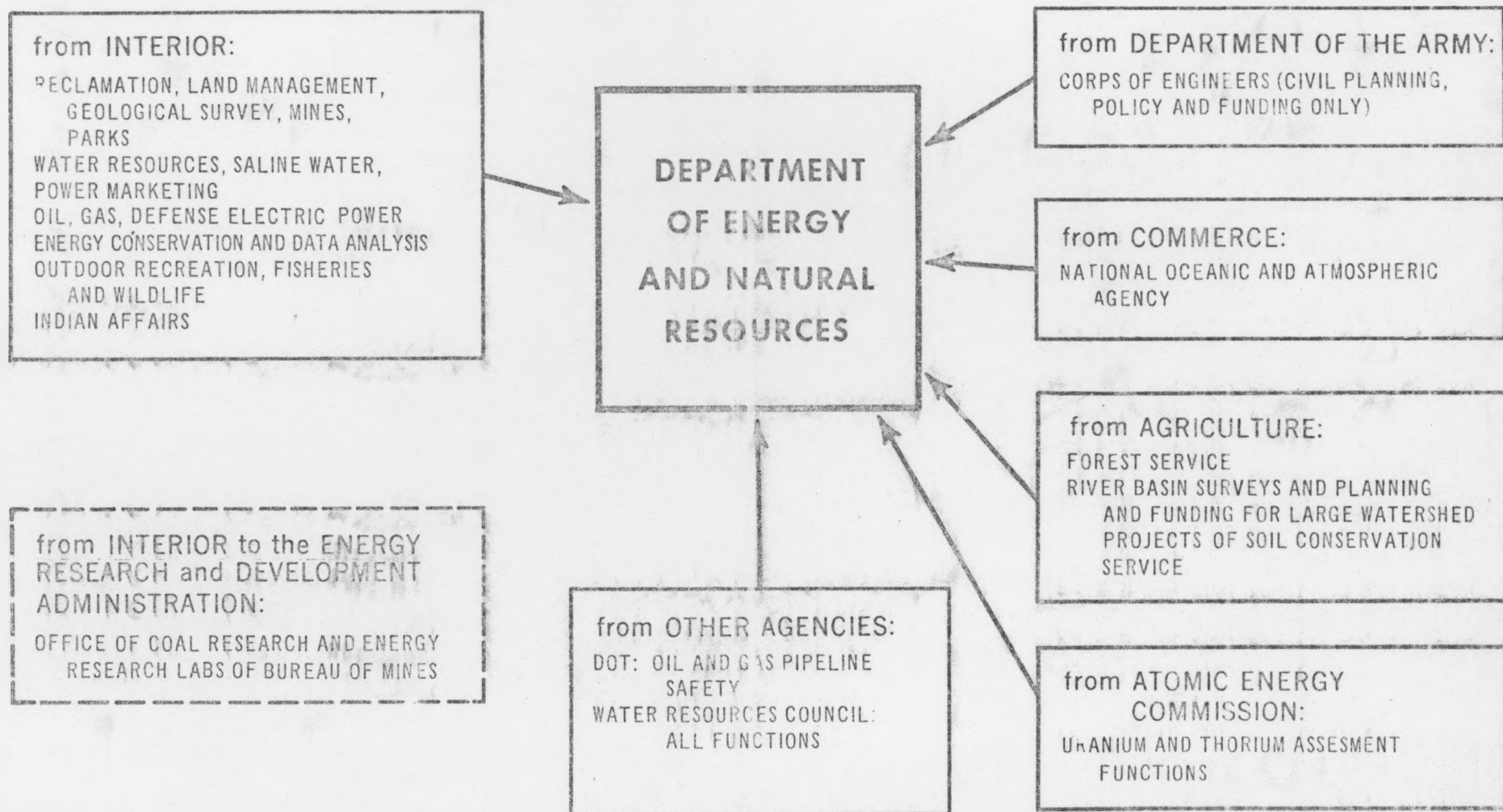
- ° To manage Federal public lands and other resources, including national parks, forests, wildlife refuges, fish hatcheries, and minerals.
- ° To preserve irreplaceable park, wilderness, scientific, historic, fish and wildlife, and other biotic resources.
- ° To assist in providing outdoor recreational opportunities.
- ° To plan and undertake programs for the conservation, management, and utilization of land, water, forest, range, mineral, fish and wildlife resources.
- ° To facilitate the development and protection of commercial fisheries.
- ° To foster the health and safety of miners.
- ° To assist in achieving oil and gas pipeline safety.
- ° To assist Indians, Alaska natives, and territorial peoples to achieve their cultural and economic objectives.

Functions and Resources Transferring to DENR

By grouping together all programs having the same major purpose, DENR will provide the Government -- for the first time -- with a truly effective capability for comprehensive management of the Nation's interrelated natural resources.

The principal functions and resources that would be transferred to DENR are as follows:

Transfers Affecting the Proposed DEPARTMENT OF ENERGY AND NATURAL RESOURCES



	<u>FY 73 Budget Outlay Estimates (in millions)</u>	<u>FY 73 Full-Time Permanent Employment</u>
<u>From Department of the Interior</u>		
All functions-except Office of Coal Research, the Energy Mines & Underground Power Transmission R&D which would be transferred to ERDA.	\$2,554	\$56,130
<u>From Atomic Energy Commission</u>		
Uranium and Thorium Assessment Program	2	78
<u>From Department of Transportation</u>		
Oil and Gas Pipeline Safety Programs	1	26
<u>From Department of Agriculture</u>		
Forest Service	788	21,860
River Basin Surveys and Investigations, and planning and funding for large watershed protection and flood prevention projects from the Soil Conservation Service	57 106	200
<u>From Department of Commerce</u>		
National Oceanic & Atmospheric Administration (NOAA)	322	12,450
<u>From the Department of Army</u>		
Corps of Engineers, Civil Functions (Planning, Evaluation, policy and funding only)	1,643	360
<u>From Water Resources Council</u>		
All functions	8	45
	<u>\$5,385</u>	<u>91,149</u>

Transfer of these functions to a single department will place in the hands of a single official effective management control over all of the major Federal programs operating in this area. It will permit -- for the first time -- the President, the Congress, and the American people to be able to hold a single official clearly accountable for progress in solving the Nation's growing resource problems.

DENR's Organization and Management Structure

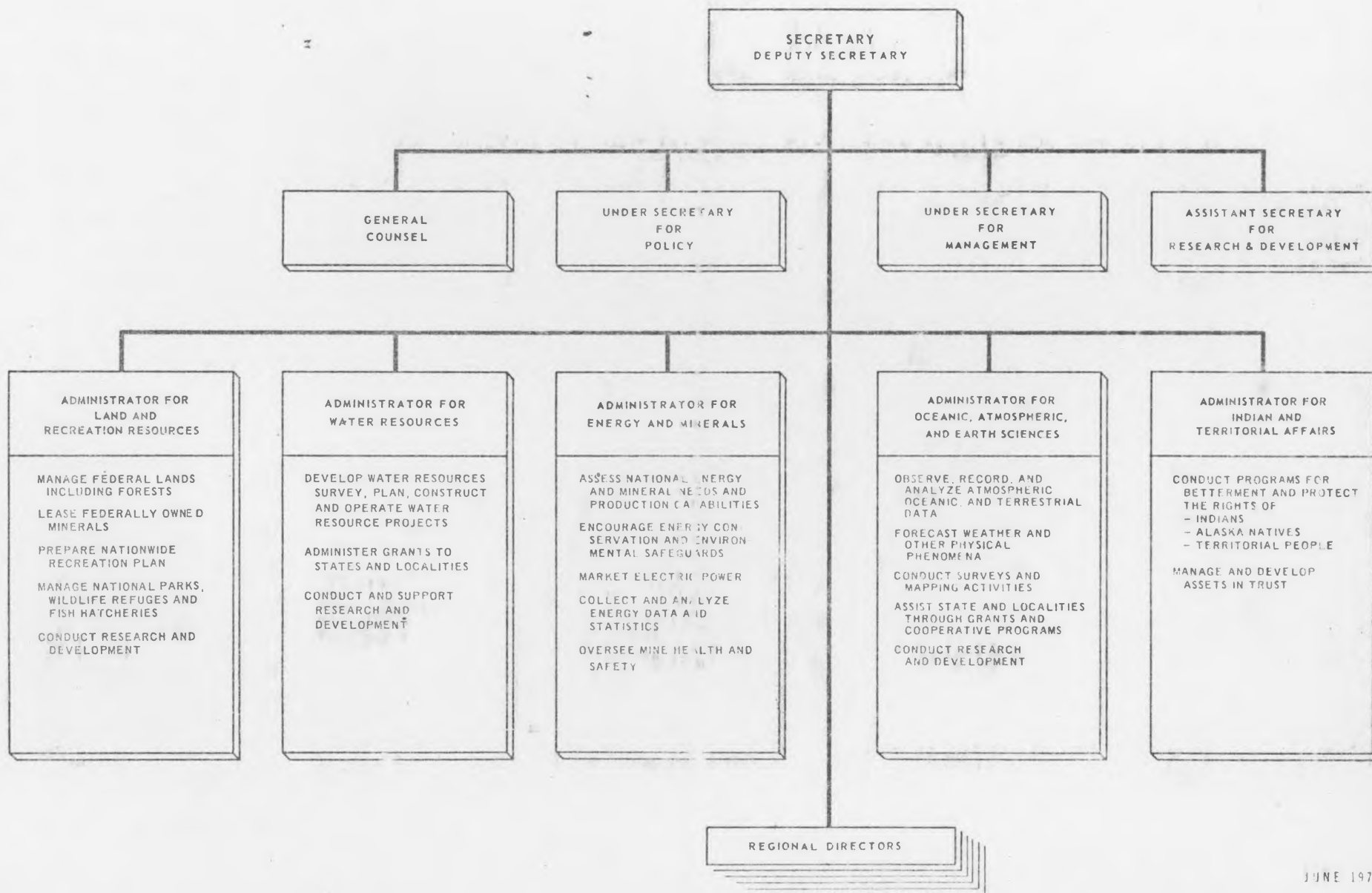
The fundamental reform achieved by transferring the Government's principal natural resources programs into the same department will be brought to full advantage by adoption of a modernized departmental management system that has been carefully designed to assure vigorous and effective execution of DENR's mission and goals.

Key elements of DENR's management system are:

- ° the Secretary, as the department's foremost responsible official, will have the necessary authority to assign all functional responsibilities and to deploy departmental resources to carry them out;
- ° the Secretary will be supported by a strong management team composed of

PROPOSED

DEPARTMENT OF ENERGY AND NATURAL RESOURCES



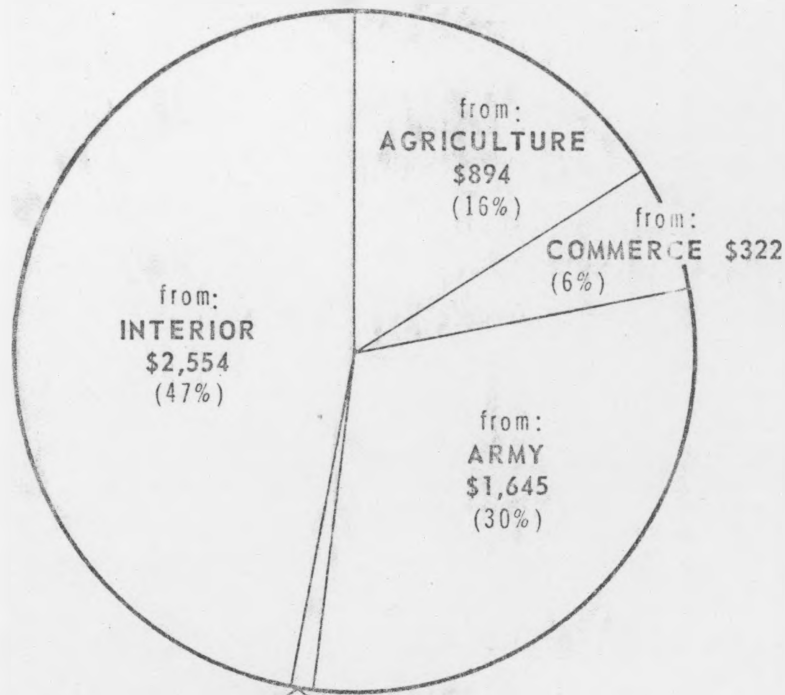
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- a Deputy Secretary, two Under Secretaries, an Assistant Secretary, and a General Counsel -- all of whom will have department-wide responsibilities with sufficient authority to assist the Secretary in directing the Department;
 - five Administrators who will direct the principal line functions of the department in the areas of land and recreation; water resources; energy and minerals; oceanic, atmospheric, and earth sciences; and Indian and Territorial Affairs. As the managers of the department's key programs, the Administrators will be accountable for the success or failure of their assigned responsibilities.
- ° A strong, modern field organization will extend secretarial representation and department-wide leadership to each region of the Nation. The headquarters Administrators in most cases will have regional administrators directing programs within the broad departmental policies and procedures established by the Secretary.

THE PROPOSED DEPARTMENT OF ENERGY AND NATURAL RESOURCES

BUDGET OUTLAYS OF
PROGRAMS TO BE TRANSFERRED
(In Millions)

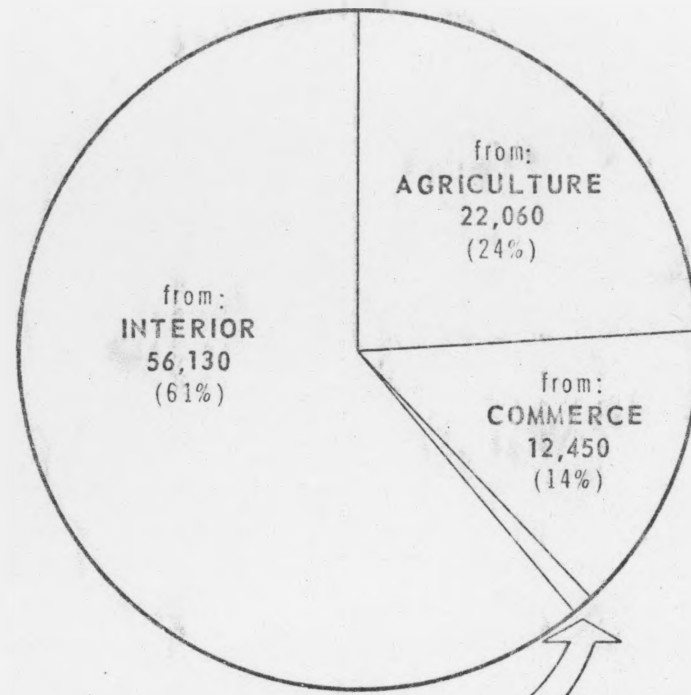
TOTAL \$5,424 Million



from:			
AEC	\$2	.03%	
DOT Oil and Gas Pipeline Safety	1	.01	
Water Resources Council	8	.14	
TOTAL	\$11	.18%	

EMPLOYMENT OF
PROGRAMS TO BE TRANSFERRED
(Full time, permanent)

TOTAL 91,149 Employees



from:			
AEC	78	.08%	
DOT Oil and Gas Pipeline Safety	26	.02	
Water resources Council	45	.04	
Army	360	.39	
TOTAL	509	.53%	

Decentralization of authority to the field will be provided to the extent feasible in order to better serve State and local governments, and the public in general.

DENR's Program Administrations

Each of the five "line" Administrations of DENR will contain programs grouped together on the basis of similar basic purposes. Each Administration will offer distinct advantages over the present situation.

The Land and Recreation Resources Administration will administer the functions of

- ° the Bureau of Land Management, the National Park Service, the Bureau of Outdoor Recreation, and the Bureau of Sport Fisheries and Wildlife of the Department of the Interior; and
- ° the U.S. Forest Service of the Department of Agriculture.

Operating under a single Administrator, these programs will work together, rather than competitively, to achieve a desirable balance between development and preservation of the Nation's land. For example, unnecessary differences in policies and objectives between Interior's Bureau of Land Management and Agriculture's Forest Service have led

to separate and at time conflicting programs and activities. While the original reasons for placing these agencies in different departments may have been sound, present and future management of these precious national assets must be carried out with a recognition of the commonality of functions shared by all land management agencies in such activities as fire protection, recreational development, forestry, grazing, wildlife management, and visitor services. The recreation components of this Administration will enhance harmonized planning and coordination of the important recreational uses of our public lands.

Consolidating these functions into a single Administration will also greatly simplify coordination of Federal activities with State and private land management activities. And, it will assure that land-use planning occurs before -- not after -- lands are developed. Finally, these transfers are in full accord with the recommendations of the bipartisan, congressionally chartered Public Land Law Review Commission in 1970.

The Water Resources Administration will provide -- for the first time -- a truly effective capability for coordinated and comprehensive planning of all major water resources programs and projects of the Federal Government. WRA will be based on the functions of

- ° The Bureau of Reclamation, the Office of Water Resources Research, and the Office of Saline Water of the Department of the Interior;
- ° The policy, planning and funding of the civil functions of the Corps of Engineers, Department of the Army;
- ° The river basin surveys and planning and funding of large watershed projects of the Soil Conservation Service, Department of Agriculture; and
- ° The Water Resources Council

Under this arrangement, the Corps of Engineers would continue to plan and prepare feasibility reports for individual projects as specified and funded by the Secretary of DENR; it will also conduct project design, construction, operation and maintenance, flood and coastal emergencies, and related activities, which will also be funded by the Secretary of DENR. Likewise, the Soil Conservation Service would continue to design and construct projects as approved and funded by the Secretary of DENR.

These transfers of planning and funding authority should consolidate and coordinate our resources development on a national scale. It should greatly reduce duplication,

competition, and sometimes conflicting programs among water resource agencies.

Operating together, WRA's programs will address the Nation's water resources as the complex, interrelated problem that it actually is. WRA will assure that water development and related land use will be responsive to both regional and national needs and objectives. Congress will have only one agency -- rather than four -- to perform analyses, coordinate plans, and authorize construction of desirable water control, utilization, and conservation projects. And, the frustrating problems of State and local governments and private groups in working with Federal agencies in this area will be greatly simplified.

The Energy and Minerals Administration (EMA) will create -- for the first time -- a strong capability for comprehensive analysis and management of all energy and mineral resources of the Nation. This Administration will be based on the functions of

- " ° The Office of Energy Data and Analysis, Office of Energy Conservation, Office of Oil and Gas, Office of Research and Development, Bureau of Mines (except the energy research centers and synthane pilot plant which will be placed in ERDA), Mining

Enforcement and Safety Administration, and the Bonneville, Southeastern, Southwestern, and Alaska Power Administration -- all from the Department of the Interior;

- ° The uranium and thorium assessment functions of the Atomic Energy Commission; and
- ° The Office of Pipeline Safety of the Department of Transportation.

The Energy and Minerals Administration will provide a central Government source of data and analysis on national energy resources and needs. It will develop the urgently-needed Federal capability for clearer understanding of the intricate supply/demand forces affecting all forms of energy, and explore the impact of alternative solutions to serve as guidance to the sound management and development of energy resources. The Government will then be able to anticipate most energy problems and initiate solutions for them in advance rather than reacting after the fact.

This Administration will also spearhead Federal efforts to promote national conservation of energy by assessing improved means of conserving energy and encouraging broader applications of available information and technology. It will also further consolidate and enhance Federal capabilities for regulating and enforcing programs in the areas of

oil imports, pipeline safety, and mining health and safety.

EMA's metallurgical and mining research to develop improved mineral location, recovery and processing systems will better enable us to develop and utilize our finite domestic resources. A major portion of this research effort will be directed at finding ways to mine these resources in harmony with other land use, natural resource and environmental values.

In performing these activities, DENR will maintain close and continuing relationships with the Energy Policy Office and the proposed Energy Research and Development Administration, in order to assure coordinated development of Federal policies and maximum impact in their execution.

The Oceanic, Atmospheric, and Earth Sciences Administration (OAESA) will bring together the impressive array of scientific and technical capabilities and services now spread between two agencies -- the National Oceanic and Atmospheric Administration of the Department of Commerce and the U.S. Geological Survey of the Department of the Interior. Once combined, their range of capabilities will reach across the full spectrum of resource and environmental expertise necessary for dealing with our oceans, atmosphere, and land resources as the environmental whole which they actually comprise.

The advantages that can result from this consolidation are considerable in view of the several related complementary programs now being conducted separately. For example:

- ° Both NOAA and USGS have programs designed to reduce loss of life and property damage caused by a broad spectrum of natural disasters;
- ° both are now involved in the collection of rainfall and river data and the forecasting of streamflows;
- ° Both carry out extensive mapping, charting, and geodetic activities;
- ° Both organizations maintain extensive national environmental and geophysical data centers; and
- ° Both are involved in earth-orbiting satellite programs to provide environmental and earth resources data.

The creation of OAESA would provide a strengthened focus for the Nation's ocean programs and, in particular, would permit a comprehensive approach to the problems of exploring, developing and managing the nonliving resources of the seas, provide for a more effective system of managing our coastal

lands and waters, enable a more comprehensive treatment of ocean environmental matters, and enable a more effective national fisheries effort.

OAESA's Coastal Zone management responsibilities can be more closely coordinated with related land-use management responsibilities of other arms of DENR. And, the fisheries resources research and industry development activities will be improved through a close organizational relationship with other elements of DENR, such as the Bureau of Sports Fisheries and Wildlife, and the related programs of the Corps of Engineers.

Moreover, OAESA would create a single focal point for participation in multi-nation scientific programs such as the World Weather Watch, and the current US/USSR programs in environmental protection. Likewise, scientists in other Nations would have a single point of contact in the Federal Government for civil programs concerned with the oceans, atmosphere, and land.

Additionally, the move of NOAA into DENR will permit improved management of the Nation's weather modification research activities now being conducted separately in the Bureau of Reclamation, the Forest Service, and NOAA.

It is clearly in the highest national interest that these two agencies be brought together under DENR as soon as possible.

The Indian and Territorial Affairs Administration will upgrade and strengthen the Government's programs for assisting our Indian and territorial peoples in achieving their social and economic objectives. At present, separate offices now address many related problems dealing with education, job training placement, public health and safety, community services, and economic development.

This Administration will be based on the resources now in Interior's Bureau of Indian Affairs and Office of Territories in order to meet the unique needs of different cultures in ways that allow the recipients to determine their own priorities. While both the Indian and Territorial programs in DENR would be included under a single Administrator, care will be taken to be certain that both peoples receive the kind of specific attention and support required to assure that Federal commitments are fully carried out.

The Indian and Territorial Affairs programs are included in DENR because of their historic association with natural resources functions of the Department of the Interior. Past concerns on their part about alterations of the Federal structure which serves them have centered on their

preference to remain under the jurisdiction of a land-resource agency. Therefore, subject to further study, these programs are included in DENR.

The need for this new department was fittingly summarized by Secretary of the Interior Rogers C.B. Morton during testimony on the DENR legislation in July, 1973:

"I would like to conclude on a philosophical note. Every day it becomes more evident that the general welfare of the Nation requires that its renewable and nonrenewable resources be conserved, managed, and utilized so as to help realize a sound long-range balance between preservation and development that will provide the quality of life to which each American aspires. I am firmly convinced that the establishment of the Department of Energy and Natural Resources is absolutely necessary to provide the organizational capability required for best achievement of these objectives."

THE PROPOSED
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

"I also again ask the Congress to create a new, independent Energy Research and Development Administration so that we can make the very best use of our research and development funds in the future. Our research and development effort could produce the most helpful solutions to the energy problem."

- From the President's Message
to Congress, September 10, 1973

THE PROPOSED
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

A key element of the President's program to avert a crippling energy shortage in years to come is the acceleration and expansion of the Federal energy research and development effort to find and develop new or improved sources of energy. He has therefore proposed the commitment of \$10 billion over the next five years and the establishment of a new independent Energy Research and Development Administration that will serve as the organizational base necessary for launching the large-scale effort to solve the Nation's energy needs.

Under the President's proposal, most Federal resources now engaged in energy research and development will be pulled together into the new agency where they will serve as the nucleus of the organizational framework, management capability, and technological skills that will be essential to the success of this massive and much needed program.

ERDA's Mission and Role

The new agency's mission will be the development, in cooperation with industry, of new energy sources to meet the energy needs of present and future generations in a

manner consistent with public safety and protective of our environment. ERDA will have the central responsibility for planning and carrying out Federal R&D activities for all forms of energy -- fossil fuel, nuclear power, solar, geothermal, etc.

Its scope will include improvement of existing energy systems, such as conversion of coal to clean-burning liquid and gas, and also extend into the frontiers of advanced new energy sources such as nuclear fusion, and solar energy conversion. ERDA's programs will range from basic research to the stage of technology demonstration projects.

The agency will formulate and carry out R&D policy and strategy in accordance with guidance from the President and the Director of the Energy Policy Office. Also, a close working relationship with the Department of Energy and Natural Resources will be maintained to assure productive coordination between energy resource management and energy source development.

In carrying out its responsibilities, ERDA will work closely with industry to assure that efforts on all fronts can make the maximum contribution to the prompt development and application of promising new energy technologies. ERDA's programs will supplement -- not supplant -- the

activities of private industry. The new agency will encourage and continue to build upon the well-established practice of jointly-funded programs with industry.

Functions and Resources Transferring to ERDA

Initially, the sum of ERDA's parts will not add up to its whole mission, particularly in the fossil fuel and advanced energy areas. ERDA will be assembled from energy technology programs now operating in AEC, Interior, and possibly other agencies. These resources will then be supplemented as the agency accelerates and expands its activities to fulfill its broad-based energy R&D mandate.

From AEC will come such programs as

- ° Reactor development
- ° Nuclear materials production
- ° Physical, biomedical and environmental research
- ° Controlled thermonuclear research
- ° Non-nuclear R&D
- ° Other non-regulatory activities

From the Department of the Interior will come the

- ° Office of Coal Research
- ° Energy research centers and synthane pilot plant of the Bureau of Mines
- ° Underground electrical power transmission R&D

Additional transfers to ERDA are under active consideration and may be included in the President's proposal; potential candidates, for example, are the stack gas emission R&D and advanced automotive power sources R&D of the Environmental Protection Administration, and the solar energy R&D of the National Science Foundation.

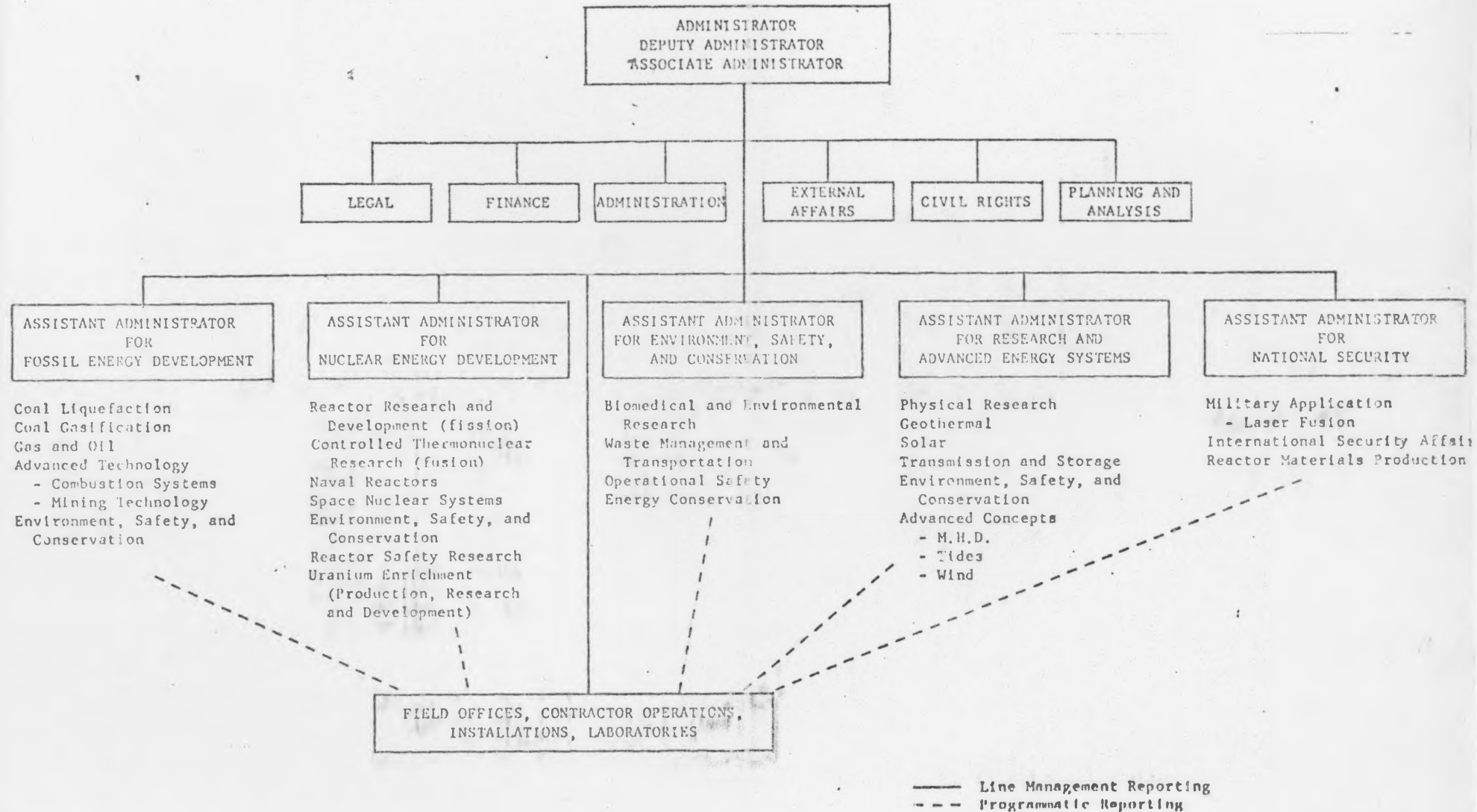
Perhaps ERDA's greatest single asset will be the capable personnel of the AEC and Interior who will accompany their functions to the new agency. Their proven technological skills, resourcefulness, and experience -- combined in the same agency under integrated policy and direction -- will enable ERDA to begin accomplishing its mission swiftly and effectively.

Resources involved in the proposed transfers from AEC and Interior total to about \$2.3 billion and about 6,600 Federal employees. With the nuclear programs would come some 85,000 contractor personnel at government-owned facilities located in almost every State. Much of ERDA's work would be accomplished by utilizing the AEC's extensive and highly sophisticated research and production facilities valued at about \$9 billion.

Transfer of these functions and resources will set the stage for dynamic progress in the search for and harnessing of new energy sources. In the past, important and often

PROPOSED

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION



JULY 1973

historic advances have been achieved by the many dedicated scientists and technicians working in this area in separate agencies and units. But our rapidly growing national energy needs are outstripping these achievements and the need for consolidation of these resources has never been more pressing.

These transfers will -- for the first time -- consolidate into a single agency the major Federal programs dealing with the search for and useful application of new or improved sources of energy. Indeed, administration of these functions by the same agency is essential if the search for energy sources is to be seriously pursued. Aside from the obvious unity of management, other benefits afforded by consolidation are better ordering of priorities, coordination of planning and execution, and the larger pool of skills and resources available for deployment and cross-utilization.

Organization and Management of ERDA

ERDA will be organized to provide, in the President's words, "significant new emphasis to fossil fuels and potential new forms of energy, while assuring continued progress in developing nuclear power." To achieve this balance, ERDA's proposed organization will enable fossil fuel and advanced energy sources to receive full recognition

and priority along with -- not subordinated to -- ERDA's important nuclear R&D functions.

The President's proposal would provide ERDA with a single Administrator and a Deputy Administrator appointed by the President with the advice and consent of the Senate. These officials would be supported by a strong management team consisting of an Associate Administrator, a General Counsel, and five Assistant Administrators.

ERDA's single-Administrator approach will provide a source of unified leadership and direction across the entire spectrum of energy technology. Testifying in July, 1973, on the merits of the proposed organization of ERDA, AEC Chairman Dixy Lee Ray pointed out

Although the commission form has worked remarkably well in managing AEC operational and developmental programs, there are distinct advantages in having a single administrator for research and development activity. The single administrator system fixes responsibility in one individual and makes it possible for that person to act with greater dispatch. Particularly with the separation of the developmental and regulatory functions of AEC, it makes sense to set up ERDA under a single administrator.

With ERDA's intended functions now spread among several programs in separate agencies, it is impossible for the President, the Congress, or the American people to hold any single official accountable for results in meeting our overall energy technology needs. The single-Administrator approach will provide -- for the first time -- a clear point of accountability for progress in developing our energy technology.

ERDA's major operating programs will be grouped into five areas based around the principal types of energy systems and other major responsibilities of the agency. In charge of each area will be an Assistant Administrator who will have full line authority over the functions and resources in his area and provide strong leadership to and clearcut accountability for the achievement of his assigned objectives.

The Assistant Administrator for Fossil Energy Development would be responsible for projects such as coal liquefaction, coal gasification, gas and oil systems, and advanced technology on combustion systems and mining technology.

The Assistant Administrator for Nuclear Energy Development would be responsible for activities such as research and development on fission reactors, controlled thermonuclear

research, naval reactors, space nuclear systems, developmental reactor safety research, and uranium enrichment.

The Assistant Administrator for Research and Advanced Energy Systems would be responsible for activities such as physical research, the study of geothermal and solar systems, energy transmission and storage systems, and advanced systems such as magnethohydrodynamics.

The Assistant Administrator for Environment, Safety, and Conservation would carry out major programs of biomedical and environmental research, waste management and transportation, operational safety, and energy-efficient systems research. These activities will be closely coordinated with activities of the fossil, nuclear, and advanced energy areas which will have integral responsibilities for environment, safety, and conservation matters in the course of developing their respective energy source technologies.

The Assistant Administrator for National Security would be responsible for ERDA's national security programs, including weapon development, testing and production, international security affairs, and the production of reactor materials such as plutonium and tritium. The development of laser fusion could also be assigned to this area because of its important implications for the weapons program.

ERDA will adopt, where practicable, AEC's highly successful technique of conducting a large part of its work through a network of R&D laboratories, some operated by government personnel and others under contract with private industry, institutions, or universities. This approach will afford a great deal of flexibility to ERDA's managers in getting the job accomplished without the build-up of excessive physical plant or administrative staff. Another benefit is that the ensuing working relationships with industry later facilitate the transition of developed technology to the stage of broad commercial application.

In testifying on the proposed reorganization during hearings in July, 1973, the President's Director of the Energy Policy Office, John A. Love, stated that the ERDA concept is

not only bold in its approach but fundamentally sound. The idea behind the new Energy Research and Development Administration is to centralize in a single independent agency the responsibility for developing and implementing technological programs to ensure our capability to meet our future energy needs. We need the focus a single agency can supply and we need a greater sense of mission as well. There has never been a peacetime challenge which required our technological capabilities more, for it is essential

that we find ways to utilize our abundant, although largely untapped, energy resources in a manner compatible with the protection of our environment.

THE PROPOSED

NUCLEAR ENERGY COMMISSION

"Since regulation of atomic energy resources can be better and more fairly performed if it is disengaged from the question of their development and promotion, I have also included in this reorganization package a separate and independent Nuclear Energy Commission to perform these vital duties."

- From the President's Message
to Congress, September 10, 1973

THE PROPOSED
NUCLEAR ENERGY COMMISSION

The Nuclear Energy Commission will be concerned exclusively with the regulation of nuclear power. Just as ERDA is to be based on the AEC's R&D and production functions, NEC is to carry out the AEC's important responsibilities dealing with the licensing and regulation of commercial nuclear power generation within safe and environmentally acceptable limits.

Separating the Atomic Energy Commission's nuclear regulatory duties from its developmental pursuits will lay to rest the long-standing problem of having these potentially conflicting responsibilities vested in the same agency. Terminating the dual role of the AEC will also enhance public confidence in the objectivity and impartiality of regulatory decisions bearing on commercial nuclear power production.

Separation of the AEC's operating and regulatory functions is a question almost two decades old. During most of that period there has been general agreement that when the nuclear industry reached maturity the Commission's regulatory functions should be vested in an independent regulatory agency, thus removing the potential for conflict.

Now, after 26 years of nurturing by the AEC, the nuclear industry seems to be rapidly reaching maturity. Currently, 34 nuclear plants are licensed for operation and constitute about 4% of the electrical capacity of this nation. In less than seven years, by 1980, the nuclear electric generating capacity is forecast to be about 20% of the total electric power capacity of the United States. Only ten years later, by 1990, it is anticipated that nuclear power will be over 40% of the electrical capacity, and by the year 2000, as much as 60%. Also, the supporting fuel cycle facilities must by necessity keep pace with this growth. And, in other areas such as the use of nuclear heart pacemakers and the medical and industrial uses of radioisotopes, there are increasing applications and uses--all of which must be controlled by licensing and other regulatory procedures.

The proposed Nuclear Energy Commission is designed to develop into the full-scaled independent regulatory commission which adequate regulation of the well-established and rapidly growing nuclear industry both warrants and requires.

Mission and Role of NEC

The NEC will absorb the AEC's present regulatory responsibilities requiring that the civilian uses of

nuclear materials and facilities be conducted in a manner consistent with public health and safety, environmental protection, national security, and the antitrust laws. The major share of this effort is directed at the regulation of electric power from nuclear energy. This involves not only the evaluation and licensing of nuclear reactors, but also the regulation of various steps in the nuclear fuel cycle from the milling of uranium through its conversion, fabrication, reprocessing and transportation to final safe disposition of the radioactive wastes. In addition, the NEC's regulatory activities will include assurance of the security of nuclear materials and facilities, and the licensing and inspection of a wide variety of nuclear materials such as those used in medical diagnosis. These functions encompass programs of standards setting, technical safety reviews, environmental evaluations, public proceedings, inspections and enforcement which have broad impact on the public as well as the regulated industries.

Organization and Management of NEC

With the creation of ERDA and the consequent transfer of the AEC's non-regulating activities to that agency, the AEC's remaining activities, which will be regulatory in nature, will be carried on in a newly designated "Nuclear Energy Commission." The change in title from "Atomic" to "Nuclear" will not only reflect a more

NEC

Organization Chart

(to be inserted)

accurate technical description of the Commission's sphere of concern, but will also serve to connote the important realignment of the AEC's functions.

Under the President's proposal, the AEC's five-member commission form of management would be retained for the NEC as the best means of assuring continued fair and impartial licensing and regulation of commercial nuclear power. In addition to the five-member commission, NEC will inherit other AEC offices and components that perform licensing, regulatory and related safety and environmental activities.

Relieved of the burdensome demands of a large, complex energy R&D and production operation, NEC's commissioners and officers will be able to concentrate exclusively on the ever-growing workload and complexities of nuclear power regulation.

Retention of a five-member commission for the sole purpose of regulating nuclear energy will also upgrade the NEC's regulatory processes to a level more in keeping with the critical importance of these responsibilities.

Functions and Resources Transferring to NEC

The NEC will be brought into existence as a viable, effective regulatory entity. It is the President's firm intent that the vital public safety and environmental responsibilities of the AEC remain unimpaired by transition to and subsequent stewardship by the NEC.

AEC's transition to an exclusively regulatory agency will be vastly simplified by the evolutionary steps taken in the AEC over the past decade to organize the regulatory functions into a separate, integrated operation under a Director of Regulation. As a result, NEC can be brought into existence with a minimum of change and disruption.

Functions to be transferred to the NEC include those now performed by the Director of Regulation, the General Counsel's staff for Regulation, the Advisory Committee on Reactor Safeguards and the panels for two safety and licensing boards. Additional functions are also being considered for transfer, particularly in areas of reactor safety, waste management, biomedical and environmental research, and controls over nuclear materials.

In support of these functions, the resources necessary to create a self-sufficient NEC will be provided. Resources now directly associated with the AEC's licensing

and regulatory functions include approximately \$40 million in net 1973 Budget outlays and about 1275 full-time permanent employees. Studies now underway will also ascertain which of the resources now under the General Manager of the AEC or directly under the Commission should be transferred to the NEC in support of that agency's functions. In addition, it is expected that ERDA would be available to perform work in support of NEC on a reimbursable basis.

The operating relationships between NEC and ERDA will of necessity be close and continuing. NEC will need to maintain a competence for independent evaluation of ERDA's fast developing nuclear technology from the standpoint of safe commercial application. The nature and extent of this relationship is now under study and will be the subject of further consultation with the Congress.

Presidential Study of Energy Regulation

Beyond the proposed formation of NEC, however, the President has recognized the need for a searching new look at the larger, more complex question of the best way to organize all energy-related regulatory activities of the Government. Such functions are now scattered among numerous agencies including the AEC, the Federal Power

Commission, elements of the Departments of Interior and Transportation, Corps of Engineers, Environmental Protection Administration, the Interstate Commerce Commission, and others.

Consequently, the President has directed that a comprehensive study be made to determine whether there is a need for additional reorganization of Federal energy regulatory activities. This study, which will be made over the next year, will provide opportunities for Congressional and public participation.

The Nuclear Energy Commission is designed to eliminate the potential for regulatory and developmental conflicts, minimize the risk of subordinating regulatory to developmental functions, maximize regulatory objectivity and impartiality, increase public confidence, permit the commissioners to concentrate exclusively on regulatory issues, and become the fully independent regulatory agency which the rapidly maturing nuclear industry requires.

During Congressional testimony in support of NEC in July, 1973, AEC's Director of Regulation L. Manning Muntzing asserted that

"In view of the rapid growth of regulatory activities against a backdrop of national urgency in energy needs, this seems a most propitious time to put into effect the concept of a separate nuclear regulatory agency which has been long in the making."