

Calendar No. 944

93D CONGRESS }
2d Session }

SENATE

{ REPORT
No. 93-980

ENERGY REORGANIZATION ACT OF 1974

REPORT

OF THE

COMMITTEE ON GOVERNMENT OPERATIONS
UNITED STATES SENATE

TO ACCOMPANY

S. 2744

TO REORGANIZE AND CONSOLIDATE CERTAIN FUNCTIONS OF THE FEDERAL GOVERNMENT IN A NEW ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION AND IN A NEW NUCLEAR SAFETY AND LICENSING COMMISSION IN ORDER TO PROMOTE MORE EFFICIENT MANAGEMENT OF SUCH FUNCTIONS



JUNE 27, 1974.—Ordered to be printed

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ENERGY REORGANIZATION ACT OF 1974

JUNE 27, 1974.—Ordered to be printed

Mr. RIBICOFF, from the Committee on Government Operations,
submitted the following

REPORT

[To accompany S. 2744]

The Committee on Government Operations, to which was referred the bill (S. 2744), to reorganize and consolidate certain functions of the Federal Government in a new Energy Research and Development Administration and in a new nuclear regulatory commission in order to promote more efficient management of such functions, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and an amended title and recommends that the bill as amended do pass.

I. SUMMARY AND PURPOSE

“The Energy Reorganization Act of 1974,” S. 2744, will consolidate the Federal Government’s fragmented and uncoordinated energy research and development functions and, at the same time, upgrade the regulation of nuclear power.

To accomplish the first purpose, the act establishes the Energy Research and Development Administration (ERDA), an independent agency formed from the transfer of the extensive technical staff and national laboratories of the Atomic Energy Commission (AEC), and of certain research and development programs from the Department of Interior and the National Science Foundation. It will be headed by a single Administrator, appointed by the President with the advice and consent of the Senate, who will exercise broad functions to explore and develop all possible sources of energy. The primary mission of ERDA is to develop the energy technologies which are necessary to give the Nation the capability to attain energy self-sufficiency by as early as 1984. There are provisions to safeguard against unwarranted priority being given to any single energy technology. The organization

(1)

is structured to include major research and development efforts devoted exclusively to conserving and to ensuring the safety and environmental quality of new energy sources.

To accomplish the second purpose, the act establishes the Nuclear Safety and Licensing Commission (NSLC), an independent regulatory commission which is based upon the Regulatory Division of the AEC but with a revised internal organization to promote well-balanced and closely supervised regulation of the burgeoning nuclear power industry. The Commission will take the AEC's present form of four members and a chairman, but Senate confirmation of NSLC Commissioners is required, as is political balance and technical qualifications among those nominated who are not now serving on the Atomic Energy Commission. The mission of the new Commission is to ensure the safety and the security of the nuclear industry and the weapons-grade and other radioactive materials used to fuel it.¹

The reorganization established by this legislation has the additional purpose of separating the regulatory functions of the AEC from its developmental and promotional functions—a response to growing criticism that there is a basic conflict between the AEC's regulation of the nuclear power industry and its development and promotion of new technology for the industry.

II. BACKGROUND AND HEARINGS *

The proposal for creation of a consolidated, independent Energy Research and Development Administration has evolved from a much more comprehensive set of reorganization proposals made in early 1971. Over the past 3 years, recognition of the importance of creating energy alternatives for the Nation—and of the role of research and development in doing so—has grown rapidly, resulting in the present proposal for consolidation of Federal energy research and development programs into an Energy Research and Development Administration (ERDA).

This evolution, and the growing emphasis on energy research and development needs, has been reflected in the many energy messages by the President in this period, and in the actions of the Congress.

President Nixon's first reorganization proposal included energy management as one component of the sweeping proposals he described in his January 1971 State of the Union Message, in which he urged consolidation of seven major departments into four new ones to be organized around the Nation's "major goals." One of these was to be an expanded Interior Department, renamed the Department of Natural Resources (DNR).

¹ As used here and elsewhere in this report, the terms "weapons-grade" and "potentially explosive" nuclear materials refer to reprocessed plutonium and highly enriched uranium which is suitable for fashioning into atomic bombs. Most commercial reactors now use a low-enriched uranium fuel that is not suitable for manufacture of bombs. They all produce plutonium as a byproduct, however, which after reprocessing is potentially explosive and suitable for bombs. The common use of potentially explosive plutonium in the fuel for nuclear power plants is planned to begin in 1977. At present, there are about 1 million pounds of plutonium and enriched uranium authorized in the licensed sector, about half of it of weapons grade. Plutonium, in addition to its potential explosiveness, is one of the most toxic substances known to man. One thirty-millionth of an ounce, less than a pollen grain, will cause cancer if inhaled or swallowed.

*This section prepared with assistance from Warren H. Donnelly, Senior Specialist, and Susan R. Abbasi, Analyst, Environmental Policy Division, Library of Congress.

On March 25, 1971, the President sent a message to Congress detailing this proposal, accompanied by drafts of four legislative bills to establish the four new departments. This proposal had its origin in the recommendations of the President's Advisory Council on Executive Organization, better known as the Ash Council.

The DNR would have had five administrations, of which one was to have been the Energy and Minerals Resources Administration (EMRA). In his March 25, 1971, message to Congress, the President described the scattered responsibilities in the many subject areas covered in the proposal, and said:

* * * the diffusion of responsibility makes it extremely difficult to launch a coordinated attack on complex problems.¹

We cannot afford to continue in this manner. The challenges in the natural resource field have become too pressing. Some forecasts say that we will double our usage of energy in the next 10 years, of water in the next 18 years, and of metals in the next 22 years. In fact, it is predicted that the United States will use more energy and more critical resources in the remaining years of this century than in all of our history up until now. Government must perform at its very best if it is to help the Nation meet these challenges.²

As justification for the new DNR, the memo noted that energy programs were scattered, with each program concentrated on a single source of energy. There was "no single agency charged with formulating and implementing a unified policy and approach to assure effective energy resources utilization and conservation, and at the same time, to meet future energy requirements. . ." The memo also said: "The grouping together of natural resources programs with broad common purposes and the establishment of a coordinated natural resources management policy through the Department of Natural Resources will eliminate many of these problems, or enable the resolution of them within one department."

Thus, in this early reorganization attempt, energy research and development was included in a far vaster undertaking, and did not play a central role.

On April 1, 1971, the administration's proposal to establish the DNR was introduced as S. 1431. Hearings on the over-all reorganization proposal and on DNR were held by this committee in May, June, and August of that year.

This legislation was not reported to the Senate by the committee and received no further action in the 92d Congress.

In April 1973, a message from President Nixon mentioned for the first time the importance of a comprehensive research and development strategy for both the short- and long-term.

The President's message referred to reorganization as a key to dealing more effectively with energy problems.

If we are to meet the energy challenge, the current fragmented organization of energy-related activities in the executive branch of the Government must be overhauled.³

¹ Papers relating to the President's Departmental Reorganization Program: A reference compilation. U.S. Government Printing Office, Washington, D.C., March 1971, p. 6.

² *Ibid.*, p. 12.

³ *Ibid.*, p. 28.

Several minor organizational changes were mentioned within the Department of the Interior, and the President described his intention to again propose a general reorganization in which the Department of Energy and Natural Resources (DENR) would be established by expanding functions of the Interior Department.

The Energy Research and Development Administration (ERDA) was first proposed on June 29, 1973, as part of a general administration reorganization proposal for energy affairs and natural resources. The President presented another energy message at this time in which he established an advisory unit, the Energy Policy Office (EPO) within the Office of the President. He also proposed the establishment of three entities drawn from the present organizational structure:

The Department of Energy and Natural Resources, which except for its handling of energy was nearly identical to the old DNR proposal, and was to be based on an expanded Interior Department;

An Energy Research and Development Administration based on R. & D. and other operating programs in the Atomic Energy Commission, with most other major non-nuclear energy R. & D. transferred to it from Interior; and

A Nuclear Energy Commission (NEC) which would be headed by five commissioners and which would exercise the licensing and regulatory functions of the AEC.

In this energy message, the President also outlined a \$10 billion, 5-year energy research and development program. Legislative bills S. 2135 and H.R. 9090 were introduced soon afterward to accomplish the proposed reorganization. The differences between the 1971 and 1973 proposals lie almost entirely in the energy area, and center largely on the role of research and development.

In 1971, during hearings by this committee on the DNR, Interior Secretary Rogers C. Morton had this to say about the R. & D. responsibilities of the Energy and Mineral Resources Administration of DNR:

This Administration will have responsibility for a broad range of research and development activities, including those that relate to coal, petroleum, and natural gas, oil shale, nuclear energy, urban refuse, health and safety, metallurgy, mining and underground power transmission, among others. A consolidated approach to these various forms seems absolutely necessary to abate the present crisis, and to provide a planning focus for our future energy needs.⁴

In 1973, this concern for a unified response to energy R. & D. needs had moved to the forefront in reorganization efforts. One of the most important changes which occurred in the 1973 proposal was the integration with one unit—the ERDA—of nuclear and nonnuclear research, which was not the case in the 1971 proposal. The proposed ERDA would also be an independent agency, reporting directly to the President, not through a Secretary.

A significant difference between the two proposals is the relationship between the proposed new units and the Atomic Energy Commission (AEC). In 1971 it was proposed that policy and funding for the AEC

⁴U.S. Congress, Senate, Committee on Government Operations, Establish a Department of Natural Resources. Hearings on S. 1431. U.S. Government Printing Office, Washington, D.C., p. 1079.

R. & D. be transferred to DNR; but the AEC was to be otherwise unchanged, and would retain its operating functions and identity. In contrast, in the 1973 proposals, the AEC would be merged into the proposed ERDA, and would lose its separate identity. Added to this would be transfers to it of most major Federal nonnuclear R. & D., largely from the Interior Department. The licensing and regulatory functions of the AEC would be separated in the 1973 proposal from the R. & D. functions, to form a new nuclear regulatory commission.

These differences result from the evolution in thinking about the importance of energy research and development, the decision to give it a central role, and the effort to make optimum use of the already existing AEC facilities and capacity.

Hearings were held by this committee on S. 2135, the DENR/ERDA/NEC proposal, on July 31, August 1, and September 13, 1973. The following witnesses were heard:

July 31, 1973: Roy L. Ash, Director, Office of Management and Budget; John A. Love, Director of Energy Policy Office, Executive Office of the President; and John C. Whittaker, Under Secretary, Department of the Interior.

August 1, 1973: Dixy Lee Ray, Chairman, Atomic Energy Commission, accompanied by Commissioner Doub and staff; Dr. Robert White, Administrator, National Oceanic and Atmospheric Administration, accompanied by Karl Bakke, Acting General Counsel, Department of Commerce; Charles R. Ford, Chief, Civil Functions, Department of the Army, accompanied by J. Phil Campbell, Under Secretary, Department of Agriculture.

September 13, 1973: Donald B. Craft, vice president, Wyatt Inc., New Haven, Conn., accompanied by Robert E. DeBlois, DeBlois Oil Co., Rhode Island; John A. Kaneb, president, Northeast Petroleum Industry, Inc., Boston, Mass., accompanied by John G. Buckley, vice president; John A. Love, Director, Energy Policy Office, Executive Office of the President; Charles DiBona, Deputy Director.

In the months following the introduction of the DENR/ERDA/NEC legislation, the energy shortage worsened rapidly; the President addressed himself to the energy crisis on many occasions, frequently referring to the importance of energy reorganization. Finally, on November 7, 1973, he requested in a national television address on energy that separate consideration be given to the ERDA/NEC proposal, in order to speed passage by avoiding the controversial aspects of the DENR reorganization. In referring to the need for national energy self-sufficiency, President Nixon said:

We must also have a unified commitment to that goal. We must have unified direction of the effort to accomplish it. Because of the urgent need for an organization that would provide focused leadership for this effort, I am asking the Congress to consider my proposal for an Energy Research and Development Administration separate from any other organizational initiatives, and to enact this legislation in the present session of the Congress.

Thus, in this request, the President linked national self-sufficiency in energy directly to the need for an independent energy R. & D. administration.

Shortly thereafter, S. 2744 and H.R. 11510 were introduced at the request of the administration to provide separate consideration of ERDA and a new nuclear regulatory commission. This committee held hearings on this proposal on December 4, 5, and 10, 1973; February 26 and 27, and March 12 and 13, 1974. The following witnesses were heard:

ERDA WITNESSES

December 4, 1973: Roy L. Ash, Director, Office of Management and Budget; Dr. Dixy Lee Ray, Chairman, AEC; W. O. Doub, Commissioner, AEC; John Sawhill, Associate Director, OMB; Frank Zarb, Assistant Director, OMB; Charles Bingman, Deputy Assistant Director, OMB; Charles A. Robinson, Jr., corporate counsel, National Rural Electric Cooperative Association; Joseph S. Ives, environmental scientist; Bradley Cook, staff engineer, Rural Electric Cooperative Association; Alvin Weinberg, director, Oak Ridge National Laboratory; Professor Peter Auer, Cornell University.

December 5, 1974: S. David Freeman, Ford Foundation, Energy Policy Project (accompanied by Frederick Weinhold); Hon. Marlowe W. Cook, Senator from Kentucky; John W. Simpson, president, Power Systems Co. of Westinghouse; John Partridge, chairman of the board and chief executive officer, Columbia Gas Systems Inc., Wilmington, Del.; Jack H. Bridges, director of National Energy programs, Center for Strategic and International Studies, Georgetown University, consultant to the Joint Committee on Atomic Energy; Carl E. Bagge, president, National Coal Association.

December 10, 1973: James T. Ramey, former Commissioner of AEC; Daniel T. Ford, Union of Concerned Scientists; Marc Messing, Environmental Policy Study; Jeffrey Knight, Friends of the Earth; Charles Bering, Environmental Action.

DENR AND ERDA WITNESSES

February 26, 1974: Roy L. Ash, Director, Office of Management and Budget; William Simon, Deputy Secretary of the Treasury.

February 27, 1974: S. David Freeman, Ford Foundation Energy Policy Project; Joseph Fisher, president, Resources for the Future; Arthur Maass, Professor of Government, Harvard University.

March 12, 1974: Dr. Theodore B. Taylor, president, International Research and Technology Corporation; Dr. Ralph Lapp, nuclear and environmental consultant; Dr. Edward Radford, professor, Johns Hopkins University; Samuel Love, president, Environmental Action; Steven Ebbin, George Washington University program of policy sciences; Harold Green, professor, George Washington University; Anthony Roisman, attorney; George Freeman, attorney.

March 13, 1974: Senator Frank E. Moss, Utah; Donald R. Cotter, Assistant to the Secretary of Defense; E. B. Giller, assistant general manager, AEC, for National Security. AEC Panel: Dr. Dixy Lee Ray, Chairman, Atomic Energy Commission; William A. Anders, Commissioner, AEC; William O. Doub, Com-

missioner, AEC; Dr. Norman C. Rasmussen, AEC Safety Study Consultant; Dr. William R. Stratton, Chairman, Advisory Committee on Reactor Safeguards, AEC; L. Manning Muntzing, Director of Regulation, AEC.

All of the administration witnesses supported the separate consideration of S. 2744. They stressed the need to move without delay in establishing the organizational structure for implementing the President's \$10 billion, 5-year energy research and development program to help meet the energy emergency. They expressed concern that continuing to tie it to the more complex, more controversial DENR proposal could delay the establishment of all three organizations indefinitely.

The committee accepted this course without abandoning the DENR concept. The bill, as reported, contains provisions requiring the President to resubmit a comprehensive energy and natural resources reorganization proposal, and establishing a Cabinet-level Interagency Energy Resources Advisory Committee to help coordinate affected agency activities in the interim.

Other witnesses were generally favorable to S. 2744, although representatives of environmental and citizen intervenor groups expressed deep concerns regarding the possibility of a pro-nuclear bias in ERDA. These groups also stressed the importance of adequate regulatory power in the new nuclear regulatory commission. The committee recalled AEC Chairman Dixy Lee Ray and other AEC representatives on March 13 to respond to these concerns.

The committee amendments to ensure against an unwarranted priority being given to any energy technology in ERDA, and to strengthen safety, safeguards, research and informational access—including technical assistance to intervenors—in the new Nuclear Safety and Licensing Commission (NSLC), were responsive to suggestions made from both sides in this exchange of views.

III. COMMITTEE ACTION

The Subcommittee on Reorganization, Research, and International Organizations marked up S. 2744 in public session on April 9, 1974, and ordered it reported with amendments to the full Government Operations Committee. The vote was 5-0. Those present and voting were: Senators Ribicoff, Javits, Jackson, Percy, and Brock.

The Government Operations Committee marked up S. 2744 in public session on May 29, 1974, and reported it, as amended, to the Senate, accompanied by this report, with a recommendation that it be approved. The roll-call vote was 10 to 0.

Those voting: Senators Muskie, Ribicoff, Metcalf, Chiles, Nunn, Huddleston, Percy, Javits, Ervin, and (proxy) Jackson.

IV. MAJOR DIFFERENCES BETWEEN S. 2744 AS INTRODUCED AND S. 2744 AS REPORTED

ERDA

1. *Qualifications for key officers*

As introduced: No provision.

As reported: Requires Administrator and Deputy Administrator to be specially qualified to manage a full range of energy R. & D. pro-

grams; Assistant Administrators must be specially qualified to manage the energy technology area to which they are appointed. Administrator may not be appointed within 5 years of release from active military duty as a commissioned officer.

2. Unwarranted energy priority

As introduced: No provision.

As reported: States congressional intent that no energy technology be given an unwarranted priority.

3. Non-nuclear R. & D. policy

As introduced: No provision.

As reported: Makes Administrator responsible for programs authorized under a non-nuclear research and development policy enacted by Congress. In the absence of such a policy, each nondefense Assistant Administrator receives minimum funding of 7 percent of total ERDA funding, excluding funds for defense programs at ERDA.

4. Conservation

As introduced: Established an Assistant Administrator for Environment, Safety and Conservation.

As reported: Establishes a separate Assistant Administrator for Conservation in addition to one for Environment and Safety.

5. Transfer from EPA

As introduced: Required the transfer from EPA to ERDA of functions relating to development of alternative automotive power systems and of technologies for emission controls on stationary sources.

As reported: Strikes the transfer and provides for cooperation between the two agencies to prevent duplication stemming from EPA's regulatory functions and ERDA's development and demonstration functions in these two R. & D. areas.

6. Energy agency coordination

As introduced: No provision.

As reported: Establishes a Cabinet-level Interagency Energy Resources Committee in the Executive Office of the President to assist the Council on Energy Policy to coordinate the operations of ERDA, the Federal Energy Administration, the Department of the Interior and other Federal agencies pending congressional enactment of a long-term reorganization measure involving the principal energy agencies. The President is required to submit his recommendations for such a long-term reorganization by the end of 1975.

7. Energy Policy Council

As introduced: No provision.

As reported: Establishes a permanent three-member Council on Energy Policy in the Executive Office of the President to establish a comprehensive national energy policy, to coordinate all Federal energy activities on a long-range basis, and to submit a comprehensive energy plan, including research and development activities.

NSLC

1. Commission

As introduced: Designated present members of the AEC as members of the new nuclear regulatory commission without the need for Senate confirmation of present AEC commissioners.

As reported: Requires appointment and confirmation of all members of a newly established Nuclear Safety and Licensing Commission, and requires political balance and technical qualifications for NSLC members who are not presently AEC Commissioners.

2. Organization

As introduced: Retained present organization of the AEC regulatory side in which a single Director supervises, and reports to the Commission on, all licensing and other regulatory activities.

As reported: Provides for three coequal Directors, each with direct and independent access to the Commission, and each responsible for separate operations relating to nuclear reactor safety, nuclear materials security and nuclear safety research.

3. Licensing

As introduced: Extended Commission licensing authority to include (1) future demonstration reactors operated by ERDA as part of an electric utility system and (2) future facilities for disposing of commercial high-level radioactive wastes.

As reported: Further extends NSLC licensing authority to cover any ERDA demonstration reactors and any long-term, high-level radioactive waste disposal facilities, except those in existence when the act takes effect.

4. Research

As introduced: Provided for cooperation by ERDA in setting priorities for conducting safety research for the Commission in ERDA facilities.

As reported: Establishes an Office of Nuclear Safety Research in the Commission with its own Director and safety research personnel who are guaranteed access to ERDA research facilities.

5. Safeguards

As introduced: Retained present AEC system in which functions for safeguarding nuclear materials and facilities are dispersed with reactor-safety functions in three separate directorates.

As reported: Establishes a Bureau of Nuclear Materials Security to pull together all safeguards functions under a separate Director who reports directly to the Commission.

6. Technical assistance

As introduced: No provision.

As reported: Requires Commission to provide existing technical reports to any party to a licensing or rulemaking proceeding, including citizen intervenor groups, and to respond to good-faith requests for relevant new studies. Appeal of an adverse ruling can be taken directly to the court of appeals without unduly delaying the Commission proceeding.

7. Notification of defects

As introduced: No provision.

As reported: Establishes civil and criminal penalties for officers and employees of licensed nuclear firms, or of firms supplying basic components to licensed firms or constructing licensed facilities, who fail to notify the Commission of noncompliance with regulations or of any potentially hazardous defect.

8. Reporting abnormal occurrences

As introduced: No provision.

As reported: Requires the Commission to make quarterly reports to Congress on full details of abnormal occurrences at licensed nuclear facilities and to widely disseminate initial information to the public within 5 days of learning of each abnormal occurrence.

9. Annual Report

As introduced: No provision.

As reported: Requires the Commission to file an annual report which includes the relative benefits, costs and risks of commercial nuclear power based on an assessment of safety and safeguards questions.

V. JUSTIFICATION OF ENERGY RESEARCH AND DEVELOPMENT REORGANIZATION

The Nation's oil imports grew by one-third last year, and we must now look to foreign sources of oil to meet 16 percent of our energy needs. This dilemma can be traced to deficiencies and imbalances in Federal efforts to develop alternative sources of energy and to make more efficient use of available resources and supplies.

In the absence of a comprehensive Federal energy research and development organization, research and development efforts in the energy area have lagged behind other government R. & D. A National Science Foundation survey in October 1973, ranked energy 8th out of 14 Federal R. & D. categories in terms of total obligations, placing it behind national security, space, health, transportation and communications, science and technology, natural resources and environment.

By fiscal year 1973, according to figures supplied by the Office of Management and Budget, Federal funding for energy R. & D. had reached \$642 million, reflecting an annual growth rate of 20 percent from the fiscal year 1970 level of \$382 million. But this still represented only 3.8 percent of total Federal R. & D. funding of \$16.8 billion.

The President's fiscal year 1974 budget provided for increases in energy R. & D. funding of another 20 percent, to \$772 million. Supplemental funding, including \$115 million which the President added to his budget request, is expected to bring energy R. & D. funding close to the \$1 billion mark, but this still represents only 5.6 percent of all Federal R. & D. funding of \$18 billion.

For fiscal year 1975, funding for Federal energy R. & D. has been accelerated substantially (see figure 1). The President's request for total energy research obligations is nearly twice that for fiscal year 1974, and the request for nonnuclear energy research is up by a factor of two and one-half. Requested funding for the nuclear fission (civilian) program is \$724 million. This represented a 37 percent increase over fiscal 1974 funding, and will comprise 40 percent of the total fiscal 1975 civilian energy research budget. Nearly two-thirds of the nuclear fission program—or \$473 million—is to be spent on developing the Liquid Metal Fast Breeder Reactor (LMFBR).

FIGURE 1. FEDERAL ENERGY RESEARCH AND DEVELOPMENT PROGRAM
[Millions of dollars]

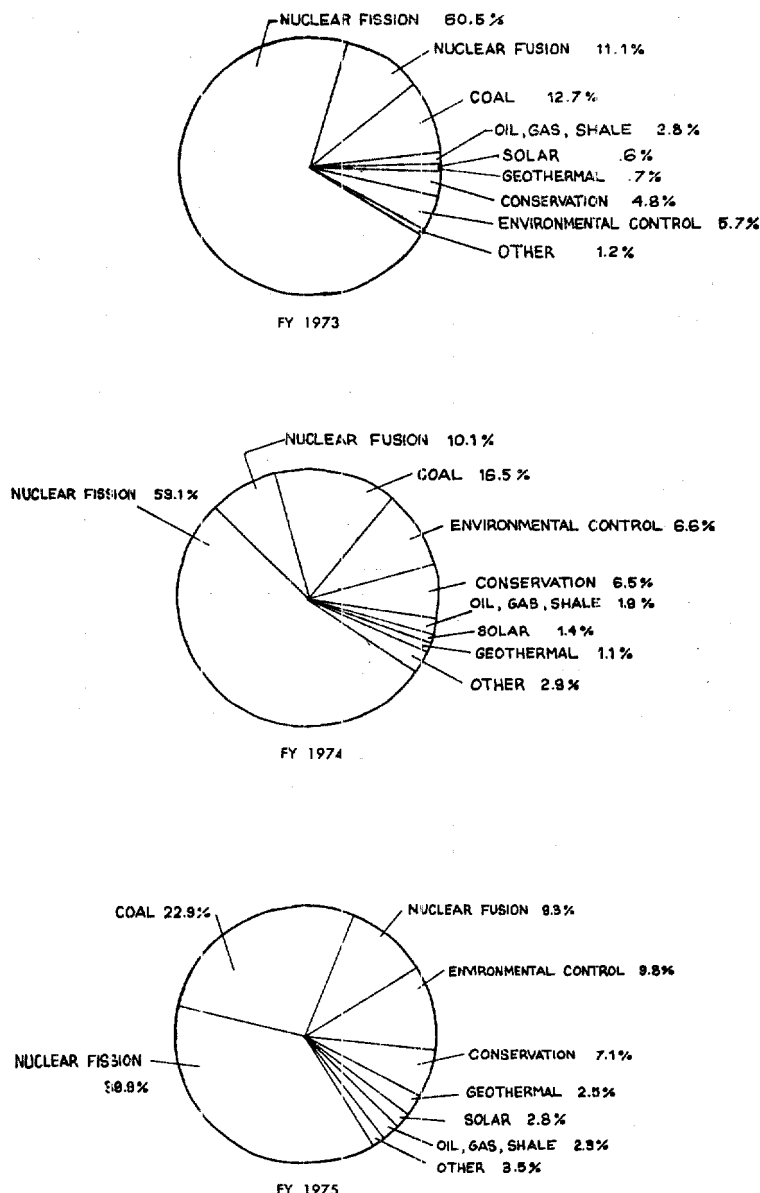
Program area	Program level (obligations): Fiscal year—			Percentage change, fiscal year 1974-75	Estimated total, 1975-79
	1973	1974	1975		
1. Conservation.....	32.2	65.0	128.6		700
(a) End-use (residential and commercial).....		15.0	27.9	+85	
(b) Improved efficiency (transmission).....	2.9	5.0	18.8	+276	
(c) Improved efficiency (conversion).....	6.5	15.9	29.8	+100	
(d) Improved efficiency (storage).....	1.6	2.9	6.4	+121	
(e) Automotive.....	7.4	14.2	23.7	+69	
(f) Other transportation.....	13.8	13.0	22.0	+69	
2. Oil, gas, and shale.....	18.7	19.1	41.8		400
(a) Production.....	.3	3.0	17.0	+467	
(b) Resource assessment.....	4.5	5.0	13.1	+162	
(c) Oil shale.....	3.2	2.3	3.0	+30	
(d) Related programs.....	10.7	8.8	8.7	-1	
3. Coal.....	85.1	164.4	415.5		2,900
(a) Mining.....	1.7	7.5	55.0	+633	
(b) Mining health and safety.....	28.2	27.0	27.7	+10	
(c) Direct combustion.....	1.5	15.9	36.2	+128	
(d) Liquefaction.....	11.0	45.5	108.5	+138	
(e) Gasification (high Btu).....	32.5	33.0	65.3	+98	
(f) Gasification (low Btu).....	4.6	21.3	50.7	+138	
(g) Synthetic fuels pioneer program.....			42.1		
(h) Resource assessment.....	1.0	1.2	1.9	+58	
(i) Other (including common technology).....	4.6	13.0	28.1	+140	
4. Environmental control.....	38.4	65.5	178.5		800
(a) Near-term SO _x	19.0	39.9	82.0	+174	
(b) Advanced SO _x		4.0	12.0	+200	
(c) Other fossil fuel pollutants (including NO _x particulates).....	8.8	13.1	57.0	+335	
(d) Thermal pollution.....	.6	1.5	18.5	+1,133	
(e) Automotive emissions.....	10.0	7.0	9.0	+29	
5. Nuclear fission.....	406.5	530.5	724.7		4,000
(a) LMFBR.....	253.7	357.3	473.4	+33	
(b) Other breeders (GCFBR & MSBR).....	5.6	4.0	11.0	+175	
(c) HTGR.....	7.3	13.8	41.0	+197	
(d) LWBR.....	29.5	29.0	21.4	-26	
(e) Reactor safety research.....	38.8	48.6	61.2	+26	
(f) Waste management.....	3.6	6.2	11.5	+85	
(g) Uranium enrichment.....	50.3	57.5	66.0	+15	
(h) Resource assessment.....	2.8	3.4	10.4	+206	
(i) Other (including advanced technology).....	14.9	10.7	28.8	+169	
6. Nuclear fusion.....	74.8	101.1	168.6		1,600
(a) Magnetic confinements.....	39.7	57.0	102.3	+79	
(b) Laser (including military application).....	35.1	44.1	66.3	+50	
7. Other.....	16.5	53.5	157.5		900
(a) Solar.....	4.0	13.8	50.0	+262	
(b) Geothermal.....	4.4	10.9	44.7	+310	
(c) Systems studies.....	7.2	17.3	30.0	+73	
(d) Miscellaneous.....	.9	11.5	32.8	+159	
Total, direct energy R. & D.....	672.2	999.1	1,815.5		11,300
Additional funds for support programs:					
1. Environmental and health effects research.....		169.7	303.4		
2. Basic research and manpower development.....		100.8	183.1		
Total, supporting R. & D.....		270.5	486.5		

Source: OMB.

The series of graphs in figure 2 show that, in the past 3 fiscal years, nuclear energy funding as a percentage of total Federal energy R. & D. funding has decreased from 61 percent to 40 percent. Neverthe-

less, in absolute figures, funding for nuclear (fission) energy research has nearly doubled, growing from \$406 million to \$725 million over this period.

FIGURE 2.—Percentage breakdown of Federal energy research and development levels, fiscal years 1973-75, by program area.



SENATE GOVERNMENT OPERATIONS COMMITTEE
SOURCE: OMB

Apart from funding, the personnel being transferred to the new ERDA will be drawn mostly from the AEC. The charts contained in figures 3 and 4 demonstrate the budgeting and personnel makeup of the new ERDA:

FIGURE 3.—Percentage breakdown of ERDA budget authority by function transferred from other agencies.

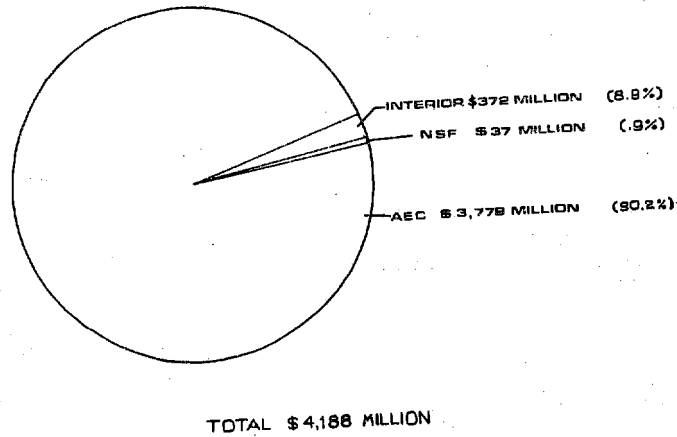
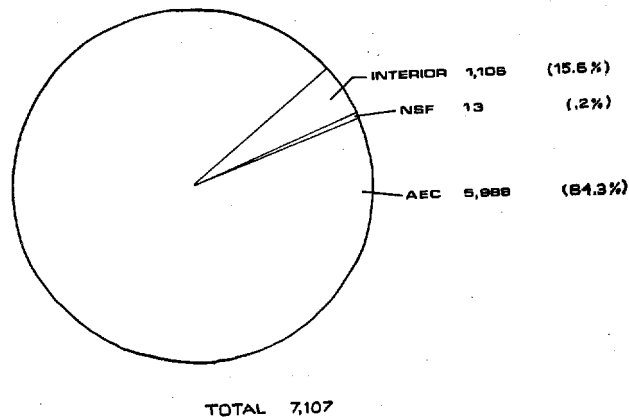


FIGURE 4.—Percentage breakdown of ERDA personnel by functions transferred from other agencies.



SENATE GOVERNMENT OPERATIONS COMMITTEE
SOURCE: OMB

The 5,988 permanent positions being transferred from AEC to ERDA do not reflect the approximately 85,000 additional individuals who now work for the AEC as employees of outside contractors in AEC owned-and-operated laboratories, production and weapons facilities and other installations. These contractor-personnel will, of course, be transferred to ERDA along with the facilities in which they work.

The estimated breakdown of all personnel and budget authority coming under the authority of ERDA is contained in the table in figure 5:

FIGURE 5.—BREAKDOWN OF FISCAL YEAR 1975 RESOURCE LEVELS OF PROGRAMS COMING UNDER ERDA CONTROL

	Budget authority (millions)	Personnel (year-end)
Atomic Energy Commission:¹		
Civilian energy (mostly nuclear programs).....	\$1,453	
Military development and production.....	1,542	
Physical, biomedical and environmental research.....	554	
Program support (all categories).....	230	
		\$5,988
		\$85,000
Total, AEC.....	\$3,779	90,988
Interior:		
Office of Coal Research.....	283	222
Bureau of Mines (6 energy centers).....	81	865
Underground power transmission R. & D.....	8	19
Total, Interior.....	372	1,106
National Science Foundation:²		
Solar energy development.....	25	8
Geothermal energy development.....	12	5
Total, NSF.....	\$37	13
Grand total.....	4,188	92,107

¹ Breakdown of personnel by each program category was unavailable.
² AEC permanent personnel.
³ AEC outside contractor personnel.
⁴ Includes revenues of \$620,000,000 mostly from uranium enrichment.
⁵ Excludes trust fund.
⁶ Preliminary data subject to change as transition plans are completed.
⁷ Some additional positions will be needed to provide administrative support.

Senate Government Operations Committee.
 Source: OMB.

This substantial input of AEC resources and personnel into the new ERDA caused concern in the committee that nuclear energy personnel and nuclear energy funding might dominate the missions and directions of the new agency. To ensure that this will not occur, S. 2744 has been drafted to prohibit any unwarranted bias in favor of a single energy technology, to provide a minimum level of funding for each of the nondefense ERDA Assistant Administrators, to require that the Administrator and Deputy Administrator of ERDA be qualified as energy "generalists," and to place greater relative emphasis on nonnuclear energy, including such clean renewable sources as solar and geothermal energy. However, the committee does not intend to prevent ERDA from placing substantial emphasis on energy technologies that it deems warranted for the purposes of fulfilling its mission.

The committee in no way wishes to derogate the resources or personnel of the Atomic Energy Commission. Current AEC employees represent the greatest concentration of scientific and engineering brainpower in the Federal Government—perhaps in the Nation at large. The committee has no doubt that current AEC employees will faithfully seek to fulfill whatever mission they are assigned in ERDA, whether it be the LMFBR or wind generators. The committee has simply designed ERDA so that its nonnuclear missions are fairly represented and funded along with the nuclear mission of the new agency.

Specifically, the provisions added by the committee to ensure this are:

(1) A statement of congressional intent that there shall be no unwarranted priority given to any energy technology in ERDA. (Section 2.)

(2) Qualifications requiring that the Administrator and Deputy Administrator of ERDA be specially qualified to manage a full range of R. & D. programs; and that the Assistant Administrators, who will actually manage the programs, be specially qualified in the technologies to which they are assigned. (Section 102.)

(3) Establishing a separate Assistant Administrator for Conservation so that energy conservation gets separate attention and is not grouped with Environment and Safety. (Section 102.)

(4) Establishing a Council on Energy Policy, similar to the Council on Environmental Quality, to draw up a national energy policy, including R. & D., and to promote interagency cooperation in energy areas. A Cabinet-level Interagency Energy Resources Committee will assist the Council, and there is also a provision permitting the Administrator to draw upon energy R. & D. capabilities of other agencies, such as NASA, NSF, the Department of Commerce, and the Department of Transportation which are not transferred to ERDA. (Section 102.)

(5) Making the Administrator responsible for carrying out programs authorized under a nonnuclear energy R. & D. policy enacted by Congress (section 103), and requiring that each non-defense Assistant Administrator will receive at least 7 percent of total civilian energy R. & D. funding in the absence of such a policy (section 304). S. 1283, the "National Energy Research and Development Policy Act," prescribes a nonnuclear R. & D. policy. It has passed the Senate and may soon reach the floor of the House.

ORGANIZATION

The net effect of these committee provisions is to help ensure that the ERDA organization will be a balanced structure allowing for resourceful and enterprising program management to explore all promising energy source, conversion, utilization and conservation technologies.

The Administrator and Deputy Administrator will be appointed by the President with the advice and consent of the Senate and be principally concerned with setting R. & D. policy, external agency

relationships and overall direction of the agency. There will also be a General Counsel appointed by the Administrator.

The proposed agency line organization is a balanced structure of six Assistant Administrators, each being responsible for a major program area, as follows:

- Fossil Energy;
- Nuclear Energy;
- Solar, Geothermal and Advanced Energy Systems;
- Environment and Safety;
- Conservation; and
- Defense Programs.

The Assistant Administrators will be appointed by the President and confirmed by the Senate.

There is an additional pool of not more than eight management positions at Executive Level V. Officials in these positions will be appointed by and serve at the pleasure of and be removable by the Administrator and will serve as heads of major staff offices, a deputy assistant administrator or other assignments.

MISSIONS

The three Assistant Administrators for fossil, nuclear and advanced energy systems will plan and execute programs designed to develop technology by energy source. The objective will be to exploit major existing sources of energy and to explore new and advanced ways of producing energy, including consideration of, and research on, closely associated environmental, economic, safety, and conservation factors.

The committee firmly believes that one advantage of organizing on the basis of energy sources is that it provides within an agency a means for assuring balance and meaningful priority setting among the competing energy technologies.

For example, significant emphasis will be placed on fossil fuels; e.g., coal gasification, liquefaction, and clean combustion systems devices, etc., since this area appears to be promising, based on current resource reserves and research technologies.

At the same time, continued emphasis will be placed on nuclear energy development, including present programs to develop and demonstrate the commercial feasibility of breeder reactors. The breeder generates more plutonium than is consumed in the process and this improves the efficient use of a valuable energy resource but it also poses a substantial danger if any plutonium, after reprocessing, is stolen and fashioned into bombs.

Thus the Administrator will have to weigh the benefits and risks of the demonstration LMFBR now under construction against those of rival energy technologies and then determine priorities accordingly. The Administrator will work in coordination with the NSLC, which has licensing authority over the breeder reactor, in assessing these benefits and risks.

A major long term program on Controlled Thermonuclear Reactors (fusion) will be continued because of its tremendous clean energy potential.

A major activity will also involve operation of the extensive government-owned uranium enrichment program to provide the domestic and much of the free world's supply of nuclear fuels. The program to encourage the private sector in this area will continue to be emphasized. A high level of attention will be devoted to safety considerations in all nuclear activities including the basic safeguards question of whether the risk of transporting large quantities of these potentially explosive nuclear materials throughout the United States and the world outweighs the benefit they provide as a fuel.

Advanced energy technologies will aim at utilizing energy source and utilization technologies such as geothermal, solar, winds, tides, advanced power cycles, as well as providing a framework for exploring new concepts and ideas that evolve over time. A number of these have significant potential if economical and safe technologies can be developed. This area will also conduct basic physical research in energy related areas.

Environmental protection and safety activities are encompassed within each of the major energy R. & D. functions, and each of the Assistant Administrators will have responsibilities in these areas. However, because of the overriding importance of these aspects of energy use, a separate Assistant Administrator is provided to undertake R. & D. on environmental and biomedical effects associated with various energy systems and energy waste management. The Assistant Administrator for Environment and Safety will also have oversight responsibilities on behalf of the Administrator to assure that appropriate environmental and safety R. & D. and related considerations are addressed broadly and comprehensively.

Conservation R. & D. efforts will be carried out by a separate Assistant Administrator and will include conducting general research concerned with slowing the rate of growth in demand. Each major program area will also be charged with assuring that the energy systems developed meet requisite environmental, safety, and conservation standards.

The remaining major organization area, Defense Programs, will have responsibility for performing most of the AEC's military applications and some of reactor materials production programs. These functions will be carried out by ERDA under the same conditions of security and in much the same manner as is now the case in the AEC. The ERDA Administrator, in conjunction with the Secretary of Defense, will conduct a 1-year study and recommend as to whether these programs should be transferred to DOD.

ERDA's top management will review the alternative concepts and set program priorities among alternative technologies. The line Assistant Administrators will sponsor their technologies in this process. The ERDA Administrator and Deputy Administrator will be supported by a strong and independent analytic staff to provide assessments on developing technologies. ERDA R. & D. decisions will form an important input to the administration in setting priorities and developing energy strategies.

To facilitate this process of frequent and easy communication between the top level and line operations, the intermediary position of

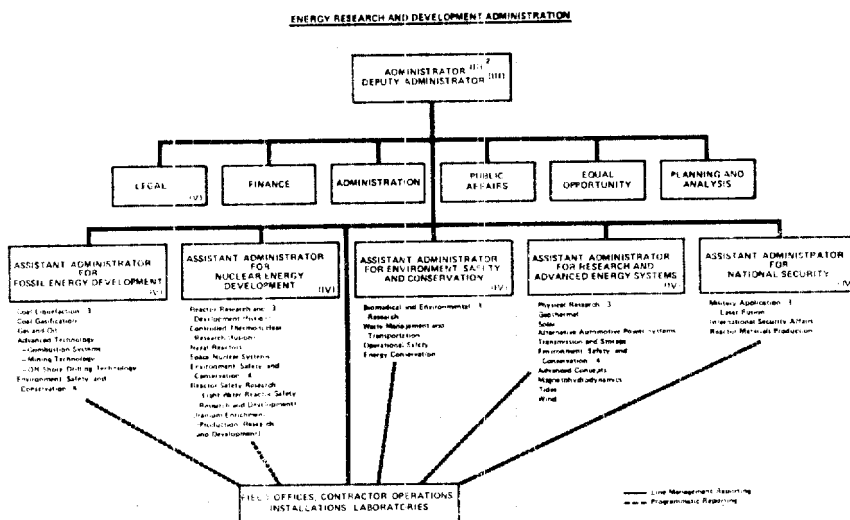
AEC General Manager has been eliminated from the ERDA Administration. Similarly, the committee eliminated from the NSLC the intermediary position of AEC Director of Regulation, who supervises regulatory activities on behalf on the Commission. The new NSLC will devote full time to regulatory activities, and there should be direct communications between the Commission and its line operations.

A great deal of flexibility is provided to the Administrator in carrying out the programs. ERDA will use transferred AEC and Bureau of Mines labs, as well as outside contractors, universities, and private research institutions to carry out the elements of the programs in achieving objectives.

The ERDA approach to developing safe, efficient energy sources will involve the energy industry to the maximum extent possible and will supplement existing and planned R. & D. by private industry. Once technology has been developed to assess its feasibility, industry will be encouraged to take the lead in further development and in applying it on a commercial scale. Therefore, ERDA's strategy should be to encourage independent energy R. & D. by working closely with industry in the development of technology to facilitate a rapid, smooth transfer. In this regard, jointly funded Federal and private projects should be encouraged.

Figure 6 is an organization chart of ERDA with the committee's changes noted.

FIGURE 6.



¹The General Activities Committee, Nuclear Energy Committee and the Patent Competition Board of the NEC are proposed to transfer to the ERDA.
²Other major areas include Executive level of position.
³Proposed areas of interest.
⁴Relative to development of energy, nuclear safety, production of the Assistant Administrator for Environment, Safety and Conservation.

NOVEMBER 1973

COMMITTEE CHANGES:

1. **Additional Assistant Administrator for Conservation.**
2. **Redesignated Assistant Administrator for Environment and Safety.**
3. **Redesignated Assistant Administrator for Solar, Geothermal and Advanced Energy Systems.**
4. **Redesignated Assistant Administrator for Defense Programs.**

VI. JUSTIFICATION OF NUCLEAR REGULATORY REORGANIZATION

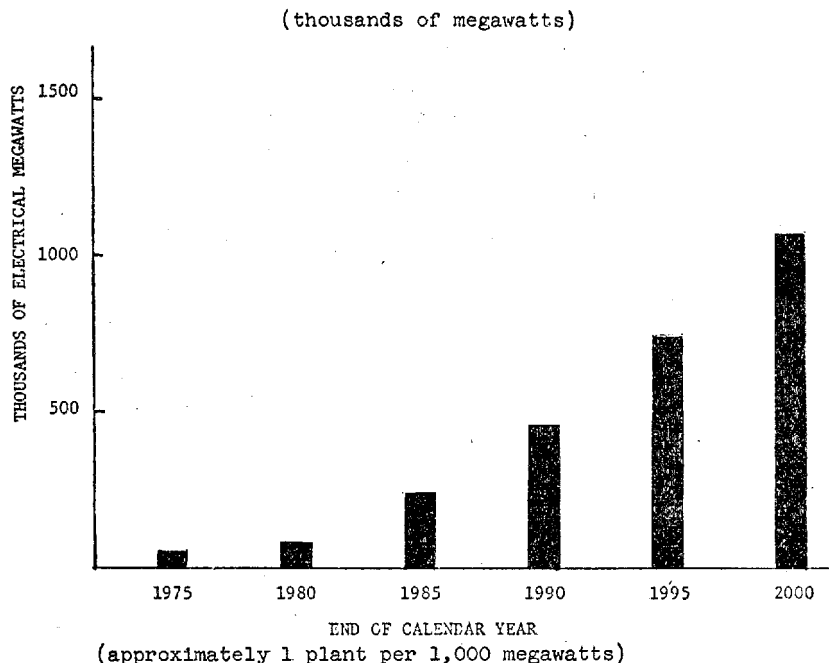
The Nuclear Safety and Licensing Commission is established in title II as a new independent regulatory agency. The Commission will have solely regulatory responsibilities, in keeping with a basic purpose of this act to separate the regulatory functions of the Atomic Energy Commission from its developmental and promotional functions, which are transferred to ERDA.

Title II, as reported by the committee contains several new provisions that will enable the new Nuclear Safety and Licensing Commission to operate effectively in licensing, inspecting, and securing the burgeoning nuclear power industry.

Meeting that challenge will be no easy task for the new independent regulatory commission. Current projections of industry growth are for the current 43 reactors producing 6 percent of the Nation's electricity to proliferate into 1,000 reactors generating 60 percent of our electricity by the year 2000. During that period, our investment in licensed nuclear powerplants will have grown from \$20 billion to \$1 trillion.

The chart in figure 7 shows the AEC's projection of installed nuclear capacity in thousands of megawatts between 1975 and 2000. (The unit of 1,000 megawatts is approximately equivalent to one nuclear powerplant, according to present AEC projections.)

FIGURE 7.—Projected growth of installed electrical capacity of nuclear power plants, 1975-2000.



Source: Atomic Energy Commission

Furthermore, plutonium to fuel the reactors will be generated by the reactors themselves at a rate of 600,000 pounds annually in the year 2000 for the United States—and 2.2 million pounds a year for the world at large. This presents security problems of enormous scope, because it is conceded by the AEC that 44 pounds of plutonium in the hands of skilled terrorists could result in an atomic bomb that poses a “credible threat”. There was testimony that only half that amount is needed for fashioning such a bomb.

Thus, the task awaiting the new Nuclear Safety and Licensing Commission is considerable. It will require strong, effective regulation to keep pace with the industry, and to ensure its safe development. Already the number of licenses issued for nuclear reactors is doubling every 2 or 3 years.

Unfortunately, the present Regulatory Division of the AEC, from which nearly all of the new Commission's personnel and functions are drawn, has been weak and undernourished in relation to the vast resources of the development side of the AEC. The table in figure 8 shows, for example, that AEC funding for regulating the nuclear power industry has grown steadily since 1969, but remains a small percentage of the AEC funding for developing the industry.

FIGURE 8.--AEC BUDGET AUTHORITY FOR REGULATION AND DEVELOPMENT OF THE NUCLEAR POWER INDUSTRY COMPARED WITH GROWTH OF THE INDUSTRY, FISCAL YEARS 1969-75

[Dollars in millions]

Fiscal year	AEC civilian reactor development and regulation combined	AEC regulation only	Percent	Number of nuclear powerplants ¹	Estimated investment in plants ¹
1969	\$239	\$9	3.8	104	\$52,000
1970	229	12	5.2	114	57,000
1971	232	16	6.9	140	70,000
1972	287	27	9.4	177	88,500
1973	335	45	13.4	194	116,400
1974	386	54	14.0	247	148,200
1975 (proposed)	506	68	13.4	297	178,200

¹ Includes plants licensed to operate, under construction, under construction-permit review, on order and publicly announced.

Senate Government Operations Committee.
Source: OMB.

There are presently 1,400 personnel in the Regulatory Division compared with 7,439 in the AEC overall. The Regulatory Division has one laboratory in New Brunswick, N.J., valued at \$4.7 million; total AEC owned and operated technical facilities are valued at \$9.7 billion.

The budget request for fiscal year 1975 would increase regulatory personnel to 1,745 out of 7,883 total AEC permanent personnel.

Under the reorganization, according to information supplied the committee by the Office of Management and Budget, regulatory personnel in NSLC will increase to 1,923, and the operating budget will increase to \$125.4 million in fiscal year 1975. The biggest dollar increases are in the reactor safety and safety research areas, as the chart in figure 9 indicates. The number of research personnel to be transferred to NSLC has not yet been determined by OMB.

FIGURE 9.—STAFFING AND FUNDING OF PRESENT AEC REGULATORY DIVISION AND PROPOSED NUCLEAR SAFETY AND LICENSING COMMISSION COMPARED, FISCAL YEARS 1974 AND 1975

	AEC regulatory operating budget, fiscal year 1974		Anticipated NSLC operating budget, fiscal year 1975	
	Staffing	Millions	Staffing	Millions
Reactor safety:				
Safety.....	894	\$40.9	1,146	\$50.8
Environment.....	118	7.6	157	9.9
Antitrust.....	42	1.6	46	1.9
Safeguards protection.....	99	4.3	114	5.2
Safety research.....	NA	NA	(1)	53.0
Commission and management support.....	2 247	(3)	446	(3)
Additional funding for personnel transferred to NSLC from ERDA.....				4.6
Total, operating costs.....	1,400	54.4	4 1,923	125.4
Goods and services on order.....		10.0		10.0
Capital equipment budget (obligations).....		3.4		5.0
Total, obligations.....		67.8		140.4

¹ Not yet determined.

² Does not include the Commission and its Secretariat which were in the overall AEC budget.

³ Prorated to other areas.

⁴ Some additional positions will be needed to provide administrative support.

Note: Major facility safeguards: New Brunswick Laboratory.

Source: Office of Management and Budget.

The committee amendments to title II are designed to guarantee that the new Commission will have the strength and autonomy to carry out its awesome safety, health and environmental responsibilities—given its limited resources in relation to the size of the nuclear industry and of the nuclear-development component of ERDA.

LICENSING AND SAFETY INFORMATION

The licensing authority is extended to cover certain ERDA demonstration reactors and high-level radioactive waste storage facilities when their purpose will lead to commercial, as distinguished from R. & D., use. This will permit NSLC earlier access to, and greater expertise in, new nuclear technology than is now possible for the AEC Regulatory Division. This should serve to speed up the eventual licensing of those facilities. NSLC personnel are guaranteed access to ERDA information and facilities, as necessary, to carry out its licensing function.

Citizen groups intervening in nuclear licensing and rulemaking cases are given substantially increased access to safety and other technical information under provisions of section 206 requiring the Commission to comply with good-faith requests for relevant studies. The Commission will provide existing studies or undertake new ones, as necessary. An expedited process for appealing adverse rulings by the Commission on requests for studies will prevent delays in the licensing process.

Closer monitoring of the nuclear power industry will be facilitated by provisions of section 205 requiring the nuclear industry, its components suppliers, and all employees to make prompt reports to the Commission of defects and of noncompliance with the Atomic Energy

Act. Similarly, the Commission is required by section 207 to make prompt reports to the public and to Congress of all abnormal occurrences in licensed facilities. It is also required by section 306 to file an annual report giving an assessment of relative benefits, costs and risks of commercial nuclear power based on the previous year's experience in dealing with specific safety and safeguards problems.

ORGANIZATION

A new regulatory organization for the Commission has been designed by the committee to help it effectively perform its functions in all categories.

As reported by the committee, NSLC will have a bipartisan, technically qualified Commission, which will directly supervise a balanced three-part regulatory organization. The high-level position of Director of Regulation is eliminated, thereby allowing the heads of the three key programs—safety, safeguards and research—direct access to the Commission and a freer interplay of regulatory proposals and priorities at the Commission level than is now possible in the present system. Each Director is appointed by and serves at the pleasure of the Commission.

It is the intent of the committee that an Office of Administration, which now assists of the Director of Regulation, would be attached to the Chairman of the Commission.

The committee intends that the Chairman of the NSLC will see to the faithful execution of the Commission's policies and decisions and will coordinate and supervise the tripartite regulatory organization accordingly.

This system parallels the balanced organization provided for ERDA in which six coequal Assistant Administrators, who run the R. & D. programs, will report directly to the Administrator. The high-level position of AEC General Manager is likewise eliminated to permit free access to the Administrator.

Under the original bill, title II would have simply renamed the AEC the Nuclear Energy Commission, and retained the Regulatory Division intact, without modification. This would have perpetuated the present system in which a Director of Regulation supervises three directorates—for regulations, licensing and inspection—thereby exercising nearly all the regulatory functions of the Commission. This system has its purpose in the present AEC, where the Commissioners exercise developmental responsibilities of a magnitude in terms of dollars, manpower and physical resources that outweigh the regulatory operations and facilities many times over. Therefore, the Director of Regulation is needed to supervise the day-to-day regulatory responsibilities, while the Commission devotes the time needed to develop new industrial technology that is one of the modern wonders of engineering.

Title II, as reported, establishes a new Nuclear Safety and Licensing Commission to replace the AEC, which is abolished in title I, as reported. The new name is intended by the committee to clearly reflect the new mission of the Commission. Because of this new mission, the committee required Senate confirmation of all appointees to NSLC, including present AEC Commissioners. Consistent with other Federal regulatory agencies, the new Commission is also re-

quired to be bipartisan. Expertise in three technical areas—reactor safety technology, health science, and environmental science—should be represented on the Commission. Present Commissioners, however, are exempted from the political and technical qualifications for the balance of their present terms if appointed by the President to NSLC.

With only licensing and related regulatory responsibilities, the new Commissioners will now be in a position to devote full time to the activities which are presently supervised by the Director of Regulation.

REACTOR SAFETY

Accordingly, the committee version of the bill upgrades the Director of Regulation from a level V to a level IV on the Executive Schedule and changes his title to Director of Nuclear Reactor Safety. In this way the former top regulatory position is assigned to the new Commission's largest and most challenging line responsibility: licensing and otherwise ensuring the safe regulation of nuclear power reactors. This includes two of the key areas in nuclear power: the performance of the Emergency Core Cooling System (ECCS) in the current generation of Light Water Reactors (LWR) and the development of the next generation of reactor, the Liquid Metal Fast Breeder (LMFBR).

At the same time, two other Directors are established coequal to the Director of Nuclear Reactor Safety to supervise the two other major regulatory functions of the Commission—safeguards and safety research.

SAFEGUARDS

One Director will head the new Bureau of Nuclear Materials Security, responsible for safeguarding against sabotage and theft, the commercial facilities and the potentially explosive nuclear materials that will come into common use in the nuclear fuel cycle. Even though most of the licensed reactors today use a uranium fuel that is not sufficiently enriched for bombs, a recent internal AEC study found the present system of safeguarding the relatively small quantities of explosive radioactive materials in the private sector to be "entirely inadequate" to prevent theft and subsequent manufacture into terrorists' bombs. A reason given was that safeguards in the Regulatory Division was not getting the same priority attention as reactor safety.

Accordingly, the committee established a separate, coequal safeguards Bureau to draw together and coordinate all safeguards personnel who are now combined with safety, environmental and antitrust personnel and scattered among the existing three regulatory directorates.

The upgrading of the safeguards function is essential if the NSLC is to keep pace with the growth of the nuclear power industry and of the quantities of potentially explosive radioactive materials it will generate in the fuel cycle. The gravity and immediateness of the problem was reflected in the testimony of General E. B. Giller, head of the AEC's weapons programs, when he told the committee:

While plutonium is produced as a result of power reactor operation, plutonium in significant quantities will not routinely be part of the commercial fuel cycles until 1980. Some-

time after that, the amount of plutonium in the private sector will exceed that in the Government sector, including weapons.

Among his responsibilities, the Director of Nuclear Materials Security will undertake a study to determine the desirability and feasibility of establishing a security force in the Bureau to take over some or all of the safeguards functions in the nuclear industry. His recommendations will be forwarded within a year to the Commission and to Congress.

SAFETY RESEARCH

The third Director will head the Office of Nuclear Safety Research, with its own research personnel, to assess the safety and the security of the nuclear power industry. This will, for the first time, give the Federal regulators of the nuclear power industry an in-house research capability that is independent of the Federal policies and programs which promote the development of the industry.

The present safety research personnel are managers who will be transferred from the Office of Reactor Safety Research on the management side of AEC. All of the research managed by this office is performed by outside contractors—mostly in AEC owned-and-operated facilities—for the regulatory side of the AEC.

The act provides for the transfer to the new Commission of all AEC research personnel whose primary responsibilities are related to the safety of reactors subject to licensing and other regulatory controls. The act excludes only those safety research personnel who the Office of Management and Budget determines are needed for new reactor development programs will be transferred to ERDA.

Therefore, the committee expects OMB to transfer the vast majority of the present 54 safety research personnel in the Office of Reactor Safety Research to NSLC. ERDA can continue to utilize its own safety research personnel for reactor development purposes—including safety research on the development of the LMFBR—as needed, presumably through the Office of Reactor Research and Development, which now conducts such research and is transferred to ERDA by this act.

Under the original bill, NSLC would have been limited to using ERDA personnel or outside contractors for engaging in regulatory safety research—largely similar to the present practice. The committee feels that to complete the separation of nuclear regulation from development, it is essential that NSLC have its own research capability and staff of safety research managers with full access to appropriate ERDA laboratories—and not be limited to evaluating ERDA and other outside safety research, as originally proposed.

The committee also added nine unspecified officers to be compensated at level V of the Executive Schedule, who will serve under the Directors to head various regulatory directorates and fill other key policy positions. The individuals in these executive level positions will be appointed and be removable by the Commission.

The revised organization is intended to give balance to the new Commission so that no one regulatory area is stressed to the detriment of another. The Commission is in a position to weigh priorities and make decisions accordingly. In particular, safety and safeguards are

given equal recognition within the organization. This is an expression of the committee's judgment that they are of equal importance in terms of public health and safety and of the future of the nuclear power industry. A serious mishap in either area could be catastrophic for both the Nation and the industry.

The organization charts in figures 10A and 10B show NEC, as proposed, and NSLC, as reported by the committee.

FIGURE 10A

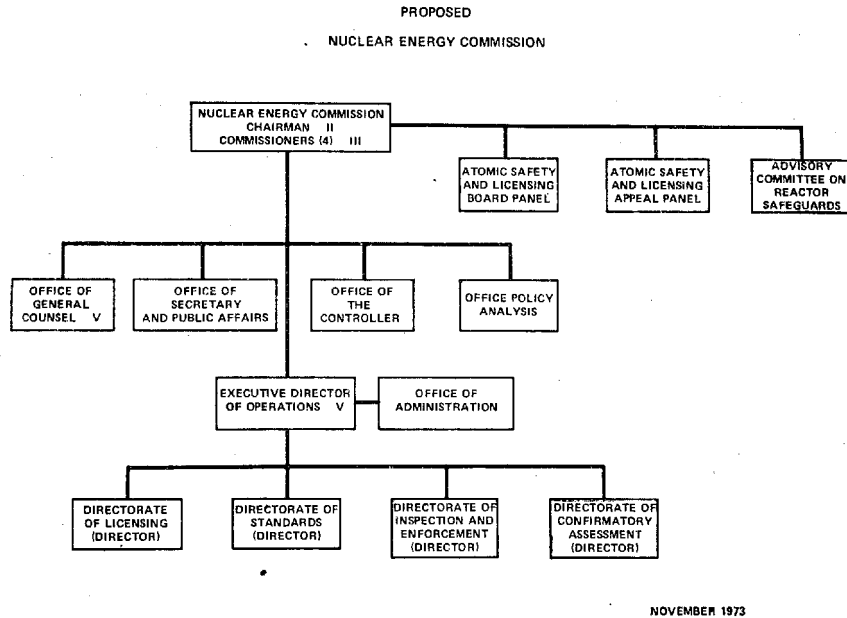
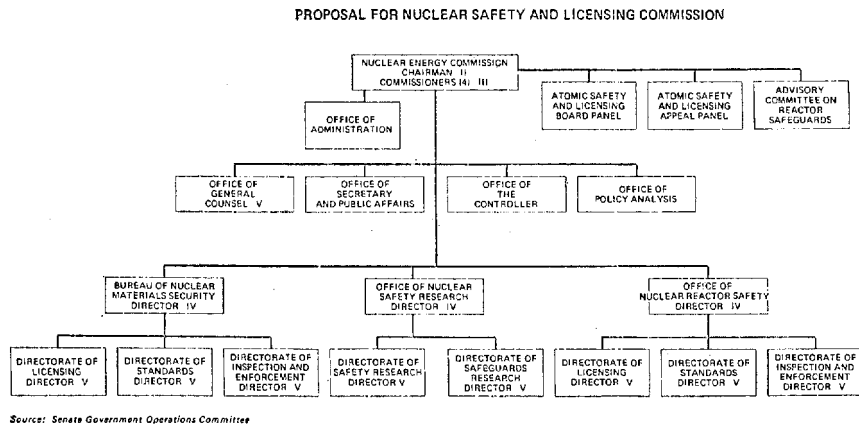


FIGURE 10B



VII. ESTIMATED COSTS

In accordance with section 252(a) of the Legislative Reorganization Act of 1970 (Public Law 91-510), the committee estimates that the costs of implementation of S. 2744 would be as follows:

1st year.....	\$4,000,000
2d year.....	4,000,000
3d year.....	4,000,000
4th year.....	4,000,000
5th year.....	4,000,000

On the basis of estimates submitted by OMB, the committee expects that the net additional yearly cost of establishing ERDA and NSLC will, after some offsetting savings gained through administrative efficiencies and other adjustments, amount to approximately \$4 million. We would expect this to be the case for each of the following five fiscal years.

The committee believes that this net increase is fully justified since most of that amount will be used for enhancing the NSLC's technical capability for carrying out critical nuclear health and safety-related research as a necessary adjunct to the NSLC's licensing and other regulatory activities.

VIII. SECTION-BY-SECTION ANALYSIS

Section 1. Short Title

Section 1 states that this act may be cited as the "Energy Reorganization Act of 1974."

Section 2. Declaration of Purpose

Section 2 is concerned with declarations and findings.

Subsection (a) sets forth a congressional declaration that the general welfare and the common defense and security require effective action to develop all energy sources and increase the efficiency and reliability of energy use. The purposes to be served are (1) meeting the needs of future generations, (2) increasing the productivity of the national economy and its international trade position, (3) making the Nation self-sufficient in energy, (4) restoring, protecting, and enhancing environmental quality, and (5) assuring public health and safety.

Subsection (b) states a congressional finding that, to best achieve the objectives of this act, it is necessary to establish an Energy Research and Development Administration (ERDA) to bring together and direct Federal activities relating to research and development on the various sources of energy, to increase the efficiency and reliability of use of energy, and to carry out the performance of other functions, including the Atomic Energy Commission's (AEC) military and production activities.

There is a proviso expressing congressional intent that in establishing ERDA to achieve these objectives, no energy technology should be given an unwarranted priority. Priority, as the committee understands it, could take the form of policy, direction, personnel, funding or some combination of these elements. This proviso is intended to be responsive to concerns that ERDA—because the vast majority of its

personnel, facilities and funding are derived from the AEC—may give an unwarranted priority to development of nuclear power to the detriment of competing energy technologies. The committee acknowledges this as a legitimate concern and adds this proviso to supplement organizational safeguards provided elsewhere in the act to prevent a pronuclear bias in ERDA.

In determining whether a priority is warranted, the committee expects that such factors as renewability of resources, safety, reliability, and environmental impact would weigh heavily in arriving at a determination.

Subsection (c) sets forth a congressional declaration and finding that it is in the public interest that the licensing and related regulatory functions of the Atomic Energy Commission be separated from the performance of other functions of the Commission, which are transferred by this act to the Energy Research and Development Administration. The Congress finds it is in the public interest that this separation of functions be effected in an orderly manner assuring adequacy of technical and other resources for their performance by each segment.

It is the intention of the committee that the establishment of the Nuclear Safety and Licensing Commission, as an independent regulatory agency, pursuant to title II of the act, will carry out the declared purpose of separating, in an orderly manner, the regulatory from the developmental functions of the AEC. Several organizational reforms added by the committee for the new Commission are designed to carry out the declared purpose of assuring adequacy of technical and other resources—particularly the establishment of an office of Nuclear Safety Research with a full complement of research personnel, as provided in sections 201(h)(2) and 203 of the act.

Subsection (d) declares the policy of Congress that small business concerns be given an opportunity to participate, insofar as is possible, in a fair and equitable proportion of grants, contracts, purchases and other Federal activities relating to research, development and demonstration of sources of energy, efficiency and utilization of energy, and conservation of energy.

The committee recognizes that no precise proportion of such Federal activities can be set for small business participation. However, it is intended that a clear policy be established to assure small business fair treatment with regard to participation in Federal activities relating to this Nation's drive to develop and utilize energy.

There are some 8.5 million small business concerns which account for an estimated 50 percent of the Nation's employment and nearly 40 percent of the gross national product. Their value to the free competitive enterprise system has been recognized previously by the Congress in the Small Business Act of 1953, as amended, 15 U.S.C. 631 et seq. The committee is especially aware of the value of such small enterprises in creating and pioneering the development of innovations which have brought new techniques and lower costs to American industry in the past and that such small businesses hold promise of doing so in the future in the vital national activities relating to research development and utilization of energy.

TITLE I—ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

Section 101. Establishment

Section 101 establishes the Energy Research and Development Administration as an independent executive agency.

Section 102. Officers

Section 102 prescribes the top officer positions.

Subsection (a) provides that the Administration will be headed by an Administrator appointed from civilian life by the President by and with the advice and consent of the Senate, to be compensated at the level II rate of the Executive Schedule. No individual can be appointed Administrator within 5 years after release from active duty as a commissioned officer in the armed services. He will be responsible for the efficient and coordinated management of the Administration.

The requirement that a civilian be appointed Administrator was added by the committee to ensure civilian control of ERDA. It is patterned after a provision of the National Defense Act (10 U.S.C. 131) requiring that the Secretary and Deputy Defense Secretary be civilians and that they be released from active duty as commissioned officers for at least 10 years. The shorter period presented for the ERDA Administrator was deemed consistent with his specialized research and development functions.

Subsection (b) provides for a Deputy Administrator to be appointed by the President with Senate confirmation, and to be compensated at level III of the Executive Schedule. He will have special responsibility on behalf of the Administrator for international cooperation in all energy and related environmental research and development.

The committee believes that there is an important opportunity for real burden-sharing in energy research and development with other developed countries, especially Japan and the countries of Western Europe. Accordingly, the committee added language making the encouragement of international cooperation in energy and related environmental research and development an explicit function of the Administrator (section 103(a)(8)) and vesting special responsibility for this function in the Deputy Administrator, subject to the authority of the Administrator. Further discussion is included in the analysis of section 103(a)(8).

Subsection (c) requires the President to appoint the Administrator and Deputy Administrator from among individuals whose training and experience makes them specially qualified to manage a full range of energy research and development programs.

By adding this provision, the committee seeks to help ensure that there is no unwarranted bias in favor of any single energy technology at the highest administrative and policymaking levels of ERDA. It is the intention of the committee that, to the fullest extent practicable, the President shall appoint capable managers to the two top ERDA posts whose backgrounds are not identified with a single energy technology. For example, a person whose background in major part is limited to nuclear power technology, would not qualify.

Every effort should be made by the President to find energy R. & D. generalists for these positions. It is absolutely essential that the Ad-

ministrator and his Deputy take an open-minded approach to running, in the national interest, a program of competing energy technologies, some of which, like solar and geothermal, are still in their infancy and require special attention to fully explore their reputed potential as limitless, clean energy sources.

This provision, together with the requirement of specialized qualifications for ERDA Assistant Administrators (section 102(d)), is intended to give the new agency the necessary balance between specialized, resourceful R. & D. programs and a general, fair ordering of R. & D. priorities based on the results of these programs.

Subsection (d) provides for appointment by the President, with Senate confirmation, of six Assistant Administrators responsible respectively for (1) fossil energy, (2) nuclear energy, (3) environment and safety, (4) conservation, (5) solar, geothermal and advanced energy systems, and (6) defense programs. These appointees will be compensated at level IV of the Executive Schedule. The President is required to appoint individuals whose training and experience specially qualify them to manage the energy technology area to which each is assigned.

As stated in the analysis of section 102(c) above, the specialized qualifications for appointment of the Assistant Administrators, in conjunction with the generalist qualifications for the appointment of the Administrator and Deputy Administrator, are intended to give needed balance to the R. & D. mission of ERDA.

The committee added an additional Assistant Administrator for Conservation by splitting off the conservation functions from an original Assistant Administrator for Environment, Safety, and Conservation. The committee believes that energy conservation is a vital, separate element in the Nation's search to achieve self-sufficiency; also, that it is not necessarily linked to environmental and safety programs. This conclusion was reinforced by the President's current energy R. & D. proposal providing separate funding of energy conservation programs for fiscal year 1975 at \$128.6 million, an 85 percent increase over fiscal year 1974, and 7 percent of total funding for energy R. & D. programs of \$1.82 billion. These conservation R. & D. programs would include promoting a full spectrum of energy efficiency in residences, commercial establishments, automobiles and other modes of transportation and in the transmission, conversion and storage of energy.

The committee intends that the Assistant Administrator for Conservation will be responsible for managing programs designed to promote energy efficiencies in all energy areas and with respect to existing as well as potential new technologies. The committee recognizes that each Assistant Administrator in charge of an energy technology area will be responsible for assuring that his programs result in maximum conservation of energy. At the same time, it is essential that the Administrator can turn to the Assistant Administrator for Conservation to evaluate these various conservation efforts and to conduct independent R. & D. programs, as the Administrator deems necessary, to promote energy efficiencies in all areas.

Similarly, the committee recognizes that each Assistant Administrator will be responsible to assure that their programs are environmentally sound and will not impact adversely on public health and

safety. It is important, however, that the Administrator has an objective source of expertise in environmental, health and safety matters to assist him in overseeing the full range of ERDA programs. It is the intent of this committee that the Assistant Administrator for Environment and Safety should provide this independent expertise and program assessment capability to the Administrator.

The committee intends that some health, public safety, environmental, and control technology R. & D. be undertaken by the Assistant Administrator for Environment and Safety. He should have more than just a coordination role which allows funds to flow to the other Assistant Administrators.

The committee also intends that the Assistant Administrator for Environment and Safety should have an inspection and audit function which reaches throughout ERDA to ensure the establishment and enforcement of appropriate health, public safety and environmental protection standards for all activities of the agency. Such a function is especially imperative in the noncommercial nuclear R. & D. area because the new Nuclear Safety and Licensing Commission will have no licensing jurisdiction over such ERDA nuclear activities.

Thus, the Administrator will need to look to the Assistant Administrator for Environment and Safety to evaluate and make recommendations on the safety and the security of all ERDA nuclear programs. This oversight responsibility will extend to such vital areas as low-level radioactive emissions from test reactors, leakage of high-level radioactive wastes from disposal and storage facilities, and the safeguarding of special nuclear materials from theft and of nuclear facilities from sabotage, including those materials and facilities used in the weapons program.

Finally, it should be noted that the committee changed the designations of two of the Assistant Administrators to make their missions clear. The Assistant Administrator for Research and Advanced Energy was changed to Assistant Administrator for Solar, Geothermal, and Advanced Energy Systems. The committee believes that solar and geothermal, as potentially renewable, clean sources of energy, represent the wave of the future and should be given the same prominence in the ERDA organizational structure as fossil and nuclear energy. (This is also the thrust of the requirement that each ERDA Assistant Administrator receive a minimum level of funding. See section 306.) As discussed in the analysis of subsection 103(a)(3), this Assistant Administrator will continue to have the responsibility for ERDA's basic physical research program.

The Assistant Administrator for National Security was changed to Assistant Administrator for Defense Programs to make clear that his responsibilities were related to the nuclear weapons program, not to overall national security matters.

Subsection (e) provides for the appointment of a General Counsel by the Administrator. The General Counsel will serve at the pleasure of the Administrator and be compensated at level V of the Executive Schedule.

Subsection (f) authorizes the Administrator to appoint not more than eight additional officers who will be compensated at level V of the

Executive Schedule. They will serve at the pleasure of and be removable by the Administrator.

An explanation of the excepted personnel system of the Atomic Energy Act, as it applies to ERDA and NSLC employees under the provisions of this act, is provided in appendix 3.

Subsection (g) provides for appointment by the Administrator of a Director of Military Application to head the Division of Military Application transferred to the Administration by subsection 104(b) of this act. The Director of Military Application will be an active member of the Armed Forces serving in general or flag officer rank or grade, as appropriate, with the same functions, qualifications and compensation as are now provided in the Atomic Energy Act for the Assistant General Manager of AEC for Military Application. The Director of Military Application will serve at the pleasure of the Administrator.

Subsection (h) provides that officers appointed pursuant to this section will perform such functions as the Administrator specifies from time to time.

Subsection (i) provides that the Deputy Administrator shall act for the Administrator in the event of a vacancy in the office of the Administrator or in the event of the absence or disability of the Administrator, and states that the Administrator shall establish the further order of succession from among the Assistant Administrators, General Counsel and or other officials of the agency.

Section 103. Responsibilities of the Administrator

Section 103 describes responsibilities of the Administrator and provides for consultation with the Administrator of the Small Business Administration in carrying out his responsibilities.

Subsection (a) prescribes eight categories included in the Administrator's responsibilities.

Paragraph (1) provides for exercising central responsibility for policy planning, coordination, support, and management of research and development programs respecting all energy sources, including assessing the requirements, undertaking programs for the optimal development of the various forms of energy sources, managing such programs, and disseminating information resulting therefrom.

The intention of the committee in this paragraph is to make clear that the ERDA Administration is the lead Federal official with respect to all elements of near-term and long-range energy research and development programs.

Paragraph (2) provides for encouraging and conducting research, development and demonstration of commercial feasibility and practical applications of the extraction, conversion, storage, transmission, and utilization phases related to the development and use of energy from fossil, nuclear, solar, geothermal, and other energy sources; including such nonnuclear research and development programs as may hereafter be authorized by the Congress.

This paragraph is intended to make reference to other legislation presently under active consideration in Congress which sets forth comprehensive strategies and policies to govern Federal nonnuclear research and development activities. The committee anticipates that

those functions will be assigned to the ERDA Administrator and would become principal responsibilities of the Agency.

The committee also wants to make clear that the reference to "fossil" in paragraph (2), and as used elsewhere in the act, includes in addition to other fossil fuels anthracite, lignite, bituminous coal and other forms of coal. The committee shares the concern that production of anthracite has been declining from year to year. In 1973, only 6.7 million tons were produced. The United States has at least 21.4 billion tons in known resources in anthracite, of which 7.3 billion are estimated to be recoverable by present mining standards. Anthracite is one of the cleanest domestic fuels available, and an energy source which can help maintain clean air standards during the energy shortage, particularly in power generation and residential use. Anthracite can also be used as is without the cost or delay required to convert to clean burning fuel.

Paragraph (3) provides for engaging in and supporting environmental, biomedical, physical, and safety research related to the development of energy sources and utilization technologies.

A full discussion of the Administrator's responsibilities in the environmental, health and safety areas—as they will be exercised by him and through the Assistant Administrator for Environment and Safety, is contained in the analysis of subsection 102(d).

The committee also intends that the Administrator—presumably through the Assistant Administrator for Solar, Geothermal, and Advanced Energy Systems (originally Research and Advanced Energy Systems)—will assume an important responsibility for fundamental research, including the further development of the AEC's physical research program. This has been a long-range basic research effort to further man's understanding of the natural laws and phenomena governing matter and energy. Both theoretical and experimental research in high-, medium-, and low-energy physics, as well as work in chemistry, metallurgy, properties of materials, mathematics and computers are important components of this program.

The AEC's single and multipurpose laboratories and research complexes constitute an essential national resource. These and other research facilities help provide for new discoveries and for the advancement of basic knowledge, as well as interfacing these discoveries with technical aspects of national problems such as energy resources development and conservation. These facilities provide the base for important ongoing research efforts; they are important ingredients in a balanced research and development program.

ERDA's responsibilities for basic research should be broadly interpreted, without undue constraint as to specific applications. While it is difficult to predict where basic knowledge will best contribute to the long-term search for energy self-sufficiency, it is clear that without a well-managed basic research program this effort would be badly compromised and new opportunities would be severely limited.

Paragraph (4) provides for taking into account the existence, progress, and results of other public and private research and development activities, including those activities of the Federal Energy Administration relating to the development of energy resources using currently available technology in promoting increased utilization of

energy resources, relevant to ERDA's mission in formulating its own research and development programs.

This paragraph corresponds to the language on page 25 of the Conference Report on S. 2776, establishing the Federal Energy Administration (FEA) which describes FEA's role in encouraging the application of existing technology to promote increased utilization of energy resources. It is consistent with the committee's intention in subsection 103(a)(1), as described above, to make clear the ERDA Administrator's primary role in Federal energy R. & D.

Paragraph (5) provides for participating in and supporting cooperative research and development projects which may involve contributions by public or private persons or agencies of financial or other resources to the performance of the work.

Paragraph (6) provides for developing, collecting, distributing, and making available for distribution, scientific and technical information concerning the manufacture or development of energy and its efficient extraction, conversion, transmission and utilization.

Paragraph (7) provides for encouraging and conducting research and development in energy conservation, which shall be directed toward the goals of reducing total energy consumption to the maximum extent practicable, and toward maximum possible improvement in the efficiency of energy use. Development of new and improved conservation measures shall be conducted with the goal of the most expeditious possible application of these measures. A detailed discussion of the Administrator's conservation responsibilities, as exercised by him or through the Assistant Administrator for Conservation, is contained in the analysis of subsection 102(d).

Paragraph (8) provides for encouraging and participating in international cooperation in energy and related environmental research and development.

As discussed above (subsection 102(b)), the Deputy Administrator will exercise special responsibility on behalf of the Administrator to give impetus to international cooperation and facilitate negotiations and exchange with other countries at a high level.

Japan and some of the countries of Western Europe have government-sponsored energy research and development programs, but most of these are very small compared with present and contemplated U.S. programs. For example, the Japanese nonnuclear program, which is currently under the auspices of the Ministry of International Trade and Industry, is funded in fiscal year 1974 at only \$8 million. The committee is concerned that there will be a tendency by these countries, despite their much higher dependence on external sources of energy producing raw materials, to allow the United States to assume most of the financial burden of developing new energy technologies. While the United States should show strong leadership, we should also encourage the maximum support in this endeavor from the other countries which stand to benefit and which have the technological capability to make important contributions. Consortia and other means of sharing the burden for specific facets of energy research could reduce costs and duplication as well as hasten the development of new technology.

Subsection (b) requires that the ERDA Administrator shall take appropriate affirmative action to help assure that small businesses may participate in a fair and equitable proportion of grants, contracts, purchases, and other Federal activities relating to research, development, and demonstration of sources of energy, efficiency and utilization and conservation of energy. Such action by the Administrator includes consultation and cooperation with the Administrator of the Small Business Administration to further the purposes set forth in section 2(d).

Section 104. Abolition and Transfers

Section 104 abolishes the Atomic Energy Commission and transfers its nonregulatory functions to the ERDA Administrator and its regulatory functions to the Nuclear Safety and Licensing Commission. There are also transfers to ERDA from the Department of the Interior and the National Science Foundation.

The committee chose the course of abolishing the AEC and transferring its regulatory functions to NSLC rather than renaming the AEC and retaining its regulatory functions in the redesignated Commission, as provided in the original bill. The committee's intent was to provide for political balance on the new Commission in the same manner as now provided by law for other Federal regulatory agencies. This abolition-and-transfer course will also allow for Senate confirmation on all appointments to the Commission, including present members of the AEC who are selected by the President to serve on the new Commission. The original bill, by not abolishing an agency whose functions are to be completely transferred, would have permitted present AEC Commissioners automatically to become members of the new Commission.

The committee decided that because the NSLC is to have an exclusively regulatory mission—as distinguished from the combined developmental and regulatory mission of the AEC—the President should appoint and the Senate should confirm members of the new Commission in that regard.

The committee was advised that if Presidential appointment and Senate confirmation of all NSLC Commissioners was required, the technical course of abolishing the AEC should be taken to eliminate the constitutional question relating to congressional removal of executive branch officers.

Additional requirements for bipartisanship and technical qualifications on the new Commission, which are unrelated to abolishment of the AEC, are explained in the analysis of section 201.

It should be noted that abolishing the AEC, rather than simply renaming it, has no effect whatever on how the authorities of the Atomic Energy Act apply to either NSLC or ERDA. An analysis of the applicable provisions of the Atomic Energy Act was performed at the committee's request by the General Counsel's office of the AEC, and the net effect was reported to be the same under the bill in its present form, as reported by the committee, and in its original form, as introduced on request for the administration.

The AEC's analysis of how the provisions of the Atomic Energy Act apply to ERDA and NEC under the provisions of this act, is shown in appendix 2.

Subsection (a) abolishes the Atomic Energy Commission and repeals sections 21 and 22 of the Atomic Energy Act, relating to the organization and members of the Commission.

The repeal of sections 21 and 22 of the Atomic Energy Act is technical in nature to facilitate the formal establishment of the new Commission in section 201 of this act. As explained in the analysis of section 201, these two provisions of the Atomic Energy Act are incorporated in subsections 201(a) through (f) of this act.

Subsection (b) transfers or allows to lapse all other functions of the Atomic Energy Commission pursuant to the provisions of this act.

Subsection (c) transfers to the ERDA Administrator all functions of the Atomic Energy Commission, the Chairman and members of the Commission, and the Commission's officers and components, except as otherwise provided in this act. This subsection pertains to all non-regulatory functions of the AEC. The regulatory functions are transferred pursuant to subsection 201(g).

Subsection (d) preserves and includes in the transfer from AEC to ERDA, the General Advisory Committee, the Patent Compensation Board, and the Divisions of Military Application and Naval Reactors; and it preserves the relationship with the Military Liaison Committee.

Illustrative of the functions transferred by subsections 104 (b) and (c) from AEC are research and development relating to nuclear and other energy sources, energy utilization and related environmental and safety aspects; military applications of atomic energy such as development and production of nuclear weapons; production of nuclear materials; research in the physical and biomedical sciences; international cooperation for the utilization and safeguarding of nuclear materials; dissemination of scientific and technical information; and administration of a program for indemnification of contractor liability for damages from nuclear incidents.

In effect, section 104, in conjunction with section 201, separates the licensing and related regulatory functions of the Atomic Energy Commission from the development and production functions of the Commission, and transfers all the functions not part of licensing and related regulation to the Administrator.

Subsection (e) transfers certain functions of the Secretary of the Interior, the Department of the Interior and offices and components thereof as follows:

Paragraph (1) transfers the functions relating to the Office of Coal Research (OCR), which was established pursuant to the act of July 1, 1960 (30 U.S.C. 661-668). Through contracts with outside organizations, OCR sponsors research and development involving principally the conversion of coal to other energy forms, such as liquid hydrocarbons, clean fuel gas, substitute pipeline gas, and direct electric power.

Paragraph (2) transfers certain functions conducted by the Bureau of Mines (established as set out in 30 U.S.C. 1-7) that are directed toward fossil fuel energy research and development.

The major R. & D. facilities of the Bureau of Mines include 22 laboratories and research centers and a synthane plant now under construction. Six of the laboratories and centers, which are engaged primarily in energy R. & D. on the production, conversion and utilization

of fossil fuels, will be transferred to ERDA. The six energy research centers included in this transfer are located in Bartlesville, Okla.; Grand Forks, N. Dak.; Laramie, Wyo; Morgantown, W. Va.; Pittsburgh, Pa., and San Francisco, Calif. The synthane plant will be a pilot plant for coal gasification to prove technology developed by the Bureau. It will also be transferred to ERDA.

The other Bureau of Mines laboratories and research centers are devoted to R. & D. on mining technology and metallurgy. The intent of the committee is for the Bureau of Mines to continue R. & D. in these areas, some of which is energy related. The energy related R. & D. which the Bureau of Mines will continue is interrelated with other activities which are not appropriate for transfer to ERDA. Research on coal mining technology, including coal analysis and preparation, as well as the use of coal for metallurgical processes, will be continued by the Bureau of Mines, especially as such research relates to mining and metallurgical technology or mine health and safety. It is important that the Bureau of Mines retain expertise in the areas of R. & D. necessary to support the Secretary of the Interior in his performance of statutory responsibilities that are not changed by the creation of ERDA. These include responsibility for mining metals and minerals, mine health and safety, mined area reclamation, and metallurgical research, as well as the Secretary's broad responsibility for management and development of public lands and natural resources.

Paragraph (3) transfers the existing program of underground electric power transmission research under the direction of the Secretary of the Interior.

Paragraph (4) transfers the program relating to the acquisition, production, distribution, and storage of helium.

The committee adopted an amendment to include among the transfers from Interior the helium conservation program. An important policy question regarding the future of the helium program has been the national interest in maintaining helium supplies for future purposes of national importance. It appears that a major potential use of helium will be in connection with research, development and possible applications of cryogenic cooling technologies for the transmission of electric power. If such technologies prove viable, very large quantities of helium may be necessary for widespread applications. The committee believes it is appropriate for the Energy Research and Development Administration to administer the program in view of this application.

Subsection (f) transfers certain functions from the National Science Foundation.

The NSF, under its general statutory authorization (42 U.S.C. 1682), has been supporting basic and applied research through proof-of-concept experimentation in these areas in preparation for prototype development and demonstration of functioning systems. The Administrator will assume responsibility under this subsection for programs in these development and demonstration areas. Subsection (c) is not intended to modify the existing authority of the NSF in basic and applied research.

Paragraph (1) transfers the functions relating to solar heating and cooling development.

This technology, relating to the conversion of solar energy for heating and cooling of residential and commercial buildings, has reached the developmental stage and is, therefore, appropriately transferred to the ERDA Administrator. Because technology related to the conversion of solar energy for central-power-station generation of electricity is still in the experimental stage and relies heavily on basic research in NSF, this program will not be transferred by this act.

Paragraph (2) transfers the functions relating to geothermal power development.

This program, involving conversion of the subsurface heat of the earth, has reached the developmental stage and is suitable for transfer to the ERDA Administrator.

Subsection (g) is a technical provision designed to permit the Administrator and Commission to the extent necessary or appropriate to perform transferred functions, to exercise authority available by law, including appropriation acts, to the official or agency from which the functions were transferred. This does not divest the transferring agency of the authority with respect to the functions retained by that agency.

Subsection (h) requires the Administrator of ERDA to utilize to the fullest extent practicable the capabilities of other agencies, to consult with the heads of other agencies, and to assign to them specific programs or projects in energy R. & D. as appropriate. Projects or programs so assigned to other agencies are to be carried out under the policy guidance of the Administrator. Such assignments must be with the consent of the concerned agency and shall be in addition to, and not detract from, its basic mission responsibilities.

The committee intended this subsection to require that the capabilities of agencies other than the new Energy Research and Development Administration (ERDA) be effectively utilized in the national effort on energy research and development. The preceding subsections transfer to ERDA identifiable segments of the R. & D. programs of the AEC, NSF, and DOI.

This subsection makes provision for the utilization of the capabilities and potential of other agencies in the national energy R. & D. effort as required for a balanced evolution of national energy options.

There are capabilities of other agencies which have been established and are needed for their own missions and, therefore, should not be transferred to ERDA. But these capabilities can and should be utilized in the national energy R. & D. program.

A key example is the National Aeronautics and Space Administration (NASA), which has excellent and broad capabilities in research and development over a wide range of technologies related to fuels and energy, in particular solar energy, propulsion and energy conversion and transmissions systems. NASA has extensively developed solar energy systems for its spacecraft as well as the basic technology for other applications. This experience together with NASA's proven ability to manage large-scale development programs should make NASA an important contributor in conducting solar energy R. & D. In addition, NASA's work in aeronautical and space propulsion systems, including nuclear systems, provides a solid base for developing more efficient and less polluting systems for ground propulsion sys-

tems. Another area in which NASA has extensive experience is in the use and handling of unconventional fuels, especially hydrogen, which is being studied as a promising alternative fuel source for the future.

Under the provisions of this subsection, therefore, the Administrator of ERDA might, for example, use NASA's capabilities by assigning to NASA responsibilities for research and development programs and projects in terrestrial applications of solar energy, ground propulsion systems, and investigation of advanced energy conversion and transmission system and alternate fuel sources. Congressional hearings have already confirmed that in these areas, NASA is well qualified for conducting such work.

Another example where directed use of other agencies' capabilities could be used is the National Science Foundation, which will continue to perform valuable work at the exploratory concept stage in the energy-related fields of generation, transmission and conservation while pursuing its own missions.

Given these valuable energy R. & D. resources in other agencies and given the tendency for each government agency to concentrate on its own programs, the committee believed that a specific requirement for coordination and use of these other agencies' resources was necessary.

This subsection is also responsive to the concern of the committee and many others in Congress that the Nation's energy R. & D. effort be a balanced exploration of all alternative sources. To this end, the concentrated use of other agencies with broad disciplinary experience can be an important factor.

Section 105. Transfer of Personnel and Other Matters

Section 105 contains mostly technical provisions relating to transfer of personnel and other matters.

Subsection (a) provides that personnel, personnel positions, assets, liabilities, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds relating to functions transferred by this act follow and are transferred with those functions. Appropriations transferred will be accounted for in accordance with section 202 of the Budget and Accounting Procedures Act of 1950 (31 U.S.C. 581c), which normally governs transfers of this type. Personnel positions expressly created by law, personnel occupying those positions on the effective date of this act, and personnel authorized to receive compensation at one of the rates prescribed for level II, III, IV, or V of the Executive Schedule (5 U.S.C. 5313-5316) will be subject to the provisions of subsection 105(c) and section 301.

Subsection (b) provides that nontemporary personnel, other than personnel entitled to compensation under the Executive Schedule, shall not be separated or reduced in grade or compensation, as a result of the enactment of this act, for one year after being transferred to the Administration created pursuant to this act. This provision is designed to preclude reduction in force solely as a result of this act for one year after the transfer. However, this provision would not preclude separation or reduction for cause or any other circumstance applicable if this act had not been enacted.

Subsection (c) provides that a person entitled to compensation under the Executive Schedule may be employed by the new Administration and that, if the employment is without break in service and

if the duties of the new position are comparable to the duties performed immediately preceding the new appointment, such person will be entitled to receive compensation at a rate not less than he received in his previous position.

Section 106. Administrative Provisions

Section 106 contains technical administrative provisions.

Subsection (a) authorizes the Administrator to prescribe appropriate policies, standards, criteria, procedures, rules and regulations.

Subsection (b) provides that the Administrator shall engage in policy planning and perform program analyses and other studies to promote the efficient and coordinated administration of his agency and to assess its progress.

Subsection (c) authorizes the Administrator to delegate, and authorize redelegations of, any of his functions.

Subsection (d) authorizes the Administrator to organize the Administration as he deems appropriate, except for the organizational elements specified in section 102 and subsection 104(b).

Subsection (e) authorizes the Administrator to establish and discontinue field offices.

Subsection (f) authorizes the Administrator to prescribe a seal for the Administration.

Subsection (g) authorizes the establishment of a working capital fund by the Administrator to defray necessary expenses arising out of the maintenance and operation of common administrative services.

Subsection (h) authorizes executive agencies to furnish the Administrator information or other data.

Section 107. Personnel and Services

Section 107 contains technical provisions relating to personnel and services.

Subsection (a) authorizes the Administrator to employ officers and employees and fix their compensation pursuant to subsection 161 d. of the Atomic Energy Act (42 U.S.C. 2201(d)).

Subsection (b) authorizes the Administrator to obtain the services of experts and consultants.

Subsection (c) authorizes the Administrator to arrange by agreement with the Secretaries of the Military Departments for participation of military personnel in the performance of his functions, excluding appointments subject to Senate confirmation.

Subsection (d) provides that the status and benefits of military persons shall not be adversely affected by service under subsection (c).

Subsection (e) authorizes payment of transportation expenses and per diem to temporary or seasonal employees. Such payments will be made in accordance with chapter 57 of title 5 of the United States Code which governs similar payments to other Government employees for official travel.

Subsection (f) authorizes the Administrator to utilize, on a reimbursable basis, the services of personnel made available by any executive agency.

Subsection (g) authorizes the Administrator to establish advisory boards in accordance with the provisions of the Federal Advisory Committee Act (5 U.S.C. App. I, 1970 ed., Supp. II).

Subsection (h) authorizes the Administrator to employ noncitizens in technical or professional capacities.

Section 108. Powers

Section 108 sets forth the basic statutory powers of the Administrator.

Subsection (a) authorizes the Administrator to insure continued research and development in the interest of expanding scientific, technical and practical knowledge in energy matters, to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities with private or public institutions or persons, including joint projects of a research, developmental or experimental nature. The Administrator is authorized to make payments (in lump sum or installments, and in advance or by way of reimbursement, with necessary adjustments on account of overpayments or underpayments) and generally to take such steps as he deems necessary or appropriate to perform his functions. Functions applicable to the nuclear activities transferred by title I of this act will be subject to the provisions of the Atomic Energy Act of 1954, and to other authority applicable to such activities. The nonnuclear responsibilities and functions transferred by this act will be carried out pursuant to the provisions of this act, the authorities applicable to those functions immediately before the effective date of this act, or in accordance with chapter 4 of the Atomic Energy Act (42 U.S.C. 2051-2053).

Subsection (b) authorizes the Administrator to acquire facilities required for the maintenance and operation of laboratories, research, and testing sites and facilities, quarters, and related accommodations for employees and their dependents, and such other special purpose real property as the Administrator may deem necessary. Special purpose facilities and real property may be acquired by purchase, lease, condemnation, or otherwise. General purpose facilities and real property needs will continue to be met through the authority of the General Services Administration. The Federal Government will take title to all property acquired pursuant to this section.

Subsection (c) authorizes the Administrator to provide, construct, or maintain, as necessary and when otherwise unavailable, certain facilities and services for employees and their dependents at remote locations. Included are emergency medical services and supplies; food and subsistence supplies; messing facilities; audio-visual equipment, accessories, and supplies for recreation and training; reimbursement to such employees for furnishing food, medicine and other supplies for temporary relief of distressed persons; living and working quarters and facilities; and transportation for school-age dependents to the nearest appropriate educational facilities. Reimbursement at reasonable prices will be required for medical treatment and services and supplies furnished to employees and their dependents.

Subsection (d) authorizes the Administrator to acquire copyrights and patents, design processes, specifications and data.

Subsection (e) requires the Administrator, subject to 42 U.S.C. 2161-2166 and other applicable law, to disseminate scientific, technical and practical energy information acquired pursuant to this act. Other applicable law would include the Freedom of Information Act. He is

required also to encourage the dissemination of such information by others so as to provide for the free exchange of ideas and criticism.

Subsection (f) authorizes the Administrator to accept, hold, administer, and utilize gifts and bequests.

Section 109. Council on Energy Policy

Section 109 substantially incorporates the language of S. 70, the Energy Policy Act of 1973, which passed the Senate on May 10, 1973. This proposal also passed the Senate on December 10, 1973, as section 3 of S. 2176, the National Fuels and Energy Conservation Act of 1973, and again on March 13, 1974, as title II of the Federal Energy Emergency Administration Act.

This section would establish a three-member Council on Energy Policy in the Executive Office of the President to supervise the collection and analysis of energy information, coordinate the energy activities of the Federal Government and prepare a long-range comprehensive plan for energy development, utilization and conservation. The Council would be assisted by an Interagency Resources Advisory Committee composed of the principal agencies with energy responsibilities. It would provide a single place for Congress and the President to seek energy information and policy recommendations. It assures that a single entity would have responsibility for examining the overall energy picture.

The Council on Energy Policy would provide sophisticated analyses of policy alternatives and would formulate recommendations for national energy policy. It would be responsive to both the President and the Congress. The Council would not assume the duties of existing agencies such as the Federal Energy Administration or the Energy Research and Development Administration, but rather it would be a policy adviser, such as the Council of Economic Advisers or the Council on Environmental Quality. In addition, once the policy choices have been made within the executive or legislative branches, the Council would formulate the energy plan to serve as a basic blueprint for other agencies to better carry out their assigned tasks in a coordinated fashion.

The Council also would publish an annual energy report. This report would accompany the energy plan and would include statistical data, energy supply and demand trends, and recommended legislation.

A major cause of the Nation's energy problem is the lack of a comprehensive national energy policy. More than 60 different agencies are involved in energy policy making. All of these agencies were established at different times and for different purposes to handle specialized problems. Each entity has a narrow focus, and there is little coordination among them. Often different Federal agencies institute conflicting policies. These conditions developed during a period when the Nation's energy supplies were ample and when there was little concern with protection of the environment. But, in the last few years, this situation has drastically changed. A May 27, 1974, New York Times editorial, "Anarchy In Energy," summarized the situation well:

There is no such thing as energy policy in Washington today. The most the Administration and Congress alike have been able to muster all these months is a series of ad hoc re-

sponses to crises as they develop, followed by deterioration and disinterest in executive and legislative branches when the specific crisis fades.

All agencies having energy responsibilities should have a clear guideline of national energy policy against which to measure their individual decisions. The need for long-range energy planning capabilities has been long apparent. In 1952, the Paley Commission devoted an entire volume of its study on Materials Policy to the Energy Situation stating:

In the past, Government has dealt with energy problems largely on a piecemeal basis with separate programs for coal, gas, for petroleum, for electricity, and for atomic energy, with each usually handled by one or more separate agencies operating under one or more separate legislative authorizations.

The Commission is strongly of the opinion that the nation's energy problem must be viewed in its entirety and not as a loose collection of independent pieces involving different sources and forms of energy. So numerous and vital are the interrelations among all sectors of the energy field, that problems in any one sector must be dealt with always in full consideration of the effects on all other sectors. The aim must be to achieve a consistent pattern of policies and programs throughout the entire energy field.

Twenty years later, these observations have become even more relevant. On June 29, 1973, the President commented on the failure of present governmental structures to deal with the energy situation and directed that a comprehensive study be undertaken to determine the best way to organize all energy-related regulatory activities of the government. The study team formed as a result of this directive issued its report on April 12, entitled "Federal Energy Regulation: An Organizational Study".

The report found, as did the Paley Commission, that over the past 50 years the Federal regulatory structure has become increasingly complex. "It has evolved in response to narrowly defined problems and the specific demands of the moment, rather than in relation to an overall plan."

The team, chaired by Atomic Energy Commissioner William O. Doub, concluded that "The establishment of an institutional mechanism to provide policy guidance would be the single most significant contribution to correcting the deficiencies in the existing system of regulation," and that the best mechanism for this would be the creation of an independent national energy council to formulate national energy objectives and provide general policy guidelines.

The Senate has previously come to an identical conclusion by passing legislation to establish a Council on Energy Policy. The Council, assisted by the Interagency Energy Resources Committee, would assure that tax policy, import controls, competitive incentives, regulatory activities and new policy initiatives would be coordinated to serve the public interest.

Subsection (a). Findings. Subsection (a) of section 109, contains the findings on the energy situation in the United States. As has been

discussed above, there are numerous Federal agencies created at different times and for different purposes to handle specialized problems all directly or indirectly involved in the establishment of energy policy.

The committee found that as a result of the involvement of so many agencies and the absence of an energy policymaking mechanism, there is no comprehensive, coherent energy policy. Instead, Federal activities consist of a myriad of laws, regulations and inactions, that often result in narrow, short-range and conflicting decisionmaking by individual agencies and the absence of an energy policymaking mechanism, there But current concern over energy difficulties reflects the fact that some fuels can be supplied, if at all from domestic sources, only at much higher real cost. Environmental constraints are also placed on fuels that contribute to air and thermal pollution. Incompatible Federal energy policies can cause increases in curtailments, demands, costs and dependence on imports.

Several factors converged to form the energy difficulties now facing the Nation. Energy shifts occurred independently and without consideration of the overall situation. As a result today we have an excessive energy demand, soaring energy prices, instability in fuel markets, and mismanagement of energy resources.

Subsection (b). Statement of Purposes. Based on these findings the committee recommends the establishment of a Council on Energy Policy. This Council would have three primary purposes. First, it would serve as a central point for the collection, analysis, and interpretation of energy statistics. The objective is to establish a reliable energy data system that is comparable to the Nation's economic statistics system. Thus, the arguments regarding energy data will be resolved and attention focused on the Nation's substantive energy difficulties. Particularly important would be the development of improved forecasting techniques in projecting energy demands and supplies.

A second major purpose of the Council would be to coordinate the energy activities of the Federal Government and provide leadership to State and local governments and other persons involved in energy activities.

Third, the Council would prepare a long-range comprehensive plan (the Energy Plan) for energy development, utilization and conservation to foster improvement in the efficiency of energy production and utilization, reduction of the adverse environmental impacts of energy production and utilization, conservation of energy resources for the use of future generations, reduction of excessive energy demands, and development of new technologies to produce clean energy.

The Energy Plan is to be continually updated in an ongoing planning process.

The plan would not call for activities that are beyond the then existing statutory authority of the appropriate agency to implement. But, the Council may submit an Energy Plan that calls for actions by operating agencies which are contingent upon the enactment of legislation recommended by the Council. If such recommendations do not become law, then that portion of the Energy Plan which is dependent upon such enactment, naturally, shall not be implemented by Federal agencies.

In sum, the Energy Plan is to provide a roadmap for phasing out those policies which have contributed to excessive energy demand and inefficient utilization of energy. In their place would be substituted policies encouraging energy conservation, improved efficiencies and the increased production of cleaner energy.

Subsection (c). Duties of Federal Agencies. In addition to creating a Council on Energy Policy, and assigning it various functions, section 109 imposes certain duties on all Federal agencies. The policies and goals set forth in section 109 are to be supplementary to the existing mandates and authorizations of Federal agencies. They are not considered to repeal existing authority of such agencies. But, where conflicts occur, the Council is to make recommendations for resolving them pursuant to paragraph 2 of subsection (e). No specific authorization of appropriations is provided for these activities. The committee believes the agencies can perform these functions as part of the general operation and administration of their programs. Section 109 seeks to insure that all agencies carefully consider the energy effect of their activities as follows:

First, all agencies are to utilize a systematic, interdisciplinary approach when their activities affect energy availability. Such planning and decisions should draw upon a broad range of both physical and social sciences and consider all relevant points of view. They will then be in a better position to recognize when their activities have energy effects, thereby resulting in better planning and projects.

Second, all agencies are to submit to the Council on Energy Policy for comment all recommendations and reports to Congress when such information has a bearing on energy matters. This provision is designed to keep the Council fully informed of all agency recommendations, reports and requests for legislation that affect energy policy. The Council has the opportunity to submit its views to Congress along with those of the Agency's. When there is a difference between the Agency's and the Council's views, then this difference would be resolved by Congress as it considers the matter. Thus, this provision is designed to surface issues and generate discussion in areas that are now too often ignored or by-passed to the detriment of the public.

Third, Federal agencies are to gather energy data and information if required by guidelines promulgated by the Council. Such information will be gathered primarily by the Federal Energy Administration, Department of the Interior, the Federal Power Commission, the Energy Research and Development Administration, the Department of Commerce, and other agencies that have operational or regulatory responsibility in the energy area. However, in gathering data on energy transmission and utilization the Council's guidelines may require other agencies, such as the Council of Economic Advisers, the Department of the Treasury, the Department of Justice, and the Department of State, to assist the Council in providing the information necessary for the preparation of energy plans and energy reports. In addition all Federal agencies are to develop analytical techniques for managing and conserving energy resources which that agency uses or regulates. It is intended that in developing such techniques, agencies will seek to maximize the social benefits while minimizing social costs of their energy activities.

Fourth, all Federal agencies are to recognize the worldwide and long-range character of energy concerns and support activities designed to foster international cooperation in anticipating and resolving energy related problems. Such activities would be coordinated by the State Department to assure that they are consistent with the foreign policy of the United States.

Subsection (d). Establishment of Council. The committee recommends the establishment of a three-member Council on Energy Policy in the Executive Office of the President. The members shall be nominated by the President subject to the advice and consent of the Senate. They shall serve at the President's pleasure. The President shall at the time of the nomination designate one of the members to serve as Chairman.

Each Council member should be qualified to interpret energy information and appraise programs and activities of the Federal Government in light of the energy needs of the Nation. In addition, as a result of his training and experience, each member is to be conscious of and responsive to not only the economic needs of the Nation but a broad spectrum of environmental, social, cultural, scientific and esthetic interests of the Nation. Energy policy pervades almost all aspects of American life, but in the past its social implications have been inadequately considered. Consequently the committee intends that members of the Council should be composed of competent individuals who have distinguished themselves for their ability to grasp broad national issues and a commitment to improve the quality of life for all Americans. When such enlightened members serve on the Council, it is more likely that the Energy Plan and recommendations for wise energy management will make a great contribution to the Nation.

Subsection (e). Duties of Council. The Council is to serve as the principal adviser to the President and the Congress on energy policy and the Council is to exercise leadership in the formulation of government policy concerning domestic and international issues relating to energy. It is to coordinate energy activities of Federal agencies and make recommendations to the President and the Congress for resolving conflicting energy policies.

The Council is to prepare annually an Energy Plan designed to coordinate Federal activities to improve the efficiency of energy production and utilization, reduce adverse environmental impacts of energy production and utilization, conserve energy resources and develop new technologies for producing clean energy.

The committee intends the Energy Plan to represent energy flows from production to utilization in the Nation. The plan would pinpoint the source of energy, where energy is converted from one form to another, the area of energy losses and waste and finally the purposes for which the energy is used. The Energy Plan would be the guide for improving the social utility of the energy available, and show the interrelation between the various parts of the overall energy picture.

The Energy Plan, which would be updated annually, would provide leadership and guidance to government agencies and others concerned with energy. The computer models and background information used to develop the Energy Plan should also be useful in determining the effects and alternatives available for meeting changes in energy supply

or demand. The Council would monitor and seek compliance with the Energy Plan.

The energy report, required by subsection (g) of section 109, would contain material explaining the Energy Plan and projecting changes that are likely to occur. The remaining duties of the Council are designed to insure that it has appropriate information and broad public input in formulating the Energy Plan and the energy report.

The Council is to promptly review the legislative recommendations and reports of Federal agencies that have a bearing on energy matters. The Council would analyze the impact of such recommendations or reports on the Energy Plan, and if the Council disapproves such an agency report or recommendation, it is to prepare a statement in writing of its position and supporting reasons and submit it to Congress and the involved agency.

The Council has an affirmative duty to keep Congress fully and currently informed of all its activities. Neither the Council nor its employees may refuse to testify or submit information to Congress.

The Council is to conduct annual public hearings to assist it in developing the Energy Plan, and it may conduct public hearings on any other pending energy matters in which there is substantial public interest.

The Council shall also issue guidelines for the collection and initial analysis of energy data now gathered by other Federal agencies. These guidelines are designed to make such data compatible, useful and comprehensive. Where the data is not available or credible due to a lack of agency authority, the Council shall recommend to the Congress the enactment of appropriate legislation. If, in the judgment of the Council, such energy information is needed for the preparation of the Energy Plan or the energy report, the Council, to carry out the purposes of this act, may obtain such data directly.

In sum, it is not the committee's intent that the Council be involved in the daily decisionmaking processes of the Federal Government or that it be involved in continuous resolution of particular conflicts between agencies and departments. However, the committee strongly feels that the President and the Congress need impartial and objective recommendations which can provide unbiased information and an accurate overview of the Nation's energy trends and problems and how they affect the future social, economic and cultural well-being of the American people. In addition the Council would coordinate the major energy activities of the Federal Government to assure that the energy needs of the Nation are satisfied in an optimum way.

Subsection (f) Administrative provisions. In conducting its functions pursuant to section 109, the Council is to consult with a broad spectrum of interests to obtain the maximum breadth of input into its activities.

The committee believes that the Council should employ a staff with experience, competence and judgment to analyze and interpret trends and developing problems in the energy area. The staff should represent many disciplines and professions to obtain the balanced and knowledgeable overview of the Nation's energy situation needed to shape the country's future energy policies. So that this staff can most usefully direct its talents, the committee intends that it should utilize to the fullest extent possible the services, facilities and information of

public and private organizations to avoid duplication of effort and expense. If the job is already being done adequately elsewhere, then the Council should not repeat it.

The members of the Council shall serve full time. Compensation for the Chairman of the Council is set at level II (currently \$42,500) of the Executive Schedule pay rates and the salaries of the other two members are set at level IV (\$38,000). These provisions parallel the compensation provisions established by law for the Chairman and members of the Council of Economic Advisers and the Council on Environmental Quality.

Finally, paragraph 3 provides that the Council may employ a professional and support staff and may acquire the services of experts and consultants. If necessary such services of experts or consultants may be paid for at a rate in excess of the general schedule to afford the Council maximum flexibility in obtaining the best assistance. The Council on Environmental Quality has similar authority. The committee intends that the Council should have available a professional staff and consulting capability comparable in size and qualification to the staff which currently serves the Council of Economic Advisers or the Council on Environmental Quality.

Subsection (g). Interagency Energy Resources Advisory Committee. Until recently, little attention has been given to Federal organizational arrangements for energy. The current energy crisis has highlighted the deficiencies of existing organization in several respects and action has been taken by the Congress to reorganize Federal agencies in a number of fields of energy. The committee recognizes, however, that the ultimate energy reorganization will not be accomplished with the enactment of this measure. The Federal Government has, and will have, a number of independent agencies which are importantly involved with energy matters.

Earlier this year, the Federal Energy Administration was established. That agency has been given authority to administer Federal responsibilities to insure the viability of existing energy systems and to respond to emergency situations. This act will consolidate Federal energy R. & D. functions under an independent ERDA. The Department of the Interior will continue to have important responsibilities for managing the extensive energy resources of the public lands and the Outer Continental Shelf. The current crisis has dramatically demonstrated the significance of energy to international relations and to the financial integrity of the United States, which are the particular concerns of the State and Treasury Departments and the Office of Management and Budget.

The managers of these, and perhaps other, Federal agencies must communicate with each other and with the Council on Energy Policy established by this measure to insure that the activities of the Federal Government impacting upon the Nation's energy supplies are consistent.

The Advisory Committee established by this subsection is intended to insure such communication until such time as further consolidation of Federal energy operating functions may make formal arrangements unnecessary.

The subsection provides the latitude for the President to designate additional members of the Advisory Committee as circumstances and experience with energy organization and energy policy, in his judgment, show them to be desirable. The chairman of the Advisory Committee, similarly, is to be chosen to reflect the circumstances of coordination which may develop as the reorganizations of Federal energy agencies are carried out.

This committee expects the members of the Advisory Committee to establish procedures for meetings and for communication among the agencies involved, including the appointment of suitable representatives of each member who can meet on a more regular basis than the principal members.

Paragraph (3), however, provides that the chairman of the Advisory Committee, whatever his other responsibilities, must be available to testify before the Congress on activities of the Advisory Committee. There will be numerous occasions when important energy decisions will involve more than one major Federal agency. In such instances, the Congress will expect the committee, represented by its chairman, to respond to inquiries regarding the interagency aspects of the decision.

Subsection (h) Energy report. This subsection provides that the Council shall transmit to the Congress and the President an annual energy report. The first such report shall be transmitted on or before January 1, 1975. Subsequent reports shall be transmitted on or before January 1 in succeeding years. In general the report is to accompany the Energy Plan and provide backup information as well as policy recommendations. The Council may wish to submit the energy report and the Energy Plan in a single document. The energy report will provide the commentary and background for the Energy Plan.

This report is to include, but not be limited to, an estimate of the energy needs of the United States for the ensuing 10 year period assuming the implementation of the Energy Plan. It should discuss the sources of supply with which the United States will be expected to meet such needs in an economical manner consistent with national policies protecting the environment, conserving resources and implementing foreign policy objectives. The report would include an evaluation of trends in the price, quality, management and utilization of energy resources and their effect on the Nation's social, environmental, economic and other requirements. The report would examine and evaluate the Federal Government's energy research and development efforts and make recommendations for improving the effectiveness of such efforts and for fostering more rapid development of new technologies that are cost beneficial. Recommendations for improving energy data and information available to the Federal agencies by improving monitoring systems, standardizing data, and securing additional needed information is to be covered in the report. Finally the report would evaluate the practices of both governmental and non-governmental entities in dealing with energy.

In summary, the annual energy report should provide a considered statement of the national energy objectives, trends, and problems. The report should provide the best judgment of the best people available on the Nation's energy problems and the progress made toward conserving resources and wise energy management.

It is anticipated that the annual report and the recommendations made by the Council would be a vehicle for legislative initiatives, oversight hearings and other activities by the appropriate committees of Congress.

Subsection (i) Public access to information. Subsection (i) of section 109, establishes as a general principle that "copies of any communications, documents, or reports, or other information received or sent by any member of the Council shall be made available to the public upon identifiable request, and at reasonable cost . . ."

Whereas paragraph 1 of subsection (i) establishes public access to information as a general principle, there is no legal requirement to make information available if it is not required to be made available under the Freedom of Information Act (5 U.S.C. 5202(b)). Paragraph 1 must be read in conjunction with the last sentence of paragraph 2 which states "nothing contained in this section shall be deemed to require the release of any information described by subsection (b) of section 552, title 5, United States Code, or which is otherwise protected by law from disclosure to the public." Although nothing in this section requires the release of any information, subsection (i) authorizes, the Council to make public any communications, documents, reports or other information which are not trade secrets.

Trade secrets may not be disclosed by the Council or its employees except under specified situations. The purpose for this qualification is to protect the business community from competitive harm. To give adequate protection to holders of trade secrets, public disclosure of trade secrets could not be made without notice to the company and an opportunity for comment in writing or for personal discussion in closed session during a period of 15 days following the notice. Of course, the 15-day period could be waived if the resultant delay would be detrimental to the public health and safety.

Subsection (j). General Accounting Office provisions. It has been evident that there is insufficient reliable information about many aspects of the energy system to support policy decisions. The need for better information is particularly acute in the Congress.

Congressional policy decisions are usually very complex involving many intangible and abstract factors. The information upon which such decisions are based requires not only extensive data but also many judgmental assumptions. The data must be complete and accurate and the assumptions must be objective and unbiased if the decisions are to be sound.

The General Accounting Office, as an arm of the Congress, has the inherent capability to collect and analyze energy information to support policy decisions. Subsection (j) would strengthen the Comptroller General's role in the energy area and empower him to acquire data essential for energy decisions.

Subsection (k) Authorization. This subsection authorizes appropriations in the amount of \$1 million for the fiscal year ending June 30, 1974, \$2 million for the fiscal year ending June 30, 1975, and \$4 million for each fiscal year thereafter.

The committee intends the level of funding for the Council on Energy Policy to be comparable to the resources available to the Council on Environmental Quality and the Council of Economic Advisers.

COST ESTIMATE FOR SECTION 109

Pursuant to section 252 of the Legislative Reorganization Act of 1970, the committee estimates that the cost of this section for which appropriations are authorized will be as follows:

Fiscal year 1975-----	\$1,000,000
Fiscal year 1976-----	2,000,000
Fiscal year 1977-----	4,000,000

Subsection (c) of section 3 would also require certain activities by other Federal agencies as part of the general operation and administration of their programs. The additional cost, if any, of such activities are contingent so as to render a cost estimate impracticable.

The committee knows of no cost estimates by any Federal agency which are at variance with its estimate.

Section 110. Recommendations for Reorganization

Despite the accomplishments in energy reorganization, which have already been made both by statute and by executive reorganization, much more remains to be done. The more important parts of Federal energy responsibilities have been dealt with, but organization must be evolutionary and dynamic. The complexity of energy problems and the rapidly developing energy situation have dictated an incremental approach to energy reorganization.

The Federal Energy Administration has been established as an agency with a limited term. This act will establish two new operating organizations and will impact heavily upon the Department of the Interior which, nevertheless, will remain an important energy agency.

The relationship between energy and other resource management considerations, such as water and land use, mineral resources, and earth sciences, has not been specifically considered thus far in reorganization measures. The coordination among energy agencies and between energy agencies and those dealing with other areas of national policy has been only partially resolved. As experience is gained with the reorganization thus far, new problems will probably be recognized.

Section 110 requires that not later than January 31, 1975, for the timely consideration of the 94th Congress, the President shall recommend to the Congress such further reorganizations in the energy and natural resources fields as he deems advisable. These recommendations are required to give consideration to coordination among energy agencies and to the relationship between energy and other natural resource matters.

Subsection (b) of this section revokes the requirement for a portion of the report which would be required by section 15 (a) of the Federal Energy Administration Act. Clause (4) of the latter provision, as a part of a more extensive report, would have called for similar recommendations but at a later time.

Section 111. Coordination with Environmental Efforts

The committee feels strongly that the Energy Research and Development Administration should have a strong capability to analyze environmental aspects of energy projects. The committee felt, however, that this capability should be built from within the Agency with its own manpower and funds. For this reason, the committee accepted the amendment of Senators Muskie and Javits to delete the provision transferring the Environmental Protection Agency's energy research

programs to the Energy Research and Development Administration. These programs are an integral part of the Agency's regulatory activities and must remain so. The amendment substituted a requirement that the agencies coordinate their work in this area. It is not the intent of the committee to limit the Energy Research and Development Administration's authority to carry out research and development regarding developmental work on stationary powerplants or new automotive engines. The following exchange of correspondence clarifies the intent of the amendment:

U.S. SENATE,
COMMITTEE ON GOVERNMENT OPERATIONS,
Washington, D.C., May 7, 1974.

To: All members of the Committee on Government Operations.

In the near future the Government Operations Committee will mark-up legislation to create a new Energy Research and Development Administration (S. 2744). At that time we will propose an amendment to the provision which would transfer certain Environmental Protection Agency research and demonstration activities to the new agency.

We do not believe it is sound public policy to separate pollution control technology from pollution and control regulations. Enforcement policies should be based on good research and adequate demonstrated techniques so that the agency can make sound decisions as to actual pollution control requirements. To transfer an important part of the agency's program could harm the public interest and lead to less well based enforcement decisions.

We do not question the importance of the proposed agency having a strong environmental component but it should not replace or duplicate EPA's activities. Instead of removing this function from EPA, full coordination between EPA and ERDA should be required to assure that EPA's research capability is utilized.

It is not enough for EPA to maintain an ability to "assess" pollution control developments; the Agency must be able to stimulate such developments and to participate actively in that process in order to understand the problem with particular technologies.

Further, a transfer of this sort could delay the development of essential pollution control technology for one to two years. Much of the clean-up technology for energy sources is similar to that required for steel, smelters, chemical plants and other industrial sources. Separation would simply lead to expensive duplication. EPA needs a substantial research and development program because of the requirements of the Clean Air Act, Federal Water Pollution Control Act, and other environmental laws.

The course we will propose should be an acceptable alternative. We will propose that ERDA have the technical capacity to coordinate with EPA, the in-house capabilities to develop new energy technologies which are environmentally acceptable, and a mandate to assimilate the pollution control technologies developed for existing sources.

We hope you will join with us in this effort to improve the capabilities of the new Energy Research and Development Administration while maintaining the technical capabilities of the Environmental Protection Agency.

Sincerely,

JACOB K. JAVITS, U.S.S.
EDMUND S. MUSKIE, U.S.S.

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C., May 17, 1974.

Hon. EDMUND S. MUSKIE,
U.S. Senate,
Washington, D.C.

DEAR ED: Thank you for the letter from you and Senator Javits advising me of your proposal to amend the pending ERDA measure (S. 2744) regarding the transfer of energy research functions presently administered by the Environmental Protection Agency.

I agree with your objectives to insure that EPA will continue to have the confirmatory research capability to back up its regulatory responsibilities regarding the Clean Air Act. I also appreciate the need for EPA to have "in-house" technical competence in the pollution control technologies which are associated with automotive and stationary powerplant emissions.

One aspect of this matter does disturb me, however.

As you know, the two principal R & D programs involved—alternatives to existing automotive engine technologies and emission control in stationary powerplant combustion cycles—are perhaps the two most critical areas of energy concern for the immediate future. Automotive uses now amount to about 40 percent of our consumption of scarce petroleum resources, and the use of the vast American coal resource for electric power production represents our most promising hope for near-term energy independence.

Obviously, R & D associated with automotive engines and stationary powerplants must constitute a major part of ERDA's effort. Furthermore, the environmental factors are among the most difficult technical problems of energy production and should be major concerns of ERDA in these *and every other technology* it approaches.

I feel strongly, therefore, that whatever action the Committee may take on the EPA programs must clearly indicate:

- (1) that the EPA program alone is not considered to be an adequate Federal research effort in these two major energy technologies; and
- (2) that the proposed ERDA would be expected to pursue whatever R & D into automotive engines and stationary combustion cycles appears to be needed, *including the environmental aspects of each.*

If these areas of R & D were removed from ERDA's authority, I believe there would be serious question whether the agency could fulfill its responsibility to develop a comprehensive Federal R & D program.

I hope you can accommodate my concerns in the specific recommendations you will make to the Committee.

Sincerely,

HENRY M. JACKSON,
Chairman.

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
Washington, D.C., May 25, 1974.

HON. HENRY M. JACKSON,
U.S. SENATE,
Washington, D.C.

DEAR SCOOP: Your letter of May 17 discusses important points regarding the concerns Senator Javits and I raised questioning the transfer of the Environmental Protection Agency's pollution control research and development functions to the proposed Energy Research and Development Administration (S. 2744). I am sure that our amendment is consistent with the philosophy behind the proposal to create the Energy Research and Development Administration, and I believe your concerns can be satisfied.

S. 2744 specifically divides regulatory research from developmental research, with the latter being transferred from existing agencies to the Energy Research and Development Administration. The former remains in the parent agency.

In fact, in the case of atomic energy, a new regulatory research activity is created through the establishment of the Office of Nuclear Safety Research (Sec. 203) within the new Nuclear Safety and Licensing Commission, which is to be a regulatory body. That research function is *not* transferred to Energy Research and Development Administration, and it should not be.

But in the case of the Environmental Protection Agency, virtually all energy related pollution control research and development is transferred under S. 2744. This research and development is primarily related to regulatory programs. In fact, the Environmental Protection Agency has never had significant funding for purely developmental research.

The Office of Management and Budget has announced that \$105 million of the \$112 million pollution control budget in the Environmental Protection Agency for FY '75 is to be transferred to the Energy Research and Development Administration. This is not developmental research for energy systems. It is intended for near-term research aimed at emission control related to the regulatory responsibilities of the agency.

Your letter mentions alternatives to existing automobile engines. If the Environmental Protection Agency had a significant effort to develop a new propulsion system designed to achieve high *full economy*, transfer might be appropriate. But it does not. The Advanced Automotive Power Systems effort is to develop a *low emission* vehicle. Environmental Protection Agency personnel in this area have concentrated substantial effort on low emission characteristics of retrofit technology and modification of present engine systems. The little development work done on systems such as the electric car have principally been contract work, and have been small efforts.

Also many of the people in the Environmental Protection Agency involved in the Advanced Automotive Power Systems program provide technical back-up to the regulatory program. Transfer of these personnel would take an important part of the technical base of the automobile emission's regulatory program from the agency.

In addition, it should be pointed out that the approach Senator Javits and I propose is consistent with S. 2176, the National Fuels and Energy Conservation Act of 1973 which you sponsored, and which passed the Senate last December. Section 13 of S. 2176 created a new program for the development of an energy efficient and environmentally sound automobile, but it maintained and recognized the Environmental Protection Agency's program for low emission research.

That precedent should be the model for the Energy Research and Development Administration as well. The development of better automobile fuel economy should be a high priority for the Energy Research and Development Administration and is clearly authorized under S. 2744, but it need not be at the expense of the Environmental Protection Agency's regulatory research program.

Your letter also raises concern over stationary power plant combustion cycles. I certainly agree that the Environmental Protection Agency's program should not constitute the entire federal effort in this area. The Environmental Protection Agency has clear and precise regulatory responsibilities to control the pollutants associated with such energy system—primarily existing sources and new sources which rely on existing energy technologies. Their research effort is directly related to those responsibilities, and should remain in the agency.

This should in no way interfere with the Energy Research and Development Administration's efforts to establish a much-needed developmental effort in combustion cycles. The Energy Research and Development Administration's developmental efforts should include detailed attention to limiting environmental by-products of new technologies. But the capability should be built into the Energy Research and Development Agency, not acquired at the expense of our efforts to clean up existing sources of pollution. Our amendment emphasizes the need for such cooperation. But the principal responsibility for research supporting environmental regulations must remain in the Environmental Protection Agency.

In summary, I believe it is possible to create a viable and strong Energy Research and Development Administration. I do not believe it is necessary or desirable to damage the Environmental Protection Agency's regulatory research program in the process. I believe our recommendation will be consistent with those objectives and with your concerns.

Sincerely,

EDMUND S. MUSKIE, U.S.S.,
*Chairman, Subcommittee on
Environmental Pollution.*

TITLE II—NUCLEAR SAFETY AND LICENSING COMMISSION

Section 201. Establishment and Transfers

Section 201 establishes the Nuclear Safety and Licensing Commission as a new independent regulatory commission. It replaces the Atomic Energy Commission which is abolished under section 104(a).

Except for the new name of the Commission and its designation as a solely regulatory agency, subsection (a) is identical to section 21 of the Atomic Energy Act. Sections 21 and 22 of the Atomic Energy Act (42 U.S.C. 2031 and 2032) are technically repealed by section 104(a) of this act. Section 22 of the Atomic Energy Act is incorporated into subsections 201(b) through (f) of this act along with new provisions to provide bipartisanship and technical qualifications on the Commission.

Subsection (a) provides the same membership and the same rules for transacting routine business as presently in the AEC. Each of the five members shall be United States citizens, shall have equal responsibility and authority and full access to information and shall have one vote. The Chairman shall be designated from among the members by, and serve at the pleasure of, the President; shall preside at meetings of, be the official spokesman for, and see to the faithful execution of the policies and decisions of, the Commission. A quorum of three is required to transact business, and action shall be taken by majority vote of members present. There is also provision for an official seal of the Commission.

The committee believes that the organization of the Commission—under a Chairman who is specifically authorized to see to, and report periodically on, the faithful execution of its policies and decisions—allows for effective coordination and supervision of the three major line functions of the NSLC. As reported by the committee, the bill establishes three basic, coequal divisions—safety, safeguards and research—each under a Director having direct access to the Commission. It is contemplated that the Office of Administration, now attached to the Director of Regulation of the AEC, will be attached to the Chairman of the Commission to assist in coordinating the duties of the three Directors, consistent with the policies and directives of the Commission. This arrangement will upgrade the role of the Commission, eliminate the high-level management position of Director of Regulation, and promote a freer exchange of views and ordering of regulatory priorities within the NSLC. (A detailed explanation of the new organization and comparative organization charts are contained in section VI of this report.)

Subsection (b) provides for appointment, confirmation, technical qualifications and political balance among the Commission members.

Paragraph (1) provides for appointment by the President with the advice and consent of the Senate.

Paragraph (2) requires the President, in selecting the members, to have a due regard to fair representation of expertise in nuclear safety technology, health science and environmental science. The committee intends that, to the greatest extent practicable, each of these three technical specialties should be represented by three members on the Commission, with the exception of present AEC members who are appointed by the President to serve on the NSLC.

The mix of three technical and two nontechnical members on the NSLC is intended to acknowledge a dual need: (1) to face up to the complex technology and inherent hazards of civilian nuclear power and (2) to address the complex economic and legal questions in the regulation of this new major industry. Neither aspect of nuclear power should be represented on the Commission to the exclusion of the other. This provision is designed to ensure the necessary balance.

These qualifications are intended to be broad enough to allow a wide choice from among highly qualified individuals in related fields covered by each category. For example, to represent the area of nuclear safety technology, a Commissioner need not be a specialist in reactor safety. He should have advanced technical training, such as a doctorate in physics or engineering, but his speciality can be in nuclear materials safeguards, nuclear waste disposal, transportation, or in other major areas related to the generic concept of nuclear safety. A Commissioner, to be representative of health science, can be, for example, a physician, biophysicist, radiologist, researcher or professor whose main interest and experience is in the field of medicine or public health. Environmental science can be, for example, represented on the Commission by a technically qualified individual whose specialty relates to ecology, pollution control or other aspects of studying and preserving the environment.

The example of the Banking Act of 1935, requiring similar fair representation of interests on the Federal Reserve Board, was followed in this subsection.

Paragraph (3) requires that not more than three members of the Commission shall be members of the same political party. This is intended to correct the anomolous situation in which the AEC is the only Federal regulatory commission on which neither bipartisanship nor fair representation of interests is required. At present, all five AEC Commissioners are Republicans.

Subsection (c) provides that the terms of the five members shall be staggered from 1 to 5 years by the President when he makes initial appointments to the Commission.

Subsection (d) requires that such initial appointments shall be submitted to the Senate within 60 days of the signing of the act. It also specifically exempts present members of the AEC from the political balance and technical requirements of subsections 201(b)(2) and (3). Present AEC Commissioners may be appointed to the NSLC and confirmed by the Senate for a period not to exceed the unexpired portion of their present term. Any subsequent appointment of such individuals would be subject to Senate confirmation on the basis of technical and political balance requirements cited above.

Under the original bill, members of the AEC would have automatically become members of the NSLC without the need for Senate con-

firmation. The committee firmly believes that fresh consideration by both the President and the Congress as to who should serve on the new Commission is warranted by the fact that the NSLC will have an exclusively *regulatory* function, as compared with the *combined* developmental and regulatory functions of the AEC.

To assure the constitutionality of naming new Commissioners, the bill as reported by the committee, takes the technical form of *abolishing* the AEC and *transferring* its regulatory functions to a newly established NSLC. Under the original bill, the AEC was *renamed* and the regulatory functions were *retained* by the renamed Commission. The net effect is the same, but a potential constitutional problem is averted. The committee was advised that without the abolition and transfer, Congress could be construed to be exercising a removal power not provided by the Constitution. The problem is avoided by establishing a new commission and providing for Senate confirmation of its members.

Subsection (e) provides for compensation of the NSLC Chairman at executive level II (\$42,500 a year) and of the four other members at level III (\$40,000 a year)—the same salary schedules as presently provided for the Chairman and members of the AEC. It should be noted that these are higher levels than provided the chairmen and members of other regulatory bodies, which are usually at level III and IV respectively. The committee supports these higher pay grades for NSLC members because of the awesome responsibilities involved in regulating what is potentially the world's most hazardous technology. The committee, therefore, wishes to stress that special care should be taken to ensure that only the most uniquely able and qualified individuals are appointed to the Commission by the President and confirmed by the Senate.

Subsection (f) provides for removal by the President for inefficiency, neglect or malfeasance and bars members from engaging in business or other outside interests.

Subsection (g) transfers to the new Commission all the licensing and related regulatory functions of the AEC, its Chairman, members, general Counsel and other officers and components—all of which are excepted from the transfer to the ERDA Administrator by section 104 (c) of the act. The functions relate specifically to all facilities, materials and activities in the civilian nuclear industry which are now under the jurisdiction of the regulatory side of the AEC.

Subsection (2) specifies the transfer of certain functions and personnel to NSLC from among, and in addition to, those transfers generally provided in subsection (g).

Paragraph (1) specifically transfers the Advisory Committee on Reactor Safeguards, the Atomic Safety and Licensing Board Panel and the Atomic Safety and Licensing Appeal Panel. Each of these is essential to the NSLC's effective operation, and the committee wanted to ensure their complete transfer to the new Commission.

Even in its new role as a Commission with only regulatory responsibility, it is unreasonable to expect that the five Commissioners would be able to do what the appeal panel now does in terms of reading and analyzing voluminous case records and technical reports, and at the same time perform all of the Commission's other regulatory roles.

The continued existence of the appeal panel will ensure that the Commission will be able to oversee the licensing and rulemaking workload while carrying out its principal administrative and coordinating functions essential to the Nation's health, safety, security, and energy supply.

Paragraph (2) transfers to the Commission all AEC research personnel whose primary responsibility is confirming the safety of reactors licensed under the Atomic Energy Act. There is an exception, however, which permits the Office of Management and Budget to determine how many such individuals should not be transferred because they are needed to assist in ERDA's reactor development program.

It should be stressed, however, that this paragraph is intended to provide the personnel needed to give the regulators of nuclear power their first in-house research capability to determine for themselves the safety of the reactors they license and inspect. Its intent is to sharply modify the present heavy dependence of the nuclear regulators on the development and promotional side of the AEC for safety research. One of the basic purposes of this act is to separate the regulatory functions of the AEC from its developmental and promotional functions, and this is intended as a key provision to carry out that purpose. The quality and number of researchers transferred by OMB to NSLC should reflect that purpose.

The source of all or most of the transferred research personnel will be the Office of Reactor Safety Research on the development side of AEC. All of the research managed by the office is for the regulatory side of AEC. There are now 54 research managers in that office. Most of them specialize in the safety of light water reactors—by far the most common reactor licensed today.

It is the intent of this act to transfer as many light-water reactor safety specialists as practicable to a new Office of Nuclear Safety Research in NSLC, which is established by section 203. The new research office is designed specifically not to be duplicative or to deprive ERDA of the resources it needs for its own safety research.

The committee cites the increasing numbers of defects, abnormal occurrences and shutdowns being reported in nuclear powerplants—nearly half of them attributed by the AEC to possible design or fabrication deficiencies—as pointing up the need for the transfer of safety research personnel to the new regulatory commission as provided in this subsection.

It should be noted that research facilities—including the AEC's national laboratories and test reactors—will be transferred to ERDA. NSLC safety research, therefore, either will be managed by NSLC personnel in ERDA facilities or will be contracted out altogether.

By transferring safety research personnel to NSLC, the committee clearly intends, however, to establish in NSLC the capability to manage or conduct its own research, to the extent the Commission considers necessary. The intent is not to limit NSLC to evaluating research performed for it by ERDA or other outside contractors.

Section 202. Licensing and Related Regulatory Functions Respecting Selected Administration Facilities

Section 202 extends the licensing and related regulatory authority of NSLC beyond the present provisions of the Atomic Energy Act to include certain reactors and waste storage facilities that will be owned and operated by ERDA.

The committee intends this subsection to be a major enhancement of the new regulatory commission's authority, enabling it to develop early expertise in new generations of nuclear technology as they approach commercial application. As also discussed in the analysis of subsection 203 (c) (3), relating to the Commission's research function, the committee believes that it is essential for NSLC to have the capability to develop expertise in reactor safety earlier in the developmental process than is now the case for the AEC Regulatory Division. The expected result will be to speed up the eventual licensing of new commercial reactors and other commercial nuclear facilities. This purpose is implemented as follows:

Paragraphs (1) and (2) are intended to extend NSLC's authority and responsibility under the Atomic Energy Act to license and otherwise regulate any nuclear power reactors to be built by ERDA or with ERDA financial assistance for the express purpose of demonstrating the commercial feasibility of such a power reactor concept for the generation of electricity in an electric utility system.

Such reactors comprise the following:

- Demonstration reactors (i.e., adaptable for generation of electricity and of substantial size) using the LMFBR technology.
- Demonstration reactors using any other power reactor concepts, except those which are already in existence. (The AEC has advised the committee that only one such demonstration reactor, located in Shippingport, Pa., is in existence and therefore excluded from this provision.)
- Experimental reactors of significant size which may not generate electricity but which are integral elements of demonstration programs which seek to establish the commercial feasibility of new power reactor concepts.

It is the intent of the committee to exclude from such regulation, research reactors, test reactors, safety reactors such as the LOFT, and small experimental reactors which are exploratory in nature, and which are not yet part of a demonstration program.

Paragraphs (3) and (4) provide NSLC the authority and responsibility for licensing and related regulation of retrievable surface storage facilities and other facilities for high-level radioactive wastes which are or may be authorized by the Congress to be built by ERDA or with ERDA financial assistance for long-term (tens to hundreds of years) storage of such radioactive wastes generated by the Administration or to which present high-level radioactive wastes may be transferred by the Administration in the future. It is not the intent of the committee to require licensing of such storage facilities which are

already in existence or of storage facilities which are necessary for the short-term storage of radioactive materials incidental to ERDA's R. & D. activities.

These two paragraphs anticipate the time, probably in the 1980's, when commercial nuclear power reactors will generate more high-level radioactive waste materials than reactors in the Government sector, including those used in the weapons program. At present, most of the wastes which are leaking from temporary tanks in AEC storage facilities are from the weapons programs. The committee intends that new facilities now being planned for long-term storage of commercial wastes will meet the strict licensing standards of NSLC.

Section 203. Office of Nuclear Safety Research

Section 203 establishes an Office of Nuclear Safety Research to manage or conduct, with its own personnel, the necessary research for the Commission to discharge its licensing and related regulatory functions. Although NSLC can contract out to ERDA for the performance of some safety research, the committee clearly intends that the Office of Nuclear Safety Research shall provide NSLC with the capability to independently confirm the safety and security of commercial reactors and other nuclear facilities subject to licensing and inspection by the Commission.

The office is designed to replace the present system in which the regulatory division of the AEC is wholly dependent upon the development side of the AEC for the research personnel and facilities needed to conduct regulatory safety research.

Thus, the committee specifically intends that the Office in NSLC be considerably more than a skeletal staff of evaluators of ERDA research. If this is not done, the weaknesses of the present system would be perpetuated.

One of the declared purposes of this act (section 2(c)) is to separate the developers from the regulators of commercial nuclear power. This section is intended by the committee to be one of the key provisions to carry out that purpose. The necessary research personnel are transferred from the development side of the AEC to the new independent regulatory Commission by section 201 (h) (2). All of the AEC's research facilities are transferred to ERDA by section 104 (c) in acknowledgement of the long-standing experience on the development side in managing these capital-intensive installations valued at nearly \$10 billion.

The committee intends that those facilities now used primarily for performing regulatory research—in particular, the Power Burst (PBF) and Loss of Fluid Test (LOFT) facilities—should be operated by ERDA primarily for NSLC-managed research. These facilities are designed to test for potential defects in Light Water Reactor (LWR)—the most common commercial reactor being licensed and inspected by the Regulatory Division of the AEC. They will have little use in ERDA's reactor-development programs which involve primarily the High Temperature Gas Cooled (HTGC) and Liquid

Metal Fast Breeder (LMFBR) reactors, for which other test facilities are used.

Therefore, the transfer to NSLC of personnel specializing in the management of research relating to the safety of licensed reactors, and the utilization by these personnel of suitable ERDA-operated facilities, will enhance the regulatory role of NSLC without impinging upon the development programs of ERDA.

In view of the increasing number of defects, abnormal occurrences and shutdowns involving light water reactors—nearly half of which are attributed by the AEC to design and fabrication problems—the committee concluded that the public interest would be best served by establishing related safety research in the new regulatory Commission rather than in ERDA. This subsection establishes the research office. Subsection 201 (h) (2) transfer the research personnel, with OMB determining the number of safety researchers needed to be retained by ERDA for its reactor development program.

The committee recommends that the vast majority of the 54 personnel now in the AEC Office of Reactor Safety Research should be transferred to NSLC. The fiscal year 1975 budget for the new Office of Nuclear Safety Research is estimated at \$53 million to cover research performed either by ERDA or NSLC personnel.

Subsection (a) establishes the Office under a Director of Nuclear Safety Research who is appointed and removable by the Commission. The Director is provided compensation at level IV of the Executive Schedule, and he is guaranteed direct access to the Commission. This elevated status places the Director on the same level in relation to the Commission as the Director of Nuclear Reactor Safety and the Director of Nuclear Materials Security.

Subsection (b) provides that the Director shall engage in or contract for research which he recommends and the Commission deems necessary to carry out the licensing and other regulatory functions of the Commission. As stated above, such research now primarily deals with the Light Water Reactor, the most common commercial reactor in use, under construction, and in the planning stage today.

Subsection (c) requires cooperation by ERDA and other agencies to assist the Director to carry out nuclear safety research on behalf of the Commission.

Paragraph (1) requires ERDA and other agencies to cooperate in the establishment of priorities for furnishing research services to NSLC. The committee intends that this will involve placing NSLC-requested research projects ahead of their own if such priority is warranted by safety considerations in the public interest.

Paragraph (2) requires ERDA and other agencies to furnish, or contract for, research on a reimbursable basis, as deemed necessary by the Commission to fulfill its functions. The committee intends that this provision obligates ERDA and the other agencies to provide research services required by the Commission, subject to an ordering of priorities as provided in paragraph (1). Furthermore, because ERDA will operate all nuclear research facilities, it has a special obligation to

make such facilities available to NSLC researchers—particularly the LOFT and Power Burst facilities, which are the most closely related to NSLC's regulatory functions.

Paragraph (3) requires ERDA and other agencies to cooperate with NSLC on research and development matters of mutual interest, including providing access to information and facilities, for the sole purpose of assisting the Commission to acquire the expertise necessary to perform its functions. Although there are general provisions in the Atomic Energy Act that may ensure NSLC personnel access to ERDA information, (sections 146b, and 161c) there is none to guarantee physical access to ERDA facilities.

This paragraph is intended to assure NSLC the access to ERDA information and facilities which the Commission needs to develop safety expertise in advanced reactor technologies as they approach the commercial development and licensing stage. This arrangement will facilitate NSLC's anticipating safety problems at an earlier stage than currently practicable and will thereby serve to speed up, rather than hinder, the licensing of new generations of reactors.

For example, this provision will ensure NSLC access to the Fast Flux Test Facility (FFTF), the major facility for safety testing of the Liquid Metal Fast Breeder Reactor. The reactor itself is being built on a demonstration basis near Oak Ridge, Tennessee. NSLC's access to the demonstration reactor is guaranteed by section 202(1). But NSLC researchers may need to observe or evaluate fast breeder safety design tests at the fast flux facility. This provision, section 203(c)(3) will ensure access.

The committee stresses that this provision in no way authorizes NSLC to use such informational and physical access for the purpose of licensing or otherwise regulating the fast flux facility or other ERDA test reactors and experimental facilities. The safe operation of noncommercial facilities, which are owned and operated by ERDA, will be strictly the responsibility of ERDA. The only exceptions, in the form of specific extensions of NSLC's licensing authority, are provided in section 202.

Subsection (d) states that nothing in subsections (a) and (b) of this section shall limit any ERDA functions relating to the safety of activities within its own jurisdictions.

Section 204. Bureau of Nuclear Materials Security

Section 204 establishes a new Bureau of Nuclear Materials Security to carry out all of the Commission's line functions relating to the safeguarding of licensed nuclear materials and facilities against threats, thefts, and sabotage. At present, these functions are now carried out by safeguards personnel who are combined with reactor safety, environmental and antitrust personnel in three regulatory directorates of the AEC. The committee clearly intends to separate the safeguards personnel and organize them into a high-level unit that can effectively

exercise all functions needed to protect the public from the hazards inherent in the planned proliferation of explosive and toxic nuclear materials in the nuclear power industry. The committee clearly does not intend to establish a unit limited to only policy advisory functions.

Subsection (a) establishes the Bureau and provides that it shall be headed by a Director of Nuclear Materials Security who is appointed and subject to removal by the Commission. The Director is to be compensated at level IV of the Executive Schedule, and he is guaranteed direct access to the Commission.

This subsection is intended to clearly establish the authority of the Director as the chief officer responsible for carrying out all the safeguards responsibilities and directives on behalf of the Commission, including regulations, licensing, inspections and enforcement. His level IV status places him at the same level in the organization as the Director of Nuclear Reactor Safety and the Director of Nuclear Safety Research, with the same direct access to the Commission. Thus, he is required to report only to the Commission on the execution of his functions, as detailed in subsection (b), and on the organization and day-to-day operations of the Bureau. He is granted autonomy within the regulatory organization, but is clearly subordinate to the Commission.

By designating the materials security unit a bureau, rather than an office, the act acknowledges the unique security and enforcement responsibilities of the Bureau within the NSLC. For example, section 204(b) (5) requires the Director to make recommendations to the Commission and to the Congress within 1 year on establishing a Federal security force within the Bureau. Generally, the Director will be responsible for coordinating with Federal, State, local and private-sector security agencies in the protection of industrial nuclear materials and facilities from internal and external threats.

Subsection (b) enumerates the functions of the Director of Nuclear Materials Security.

Paragraph (1) provides that the Director shall recommend regulations for safeguarding against threats, thefts, and sabotage involving special nuclear materials, high-level radioactive wastes and nuclear facilities resulting from all activities licensed under the Atomic Energy Act.

The committee clearly intends to bring under the jurisdiction of the Director any nuclear materials at any stage of the nuclear fuel cycle which, if diverted by misguided individuals, would constitute a substantial hazard to the public, either on the basis of their explosiveness or toxicity. The same standard applies to protecting licensed nuclear facilities from sabotage. The Director is the one Federal officer below the Commission to whom the Nation should look for the physical protection of the licensed nuclear industry. His recommendations on regulations should reflect a careful appraisal of what the industry and State and local authorities can be reasonably expected to provide

in the way of protection, and what the Federal Government must provide, to ensure maximum security for the Nation at large.

Paragraph (2) provides that the Director shall enforce safeguards regulations which are promulgated by the Commission, generally upon his recommendation.

The recent Rosenbaum report, prepared for the AEC by a team of outside consultants, found the present safeguards system under current AEC regulations to be "entirely inadequate" to meet the threat of theft of potentially explosive materials and the subsequent clandestine manufacture of bombs.

It should be noted that while the job of safeguarding commercial nuclear material is enormously important, the job itself is manageable and well within the bounds of available technology. There are now approximately 570 licensed facilities which are authorized to possess approximately 1 million pounds of plutonium and enriched uranium. But 99.8 percent of this authorized material, about half of it of weapons-grade, is located in about 100 facilities. Of these, 27 were fuel facilities where theft is considered a problem, because the nuclear materials are in a form that can be easily handled. The remaining facilities are reactor sites where the fuel is highly radioactive, making theft unlikely. Furthermore, of the 27 fuel facilities, only 19 are listed by the AEC as major facilities. Thus, the present commercial safeguards efforts against theft can be focused on less than 20 major facilities, and this figure is expected to grow by only another 20 by the 21st century.

The weakest link in the commercial nuclear fuel cycle is the transportation of "trigger quantities" of potentially explosive materials—4.4 pounds of plutonium, 11 pounds of enriched uranium—from one facility to another. In the year ending March 31, there were 455 such shipments—mostly in conventional trucks without armed guards. Two armed guards were required with each shipment beginning in March. But the number of shipments each year will climb into the thousands over the next two decades, and tighter security will be needed to prevent thefts by terrorist groups.

Still, the armored truck technology is now at hand in the transportation of weapons parts and assembled bombs by the AEC, just as there is now a sophisticated alarm and detection system in the facilities producing these weapons.

In the committee's view, there is no justification whatever for the failure to utilize these currently available technologies in the commercial sector. The fact that current AEC regulations result in commercial facilities and shipments not being as well guarded as weapons facilities and shipments is viewed by the committee with great concern.

Pursuant to this paragraph (2), the Director can recommend to the Commission new regulations that can bring a swift remedy to the problem.

This paragraph is also intended to make clear the supremacy of the Commission, including its authority to issue such regulations as it determines are necessary, regardless of the Director's recommendations. At the same time, the high executive status of the Director will enable him to make the strongest possible presentation of his recommendations to the Commission.

The clear authority of the five-member Commission over the activities of the Director should allay fears associated with the possible establishment of a national security force within the Bureau. It is the intention of this act to safeguard nuclear facilities and materials without altering the constitutional safeguards or the traditional openness of our society. Congressional oversight relating to the activities of the Commission in general and the Bureau in particular will also serve to protect the public interest while protecting the security of the nuclear industry.

Paragraph (3) provides that the Director shall be responsible for monitoring, testing and upgrading internal accounting systems for special nuclear materials used in the licensed industry.

This function relates primarily to safeguarding against internal diversion of materials from fuel facilities and reactor sites. If successfully diverted by an employee or infiltrator, even in small amounts over a period of time, these materials could be fashioned by reasonably skilled individuals into nuclear bombs or deadly dispersal devices.

The Rosenbaum report laid particular emphasis on the inadequacy of the present internal accounting systems in the nuclear industry. The Director will have as one of his most urgent tasks the evaluation and upgrading of this system so that there can be reasonable assurance that sneak-thief diversions can be prevented or can be detected if they do occur. Essential to this effort will be so-called "black hat" gaming techniques, or actual undercover attempts to surreptitiously remove nuclear materials from facilities, to test the adequacy of the system and detect potential paths of diversion.

Paragraph (4) requires the Director of Nuclear Materials Security to develop contingency plans in consultation and coordination with his counterpart in ERDA for dealing with nuclear threats, thefts and sabotage in the licensed nuclear industry.

This paragraph acknowledges the obvious connection between safeguarding weapons-grade and toxic nuclear materials, whether they are used in the test reactor and weapons programs of ERDA or in the nuclear power industry regulated by NSLC. If successfully diverted from either sector, they spell serious danger for the public at large.

Therefore, the Director of the new Bureau of Nuclear Materials Security in NSLC should work closely with the Director of the ERDA Division of Safeguards and Security which will be transferred from the development side of the AEC by this act. The importance of drawing upon the long safeguards experience and sophisticated techniques related to the AEC's weapons program is made all the more

urgent by the AEC's estimate that the nuclear power industry will generate more weapons-grade material than will the government weapons programs after 1980.

The need for coordinated contingency planning is essential to developing an effective and comprehensive Federal response to suspected or actual nuclear thefts and to blackmail demands. It is particularly important that there be full coordination not only between responsible authorities in ERDA and NSLC, but with other concerned agencies as well, including the Department of Defense, FBI and CIA.

The Rosenbaum report recommended interagency agreements to work out these arrangements. The committee intends this paragraph of subsection (b) to authorize the Director to enter such agreements on behalf of the Commission.

Paragraph (5) requires the Director to conduct a thorough review of the desirability and feasibility of establishing a security agency within the Bureau to execute some or all of its safeguards functions. His report will be made within 1 year to the Commission, which will submit it to Congress as soon as it is received.

The committee intends that this report should explore every facet of the present industrial safeguards system. It should evaluate the adequacy of present safeguards and project ahead as to the capacity and the determination of the industry to institute new measures needed to keep pace with the projected proliferation of weapons-grade materials.

The Rosenbaum report recommended the establishment of a Federal nuclear protection and transportation service to immediately tighten security at licensed nuclear facilities and in the transporting of materials from one facility to another.

The report authorized in this subsection is intended to take up where the Rosenbaum report left off. It is also intended to study the recent internal reorganization on the general manager's (nonregulatory) side of the AEC in which separate safeguards and security divisions were merged into a new Division of Safeguards and Security to deal primarily with the weapons program. This example is especially relevant to the new regulatory Commission because the civilian nuclear industry, according to present projections, will be producing more explosive materials than the government weapons program after 1980.

The committee expresses the hope that the safeguards study and recommendations can be completed in far less than the year provided in this provision of the act. The need for upgrading the present safeguards system is urgent, and if Federal personnel are needed to protect licensed nuclear facilities and shipments, these steps should be taken without delay.

Paragraph (6) authorizes the Director of Nuclear Materials Security to engage in or contract for research in the safeguards area.

It is intended that this research, involving such elements as detection and alarm systems, materials inventory and accounting systems, and transportation technology, will be performed at the Director's

request by the Office of Nuclear Safety Research in NSLC. The research director will have the option to engage in the research with NSLC personnel, or to contract out to ERDA.

Subsection (c) provides that the safeguards functions of NSLC in the licensed sector in no way limit safeguards functions exercised by ERDA in the weapons, test reactor and other nonregulatory areas.

Section 205. Noncompliance

Section 205 requires officers and employees of licensed nuclear facilities, or of firms supplying components to, or constructing, these facilities, to report knowledge of safety defects or of noncompliance with NSLC regulations, or face civil or criminal penalties.

The committee intends by this provision to upgrade the system of detecting and anticipating the defects that increasingly have plagued the nuclear power industry and threatens its safety record on a daily basis. The application of this provision to component suppliers is intended to benefit electric utilities in particular, which usually have no way of knowing that a sealed, prefabricated part is defective until it triggers a shutdown costing tens of thousands of dollars a day in lost generating capacity.

The frequency of shutdowns has caused nuclear power plants to operate at an average of 58 percent of capacity in 1973, compared with the 80 percent projected originally. Out of a total of 39 operating plants, the AEC surveyed 27 which were licensed to operate for 3 months or longer, and found nearly a third (8) operating at less than 50 percent of capacity. The Federal Power Commission reported that the Nation's 1,017 fossil power plants, many of them relatively old and rated to operate at less than 50 percent capacity, operated at an average of 53 percent capacity in 1973.

Component failures accounted for more than half of the 861 abnormal occurrences in nuclear powerplants which were reported to the AEC in 1973. Often the defective components were relatively non-complex hardware items. For example, valves were the most frequent components involved in abnormal occurrences—amounting to 157 failures, or 19 percent of the total. Yet, the breakdown of a simple valve has potentially catastrophic implications. The system most frequently involved in abnormal occurrences (210) was the primary cooling system, which is used to prevent a meltdown of the nuclear core of a reactor. The system next most frequently affected by defects (166) was the emergency core cooling system, which prevents a meltdown in case the primary cooling system fails. A meltdown is the worst conceivable reactor accident; according to testimony, such an accident could result in breaching of the containment vessel of a powerplant and in the release of radioactive fallout equivalent to many Hiroshima bombs.

The table in figure 11 shows the operating statistics for the 27 nuclear powerplants surveyed by the AEC in 1973:

FIGURE 11.—Operating statistics of 27 nuclear powerplants surveyed by the AEC in 1973 (Licensed to operate 3 months or longer).

Plant	Type	Power level (MWe-Net)	Date Commercial Operation Started	Total Clock Time During the Period (Hours)	Total Time Generator On-Line (Hours)	Plant Avail. Factor (%)	Plant Capacity Factor (%)	Total Time Reactor Critical (Hours)	Reactor Availability Factor (%)	Remarks
Connecticut Yankee	PWR	575	Jan. 1968	8760	4420	51	48	4932	56	Refueled; Turbine problems
Haddam Neck, Conn										
Dresden-1	BWR	200	July 1960	8760	6374	73	35	6429	73	Refueled
Dresden-2	BWR	800	June 1972	8760	7672	88	74	7952	91	
Dresden-3	BWR	800	Nov. 1971	8760	5908	67	55	6183	71	Refueled
R. E. Ginna	PWR	490	Mar. 1970	8760	8325	95	87	8346	95	
Humboldt Bay	BWR	68	Aug. 1963	8760	7814	89	73	7838	90	
Indian Point-1	PWR	265	Oct. 1962	8760	0	0	0	0	0	Refueled; variety of inspections and repairs
Maine Yankee	PWR	790	Dec. 1972	8760	6644	76	52	6644	76	
Millstone Point-1	BWR	690	Mar. 1971	8760	3983	46	35	4217	48	Refueled; condenser tube leaks; feedwater spargers
Monticello	BWR	545	July 1971	8760	6241	71	68	6481	74	Refueled
Nine Mile Point	BWR	610	Dec. 1969	8760	6682	76	66	6745	77	Refueled
Oconee-1	PWR	886	July 1973	6168	3723	60	43	4355	71	
Oyster Creek	BWR	650	Dec. 1969	8760	6402	73	66	6497	74	Refueled
Palisades	PWR	821	Dec. 1971	8760	3853	44	41	3895	45	Refueled; steam generator tube leaks; core internals vibration
Pilgrim	BWR	664	Dec. 1972	8760	7571	86	73	7757	89	
Point Beach-1	PWR	497	Dec. 1970	8760	6867	78	67	7127	81	Refueled

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Plant	Type	Power Level (MWe-Net)	Date Commercial Operation Started	Total Clock Time During the Period (Hours)	Total Time Generator On-Line (Hours)	Plant Avail. Factor (%)	Plant Capacity Factor (%)	Total Time Reactor Critical (Hours)	Reactor Availability Factor (%)	Remarks
Point Beach-2	Two Creeks, Wis.	PWR	Apr. 1973	8760	8192	94	73	8376	96	
Quad Cities-1	Cordova, Ill.	BWR	Feb. 1973	8760	7437	85	73	7700	88	
Quad Cities-2	Cordova, Ill.	BWR	Mar. 1973	8760	7405	85	78	7686	88	
H. B. Robinson-2	Harrisville, S. C.	PWR	Mar. 1971	8760	6593	75	65	6802	78	Refueled; Turbine problems
San Onofre-1	San Clemente, Calif.	PWR	Jan. 1968	8760	5502	63	60	5576	64	Refueled; Turbine problems
Surry-1	Gravel Neck, Va.	PWR	Dec. 1972	8760	5378	61	53	5526	63	Broken pump shaft; Valve problems; Steam leaks; Turbine oil pump
Surry-2	Gravel Neck, Va.	PWR	May 1973	7200	5318	74	63	5592	78	
Turkey Point-3	Florida City, Fla.	PWR	Dec. 1972	8760	6954	79	58	7195	82	
Turkey Point-4	Florida City, Fla.	PWR	Sept. 1973	4896	3587	73	45	3937	80	
Vermont Yankee	Vernon, Vt.	BWR	Nov. 1972	8760	5354	61	43	5672	65	Refueled; Startup transformer; Offgas treatment system
Yankee Rowe	Rowe, Mass.	PWR	July 1961	8760	6222	71	68	6461	74	Control rod replacement; New control rod shroud assembly
Totals				228504	160421			165947		
Averages				8463	5942	70	58	6145	73	

The Atomic Energy Act contains no similar provision requiring the reporting of defects and noncompliance, subject to civil or criminal penalties. This provision is patterned closely after sections 15, 20 and 21 of the Consumer Product Safety Act. The committee believes that the unquestionable health and safety considerations implicit in the NSLC's need for information relating to nuclear defects is at least as imperative as the Consumer Product Safety Commission's need for such information in the product safety area.

The Commission has informed the committee that the defects-reporting system has worked well in its first year of operation. There have been 140 reports of product-safety defects, all of them bonafide, over a 12-month period. They have resulted in the issuance of only one civil penalty notice for noncompliance. Three cases involving refusals to comply with subsequent Commission directives are still pending. All other cases stemming from reports of defects were closed by means of voluntary compliance with Commission directives.

The committee expects that a similar record of bonafide defects reports and speedy compliance will be experienced by the NSLC. It is intended that this provision, combined with the requirement in section 207 for timely NSLC reports of abnormal occurrences, will substantially upgrade the Federal response to defects in all licensed nuclear facilities.

Subsection (a) requires any Director, officer and employee of any licensed nuclear facility, or of any firm constructing or supplying components to such a facility, to report immediately to the Commission information reasonably indicating (1) failure to comply with the Atomic Energy Act or regulations of the NSLC or (2) any defect which could cause a substantial safety hazard, unless he actually knows the Commission already has been informed. The committee intends, and the provision so states, that only "basic" components are covered by this requirement to report defects, as distinguished from incidental components unrelated to the safety of a nuclear facility.

Subsection (b) provides that persons knowingly violating this provision are subject to a civil penalty amounting to a fine of \$5,000 for each violation, not to exceed \$25,000, as provided in section 234 of the Atomic Energy Act.

Subsection (c) provides a criminal penalty for knowing and willful violation not to exceed a fine of \$50,000 or 1-year imprisonment, or both.

Subsection (d) requires that the details of this provision be posted prominently in licensed nuclear facilities.

Subsection (e) authorizes the Commission to conduct reasonable inspections and other enforcement activities to insure compliance with this provision.

Section 206 Information and Studies

During the course of hearings on S. 2744, testimony was presented by several witnesses concerning the disadvantageous position of public intervenors in AEC licensing cases. There was some discussion of the disparity in financial capability—the utilities may budget from \$500,000 to \$1 million to present their case in a major licensing proceeding, while intervenors consider themselves fortunate to have \$150,000 to fight it—but the major thrust of the testimony concerned access to ex-

perts and technical data. This testimony demonstrated the very real difficulty that AEC intervenors have in presenting an effective case when technical experts and data are unavailable or available only in a limited manner through the AEC. As a practical matter, the vast majority of experts in nuclear engineering are employed either by the AEC or the electric power industry; it is a rare nuclear engineer who works outside this field who might be available to serve as an expert or do technical studies on behalf of intervenors in AEC licensing and rulemaking proceedings.

To partially correct this imbalance between public and other hearing participants in AEC licensing cases, the Committee adopted section 206. The section makes the Commission, ERDA, other government agencies, or outside contractors, available as potential sources of data, studies, or technical assistance.

Under the section, any participant in a licensing or rulemaking hearing may make good faith requests for relevant studies or reports from the Commission. The Commission is only required in the first instance to accept requests which are "made in good faith" and which are "relevant." This is designed to assure that an intervenor will not have a vehicle for delaying a hearing by presenting frivolous requests for reports and then seeking repeated appeals of the Commission's denials of such requests.

If the requested studies or reports are in existence, they would be made available to the requesting party in a timely manner. If they are not in existence and must be prepared in response to the request, this section sets out the criteria and procedures which govern whether they should be prepared and made available.

Subsection (a) provides that the Atomic Safety and Licensing Board will determine "if such studies or reports are reasonably necessary for the requesting party to present its position in the proceeding or hearing, and are in the public interest". Rights under the remainder of the section are predicated on this determination. Under subsection (a), the requesting party must be promptly notified of the Board's determination, and the determination may be reviewed under normal procedures by the Commission.

In making the determination as to reasonable necessity in presenting a case, the Board or Commission might consider such factors as the significance of the information sought, the availability to the requestor of the material from other sources, relevance of the study to issues in the proceeding, and the degree to which the request is essential to the requesting party's position.

If a dispute arises as to whether a report offered by the Commission is responsive to the party's request, that dispute would be resolved in the first instance by the Atomic Safety and Licensing Board.

Subsection (b) allows the Commission to obtain reimbursement of its costs of preparation where the party possesses the necessary financial resources. This provision would not be used to bankrupt citizen groups, but to obtain reimbursement where a party is clearly able to pay, such as a utility.

If a party is capable of contributing to or reimbursing the Commission for the cost of preparation of a study or report, and refuses to do so, the Commission might then refuse to prepare, or discontinue

the preparation of, the study or report, unless the Commission found it in the public interest to prepare the study or report, notwithstanding such refusal to contribute to or recompense the Commission for the cost of preparation.

The Commission should notify requesting parties of its intention to seek reimbursement and the estimated cost of the reports or studies at the time of the request for the work.

Subsection (c) provides that when the Commission shall be of the opinion that a determination under subsection 206(a) involves a controlling question of law as to which there is a substantial ground for difference of opinion and that an immediate appeal from the determination may materially advance the ultimate termination of the litigation, it shall so state in writing in its determination.

The determination with respect to allowing such an appeal would normally be made by the Atomic Safety and Licensing Appeal Board upon application to it. It is this Board which has been delegated the appellate review functions of the Commission. The court of appeals for the District of Columbia may, thereupon, in its discretion, permit an appeal to be taken from such determination, upon application within ten days of the time the requesting party is notified of the determination of the Commission. Application for an appeal would not operate to stay proceedings of the Commission unless the Commission or the court of appeals or a judge thereof so ordered.

Thus, subsection (c) is intended to provide for appeal in an orderly but timely fashion of what may subsequently turn out to be a controlling question, but the subsection also provides an explicit safeguard in its final proviso against the danger that the appeal will result in delay of the NSLC proceedings.

Subsection (d) makes clear that the report in question must be available for inclusion in the record but will only be received in evidence if it is relevant, material and reliable. The authors and others who worked on preparing it would, of course, be available for cross-examination in the hearing if the report were received in evidence.

The provisions of section 206 in no way alters any of the exemptions to the provisions of the Freedom of Information Act.

Section 207. Abnormal Occurrence Reports

Section 207 requires the Commission to make quarterly reports to Congress on full details of abnormal occurrences at licensed nuclear facilities and to widely disseminate initial information to the public within 5 days of learning of each incident. Specifically, the initial public reports must include the date, place and nature of each abnormal occurrence. In addition the quarterly congressional reports must state the cause and any action taken to prevent recurrence of each incident.

A detailed discussion of the nature and importance of abnormal occurrences in relation to nuclear defects appears on page 67 of this report (section 205). In addition the committee wishes to make clear its intention that the Commission's abnormal occurrence reports cover all licensed nuclear facilities and activities. Earlier this month, the AEC issued its first annual report on abnormal occurrences,

and it covered only those incidents which took place at nuclear powerplants. The intention of this provision is to require comprehensive reports to Congress, and initial reports to the public, relating to all abnormal occurrences in the licensed sector.

For example, materials unaccounted for and faulty alarm and detection systems in licensed nuclear fuel facilities should be included in abnormal occurrence reports. Similarly, mechanical breakdowns, leaks and lost shipments in the course of transporting licensed nuclear materials should also be the subject of these reports. Also, abnormal occurrences at high-level radioactive waste-disposal facilities, at such time as they come under the licensing provisions of this act, should be included in these reports.

The committee also notes that, to date, there are no uniform criteria as to what constitutes abnormal occurrences. The AEC states in its first such report that the definition is "still undergoing evolutionary change," varying from plant to plant, and resulting in "a lack of uniformity in what is reported to the AEC." The committee expects that this provision will be broadly interpreted, and intends that reports made to Congress and the public under this provision shall be based on uniform criteria so that the data can be evaluated intelligently and in the national interest.

Section 208. Other Officers

Section 208 provides for the appointment of a Director of Nuclear Reactor Safety and for nine unspecified executive-level officers.

Subsection (a) authorizes the Commission to appoint a Director of Nuclear Reactor Safety, who reports directly to, and is removable by, the Commission. This position is intended to succeed the AEC Director of Regulation who now is compensated at level V on the Executive Schedule.

The Director of Nuclear Reactor Safety is elevated to level IV by this provision, placing him at the same level as the new positions of Director of Nuclear Materials Security and the Director of Nuclear Safety Research.

The committee intends that the Director of Nuclear Reactor Safety will continue to supervise the existing directorates of regulations, licensing and enforcement as they pertain to the safety of nuclear powerplants and other facilities in the licensed industry. As such, he will remain the chief officer beneath the Commission responsible for safety. The other two Directors will be the chief officers on behalf of the Commission for safeguards and research respectively.

Subsection (b) provides for not more than nine additional officers in NSLC at level V on the Executive Schedule, who shall be appointed and removable by the Commission.

The committee readily acknowledges that this represents a higher rate of Executive Schedule officers in the NSLC than in any other regulatory agency. The committee also stresses that the nuclear power industry will offer a regulatory challenge of such unprecedented proportions, in terms of the energy needs and the health and safety of the people, so as to warrant this major commitment of Executive Schedule officers.

The organization of NSLC, as provided in the act and as detailed in the chart in section VI of the report, could result in the assignment of these level V officers as follows:

Office of Nuclear Reactor Safety:

Director, Directorate of Licensing
Director, Directorate of Regulations
Director, Directorate of Enforcement

Office of Nuclear Materials Security:

Director, Directorate of Licensing
Director, Directorate of Regulations
Director, Directorate of Enforcement

Office of Nuclear Safety Research:

Deputy Director, Safety
Deputy Director, Safeguards

Office of Administration:

Director

The organization chart in section VI of the report shows how these positions would be placed in the NSLC.

The committee provided for the appointment of nine level V officers in NSLC because it is of the conviction that the unprecedented magnitude, complexity and potential hazards of the nuclear power industry require individuals of policymaking calibre in the key regulatory positions. In determining how to proceed with nuclear power in ways that confine risks and costs to acceptable levels, they will have to recommend innovative policies to their immediate superiors and to the Commission itself.

TITLE III—MISCELLANEOUS AND TRANSITIONAL PROVISIONS

Section 301. Transitional Provisions

Section 301 contains, with the exception of subsection (a), customary transitional provisions.

Subsection (a) provides that, except as otherwise provided in the act, whenever all of the functions of an agency, or other body, or of any component thereof, have been transferred by title I of this act, the agency or other body or component shall lapse. This, in effect, discontinues organizational structures when they no longer have functions to perform. It applies only when all of the functions of the agency or component have been transferred by the Administrator. This subsection also provides that all Executive Schedule officers and statutory positions in an agency or component that lapses under the first sentence of the section also shall lapse.

Specifically, the effect of this subsection will be to allow the position and the office of General Manager of the AEC to lapse. The committee intends to replace the coordinating function of the General Manager with the balanced organization in which six coequal Assistant Administrators report directly to the Administrator and the Deputy Administrator. The removal of this high-level position should upgrade the role of ERDA's two highest officers and permit a healthy interplay of ideas and priorities among the program managers in relation to these highest positions.

Similarly, the committee established in title II a balanced organizational structure in NSLC by eliminating the intermediary position of

Director of Regulation and permitting three coequal program Directors to report directly to the Commission. The committee's intention is to upgrade the role of the Commission in its exercise of exclusively regulatory responsibilities by insuring fullest possible access to all available information within the organization on the safety and security of the nuclear power industry.

Subsection (b) is a savings clause that continues the effectiveness of all existing orders, determinations, rules, regulations, permits, contracts, certificates, licenses, and privileges affected by this act, until such time as they are otherwise modified or replaced by appropriate authority or otherwise expire. This avoids any inadvertent lapsing or impairment of essential Executive orders, directives, documents, and obligations, and will afford the President, the Administrator, the Commission or other officials sufficient time to deal with these matters in an orderly fashion.

Subsection (c) is another savings clause that preserves and continues administrative proceedings in being on the effective date of the act. These proceedings will, in effect, be continued, modified, or terminated as if the act had never been enacted.

Subsection (d) is a savings clause that permits suits commenced prior to the date of this act to be continued and conducted as if this act had not been enacted.

Subsection (e) protects suits, actions or other proceedings from abatement by reason of enactment of this act. In any litigation pending when these actions take effect, the court may enter an appropriate order which will give effect to these savings provisions.

Subsection (f) provides for proper substitution of parties in connection with the continuation of litigation pending on the date this act becomes effective.

Subsection (g) makes final orders and actions of any transferred official or component subject to judicial review as if this act had not been enacted.

Subsection (h) provides that with respect to functions transferred by the act, references in laws to other officials shall be deemed to be a reference to the Administrator, the Commission or other officials, as appropriate.

Subsection (i) provides that any existing authority of the President is not affected by this act.

Subsection (j) provides that reference in this act of provisions of law shall be deemed to include, as appropriate, reference thereto as amended or supplemented before or after the effective date of this act. This avoids repetitious use of the phrases "as amended" or "as supplemented."

Subsection (k) makes clear that except as otherwise expressly provided in this act, authority provided by this act is in addition to, and not in substitution for, any existing authority transferred by this act.

Section 302. Incidental Dispositions

Section 302 authorizes the Director of the Office of Management and Budget to make such additional incidental dispositions of personnel, personnel positions, assets, liabilities, contracts, property, records, ap-

propriations, etc., as may be necessary to carry out the intent and purpose of this act.

Section 303. Definitions

Section 303, to avoid repetitious references, defines "function," "functions," "perform" and "performance" to include such terms as duties, obligations, powers, authorities, responsibilities, rights, privileges, and activities, and the exercise thereof.

Section 304. Authorization for Appropriations

Section 304 provides for annual authorization of appropriations for both ERDA and NSLC, with provision for minimum funding of ERDA nonnuclear programs under certain circumstances and with special guidance on the funding of NSLC.

Subsection (a) provides that except as otherwise provided by law, appropriations made under this act shall be subject to annual authorization.

Subsection (b) provides that in the absence of a specific nonnuclear energy R. & D. policy enacted by Congress, at least 7 percent of the nondefense appropriations of ERDA be spent in each of the following five civilian-energy categories:

- (1) fossil fuel;
- (2) nuclear energy;
- (3) environment and safety;
- (4) conservation; and
- (5) solar, geothermal and advanced energy systems.

The committee arrived at the 7 percent figure by determining the proposed budget authority for the smallest of the above R. & D. categories and establishing that as the floor for any ERDA R. & D. civilian program run by an Assistant Administrator. Conservation funding as proposed in the fiscal year 1975 budget is 7.1 percent of the total civilian energy R. & D. program, and this is the smallest of the above categories. (See table 1, section V.) The committee stresses that this level is intended as a floor, not a ceiling; also that spending in categories (4) and (5) above should be prudently increased.

In arriving at the 7 percent minimum expenditure, funding of advanced energy systems that are based on fossil fuel or nuclear energy should be considered as part of categories (1) and (2) rather than category (5).

This subsection would become inoperative at such time as a nonnuclear R. & D. bill passes Congress and is signed into law. Such a bill, S. 1283, "The National Energy Research and Development Policy Act," has passed the Senate and soon may reach a vote in the House.

The committee's intent is to be responsive to legitimate concerns that, in the absence of a specific nonnuclear R. & D. policy to guide it, ERDA will have a built-in, pronuclear bias. The committee agrees that even with all the organizational safeguards it has built into this act to prevent such a bias, the fact that more than 90 percent of ERDA's personnel, funding and facilities will be derived from the AEC (see section V) pose too great a risk of pro-nuclear bias without the additional policy safeguard provided in this subsection.

The committee believes that the vast wealth of scientific brainpower and facilities being transferred to ERDA from the AEC can be, and

will be, responsive to the new mission of exploring all energy technologies in the national interest. The national laboratories of the AEC represent one of the Nation's most valuable resources, and the committee, by means of this subsection, is seeking to guarantee that they will be put to the multipurpose use as intended by this Act.

Subsection (c) provides that authorizations for NSLC shall reflect the need for effective licensing and other regulation of the nuclear power industry in relation to the growth of the industry.

This subsection reflects the committee's strong belief that the NSLC can effectively regulate the nuclear power industry only if it is given the resources needed to keep pace with the enormous projected expansion of the industry.

In fiscal year 1974, the AEC Regulatory Division, from which NSLC is mostly derived, had an operating budget of \$54 million to oversee 43 operating nuclear powerplants worth an estimated \$20 billion. Actually, these 43 plants represent the tip of an iceberg because, by July 1, there were 247 plants demanding the AEC's regulatory attention, including those under construction, on order and publicly announced. By the year 2000, it is projected that there will be 1,000 operating powerplants worth \$1 trillion, generating 60 percent of the Nation's electricity and posing health, safety and security problems of potentially cataclysmic proportions.

Because of the obvious difficulty in projecting years ahead to estimate specific authorizations needed for the complex regulatory functions of NSLC, the committee arrived at the language of this subsection to express congressional intent based on the urgency of the situation.

Section 305. Comptroller General Audit

Section 305 provides for audits by the Comptroller General of both ERDA and NSLC.

Subsection (a) applies to both nuclear and nonnuclear activities the present provisions of section 166 of the Atomic Energy Act for audit and access to records by the Comptroller General with respect to contracts.

Subsection (b) provides that the Comptroller General shall audit and review the operations of the Nuclear Safety and Licensing Commission to the extent necessary to provide Congress with a comprehensive evaluation of the efficiency and effectiveness of its operations under title II.

The importance of the activities of the NSLC in safeguarding public health and safety from the dangers of nuclear energy, merits the independent, unbiased review available through the GAO. The committee views the work of the GAO as an important element of the legislative structure to preclude and deal with nuclear thefts, shortages, accidents or sabotage relating to all activities licensed under the Atomic Energy Act.

Paragraph (1) requires the Comptroller General to submit a report to designate a committee chairman within 54 to 60 months after the enactment of S. 2744. This time frame was selected to give the Commission an opportunity to acquire sufficient operating experience to enable the General Accounting Office to make an accurate, valid determination of the Commission's performance.

The report shall include the following:

Subparagraph (A): A detailed, comprehensive documentation of the manner in which the NSLC carries out all of its assigned responsibilities. Congress wants to be sure that all practical measures are being taken to safeguard the public health and safety.

Subparagraph (B): The effect of the Commission's activities on the efficiency, effectiveness and safety of the activities licensed by it.

Subparagraph (C): Recommendations for improving the implementation of title II. Sufficient factual information is required to give Congress a sound basis for making an independent judgment of the success of the legislation and for taking those measures deemed necessary to enhance the performance of the licensing and related regulatory functions of the Commission.

Paragraph (2) requires that copies of the GAO report are to go to the NSLC and to the Committees of Congress that are principally concerned with the work of the Commission.

Section 306. Reports

Section 306 requires annual reports by both ERDA and NSLC, and a 1-year study relating to the possible future transfer of the nuclear weapons program.

Subsection (a) requires the Administrator to transmit to the President for submission to the Congress an annual report on his agency's activities. The report is to include a statement of the short-range and long-range goals, priorities, and plans of the Administrator, together with an assessment of the progress made toward attainment of these objectives and toward the more effective and efficient management of the Administration and coordination of its functions.

Subsection (b) requires the Administrator, in collaboration with the Secretary of Defense, to conduct a thorough review of the desirability and feasibility of transferring to the Department of Defense or other Federal agencies the functions of the Administrator respecting Military application and restricted data. This review is to be made, and a report sent to the President for submission to the Congress, within one year after the Administrator takes office. The report will set forth the Administrator's comprehensive analysis, the principal alternatives, and the specific recommendations of the Administrator and the Secretary of Defense.

Subsection (c) requires the Commission to transmit to the President for submission to the Congress an annual report on the agency's activities. The report shall be in layman's language and shall include a statement of the short-range and long-range goals, priorities and plans of the Commission as they relate to the relative benefits, costs and risks of commercial nuclear power.

This assessment shall be based on the following complete accounting of NSLC activities and findings:

Paragraph (1): insuring the safe design of nuclear powerplants and other licensed facilities;

Paragraph (2): investigating abnormal occurrences and defects in nuclear powerplants and other licensed facilities;

Paragraph (3): safeguarding special nuclear materials at all stages of the nuclear fuel cycle;

Paragraph (4) : investigating suspected, attempted, or actual thefts of special nuclear materials in the licensed sector and developing contingency plans for dealing with such incidents;

Paragraph (5) : insuring the safe, permanent disposal of high-level radioactive wastes through the licensing of nuclear activities and facilities;

Paragraph (6) : protecting the public against the hazards of low-level radioactive emissions from licensed nuclear activities and facilities.

The committee added this subsection to require an annual report by NSLC in addition to the original provision requiring such a report by ERDA. The committee believes that despite the fact that the Atomic Energy Act requires annual reports by each of the new agencies, it is as important to specify for NSLC, as it is for ERDA, the particular areas to be covered in the report. The legislation specifies the contents of the NSLC annual report in detail because of the unique potential hazards to society posed by the projected large-scale generation of commercial nuclear power.

Section 307. Information to Committees

Section 307 provides that the Administrator shall keep the appropriate congressional committees fully and currently informed with respect to all of the Administration's activities.

Section 308. Transfer of Funds

Section 308 permits the Administrator, when authorized in an appropriation act, to make transfers of funds from one appropriation to another within his agency, but no appropriation shall be either increased or decreased by more than 5 percent.

Section 309. Conforming Amendments to Certain Other Laws

Section 309 is a technical, conforming amendment covering the Executive Schedule compensation pertaining to this act.

Section 310. Separability

Section 310 is a standard separability provision that avoids the invalidation of the remaining provisions of this act in the event that a single provision is found to be invalid.

Section 311. Effective Dates and Interim Appointments

Section 311 provides effective dates and a system of interim appointments for both ERDA and NSLC.

Subsection (a) provides that this act shall take effect 120 days after its enactment for both the Energy Research and Development Administration and for the Nuclear Safety and Licensing Commission. The 120-day period will allow sufficient time for the complex tasks of arranging and staffing the wholly new organizations and of preparing such rules, regulations and orders as may be necessary for a smooth transition.

This subsection also provides for advance transfer of funds to pay salaries and expenses of any officer prior to the formal transfer of funds after the Act takes effect.

Subsection (b) provides that if an officer, subject to Senate confirmation under this act, has not entered upon his office on the effective date of the act, the President may designate any officer who was such an officer immediately prior to the effective date of the act, to act in such office temporarily. An officer thus designated would draw pay at the rate provided in this Act for the position filled by him under this subsection.

TITLE IV—BAR AGAINST SEX DISCRIMINATION

Section 401 bars sex discrimination in connection with any license, activity, or Federal assistance under this act.

Sex discrimination is prohibited under title VII of the 1964 Civil Rights Act, which relates to employment by firms with 15 or more employees and has been amended to include State and local governments, but sex discrimination is not prohibited under title VI, which relates to federally assisted programs and activities. This amendment says that no person shall on the ground of sex be excluded from or denied the benefits of, or be subjected to discrimination under any program in this particular act. Until such time at title VI of the Civil Rights Act is amended this approach remains necessary.

Such language has been added to the Federal Aid Highway Act of 1973, the Water Pollution Control Amendments of 1972, the Nurses Training Act and a variety of other public laws.

APPENDIX 1.—CHANGES IN EXISTING LAW

In compliance with subsection 4 of rule XXIX of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman) :

TITLE 5, UNITED STATES CODE

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CHAPTER 53—PAY RATES AND SYSTEMS

* * * * *

SUBCHAPTER II—EXECUTIVE SCHEDULE PAY RATES

* * * * *

§ 5313. POSITIONS AT LEVEL II

Level II of the Executive Schedule applies to the following positions, for which the annual rate of basic pay is \$42,500:

(1) ***

* * * * *

(8) Chairman. [Atomic Energy] *Nuclear Safety and Licensing Commission.*

* * * * *

(22) *Administrator of Energy Research and Development.*

§ 5314. POSITIONS AT LEVEL III

Level III of the Executive Schedule applies to the following positions, for which the annual rate of basic pay is \$40,000:

(1) * * *

* * * * *

(42) Members, [Atomic Energy] *Nuclear Safety and Licensing Commission.*

* * * * *

(60) *Deputy Administrator, Energy Research and Development Administration.*

§ 5315. POSITIONS AT LEVEL IV

Level IV of the Executive Schedule applies to the following positions, for which the annual rate of basic pay is \$38,000:

(1) * * *

* * * * *

[(50) General Manager of the Atomic Energy Commission.]

* * * * *

(99) *Assistant Administrators, Energy Research and Development Administration (6).*

(100) *Director of Nuclear Reactor Safety, Nuclear Safety and Licensing Commission;*

(101) *Director of Nuclear Materials Security, Nuclear Safety and Licensing Commission;*

(102) *Director of Nuclear Safety Research, Nuclear Safety and Licensing Commission.*

§ 5316. POSITIONS AT LEVEL V

Level V of the Executive Schedule applies to the following positions, for which the annual rate of basic pay is \$36,000:

(1) * * *

* * * * *

[(29) Assistant General Manager, Atomic Energy Commission.]

[(62) Director of Regulation, Atomic Energy Commission.]

[(69) Deputy General Manager, Atomic Energy Commission.]

(81) General Counsel of the [Atomic Energy] *Nuclear Safety and Licensing Commission.*

[(102) Assistant General Managers, Atomic Energy Commission (2).]

* * * * *

(133) *General Counsel, Energy Research and Development Administration.*

(134) *Additional officers, Energy Research and Development Administration (8).*

(135) *Additional officers, Nuclear Safety and Licensing Commission (9).*

APPENDIX 2.—PROVISIONS OF THE ATOMIC ENERGY ACT APPLICABLE TO
FUNCTIONS TRANSFERRED FROM THE AEC TO ERDA AND NSLC

The Energy Research and Development Administration and the Nuclear Safety and Licensing Commission, will utilize authorities provided by the Atomic Energy Act of 1954, as amended. Since the bill entails a separation of functions to be administered separately by these two agencies, it follows that certain provisions of the Atomic Energy Act will be applicable to each agency. The following analysis shows the distribution of separately and jointly applicable authorities under that act.

The Committee has been advised by the Office of General Counsel, AEC, that the applicability of provisions of the Atomic Energy Act to ERDA and NSLC are the same in the bill, as reported, as in the original bill.

I. The following provisions of the Atomic Energy Act of 1954, as heretofore amended, apply only to ERDA

Subsection 31b. (certain grants and contributions).

Section 33 ("Research for Others"); provided that the NSLC retains authority to contract out for research as it deems necessary to exercise its licensing and related regulatory functions.

Chapter 5 ("Production of Special Nuclear Material").

Subsection 53c; 53d; and 53f. (distributing special nuclear material).

Section 54 ("Foreign Distribution of Special Nuclear Material").

Section 56 ("Guaranteed Purchase Prices").

Section 58 ("Review").

Subsection 63c. (charges for distributing source material).

Section 64 ("Foreign Distribution of Source Material").

Section 67 ("Operations on Lands Belonging to the United States").

Section 91 ("Authority").

Section 142 ("Classification and Declassification of Restricted Data").

Section 143 ("Department of Defense Participation").

Subsections 144a; 144b; and 144c. (international cooperation).

Subsection 151c; 151d; 151e. (certain patent aspects).

Section 153 ("Nonmilitary Utilization").

Section 154 ("Injunctions").

Section 157 ("Commission Patent Licenses").

Subsections 161c; 161m; 161r; 161t; 161u; and 161v. (general provisions).

Section 164 ("Electric Utility Contracts").

Section 167 ("Claims Settlements").

II. The following provisions of the Atomic Energy Act of 1954, as heretofore amended, apply only to NSLC

Subsection 53b. (minimum criteria for licenses).

Subsection 53e. (licensing conditions).

Section 62 ("License for Transfers Required").

Subsection 63b. (minimum criteria for licenses).

Section 69 ("Prohibition").

Section 101 ("License Required").

Section 102 ("Utilization and Production Facilities for Industrial or Commercial Purposes").
Section 103 ("Commercial Licenses").
Section 104 ("Medical Therapy and Research and Development").
Subsection 105c (licensing antitrust review).
Section 106 ("Classes of Facilities").
Section 107 ("Operators' Licenses").
Section 109 ("Component Parts of Facilities").
Subsection 161h. (licensing activities).
Subsection 161w. (licensing charges).
Section 182 ("License Applications").
Section 183 ("Terms of License").
Section 184 ("Inalienability of Licenses").
Section 185 ("Construction Permits").
Subsections 186a. and 186b. (license revocation).
Section 187 ("Modification of License").
Section 190 ("Licensee Incident Reports").
Section 191 ("Atomic Safety and Licensing Board").
Section 192 ("Temporary Operating License").
Section 272 ("Applicability of Federal Power Act").
Section 273 ("Licensing of Government Agencies").
Section 274 ("Cooperation with States").

III. The following provisions of the Atomic Energy Act of 1954, as heretofore amended, generally apply, respectively, to the functions of the Administrator and to NSLC

Chapter 1 ("Declaration, Findings and Purpose"); provided that all references to encouraging, promoting, utilizing, developing and participating in atomic energy or the atomic industry shall not be applicable to the NSLC.

Chapter 2 ("Definitions"); provided that (i) the determinations and criteria in j. (extraordinary nuclear occurrences) shall be the responsibility of the Administrator only in regard to activities and matters not covered by the licensing and related regulatory facets of Section 170 of the Atomic Energy Act, as amended, and (ii) the determinations in v. (production facility), z. (source material), aa. (special nuclear material), and cc. (utilization facility), shall be the responsibility of the Administrator only in regard to facilities and materials not subject to licensing and related regulatory control by NSLC.

Chapter 3 ("Organization"); except (i) as provided for in this bill, (ii) the Inspection Division established by subsection 25c. will be transferred to NSLC, and the ERDA Administrator also will provide for the discharge of the inspection function under subsection 25c. in ERDA, (iii) in regard to section 29 ("Advisory Committee on Reactor Safeguards"), it is intended that the ACRS be transferred to NSLC but that the ACRS also be made available to ERDA as the Administrator may request to perform such of the activities contemplated by section 29 as relate to functions transferred to the Administrator.

Subsections 31a; 31c; and 31d. (research assistance), and Section 32 ("Research By the Commission").

Section 51; provided, that the respective determinations shall be made as indicated in Chapter 2 above.

Subsection 53a; provided, that subdivisions (ii) and (iii) of said subsection (distributing and making available special nuclear material) shall apply only to ERDA, and subsection (i) (licenses) shall apply only to NSLC.

Section 55 ("Acquisition").

Section 57 ("Prohibition").

Section 61 ("Source Material"); provided, that the respective determinations shall be made as indicated in Chapter 2 above).

Subsection 63a. (source material); provided, that the authority to distribute shall apply only to ERDA and the authority to license shall apply only to NSLC.

Section 65 ("Reporting").

Section 66 ("Acquisition").

Section 68 ("Public and Acquired Lands").

Section 81 ("Domestic Distribution"), and Section 82 ("Foreign Distribution of Byproduct Material"); provided, that the authority to distribute shall apply only to ERDA and the authority to license shall apply only to NSLC.

Section 92 ("Prohibition").

Subsections 105a. and 105b. (Antitrust provisions and reporting).

Section 108 ("War or National Emergency").

Section 110 ("Exclusions"); it should be noted that subsection 110a. is amended by section 202 of the bill.

Chapter 11 ("International Activities"); provided, that, except for licensing and regulatory aspects, the implementation of these provisions shall be the responsibility of ERDA.

Section 141 ("policy"); provided, that the implementation of subsection 141a. shall be the responsibility of ERDA.

Subsection 144d. (Presidential authorization).

Section 145 ("Restrictions"); except that only the Administrator shall establish the basic standards and procedures for the safeguarding of the national defense and security.

Section 146 ("General Provisions").

Subsection 151a and 151b. (certain inventions and discoveries).

Section 152 ("Inventions Made or Conceived During Commission Contracts").

Section 155 ("Prior Art").

Section 156 ("Commission Patent Licenses").

Section 158 ("Monopolistic Use of Patents").

Section 159 ("Federally Financed Research").

Section 160 ("Saving Clause").

Subsections 161a., 161b., 161c., 161d., 161f., and 161g. (general authority).

Subsection 161i. and 161j. (certain regulations or orders and dispositions); provided, that the Administrator shall establish the basic standards and procedures respecting the national security.

Subsections 161k. (firearms); 161n. (delegations), provided that no functions delegated to officers of NSLC shall include functions relating to the development of atomic energy or the atomic industry; 161o. (reports and records), 161p. (rules and regulations), 161q. (rights-of-way), and 161s. (succession of authority).

Section 162 ("Contracts").
Section 163 ("Advisory Committees").
Section 165 ("Contract Practices").
Section 166 ("Comptroller General Audit"); it should be noted that section 305 of the bill also makes this section applicable to ERDA's contracts for non nuclear activities.
Section 168 ("Payments in Lieu of Taxes").
Section 169 ("No Subsidy").
Section 170 ("Indemnification and Limitation of Liability").
Chapter 15 ("Compensation for Private Property Acquired").
Section 181 ("General").
Subsection 186c. (Retaking and Recapture); provided that the Administrator shall establish the basic standards and procedures in regard to safeguarding the national defense and security.
Section 188 ("Continued Operation of Facilities"); provided, that findings and judgments respecting the production program shall be the responsibility of the Administrator.
Section 189 ("Hearings and Judicial Review").
Chapter 17 ("Joint Committee on Atomic Energy").
Chapter 18 ("Enforcement"); except for Section 234 ("Civil Monetary Penalties for Violation of Licensing Requirements") which is applicable only to NSLC.
Section 241 ("Transfer of Property").
Section 251 ("Report to the Congress").
Section 261 ("Appropriations").
Section 271 ("Agency Jurisdiction").
Section 281 ("Separability") and Section 291 ("Short Title").

APPENDIX 3—EXPLANATION OF PERSONNEL PROVISIONS OF S. 2744

The provisions of S. 2744 pertaining to personnel administration in ERDA and NSLC provide for the continuation of the excepted personnel system authorized by section 161d. of the Atomic Energy Act, as amended. In this regard, section 107(a) of the bill authorizes the Administrator "to select, appoint, employ, and fix the compensation of such officers and employees, including attorneys, pursuant to section 161d. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2201(d)) as are necessary to perform the functions now or hereafter vested in him and to prescribe their functions."

The continuation of the excepted personnel system of the Atomic Energy Act, of course, will have no new impact on those employees who will transfer from AEC to ERDA and NSLC. Employees of the Department of Interior and NSF who would be transferred to ERDA would, at the same time, be transferred from the competitive civil service system to the excepted personnel system of ERDA under the authority of section 107(a) of S. 2744. Although there are significant systems differences between the competitive civil service system and the personnel system authorized by section 161d, of the Atomic Energy Act, both systems impact on individual employees in terms of rights, protections, and benefits in much the same way, as amplified below.

Individual employees transferred to the excepted personnel program for ERDA or NSLC, therefore, would not relinquish any of their basic rights of benefits as Federal employees. There would be available

to them in ERDA and NSLC, however, the added benefits provided by the AEC's merit employment system. In addition, section 105(b) of S. 2744 provides that "transfer of nontemporary personnel pursuant to this Act shall not cause any such employee to be separated or reduced in grade or compensation for one year after such transfer." Section 105(c) provides a somewhat similar protection for those officers paid in accordance with the Executive Salary Schedule: "Any person who, on the effective date of this Act, held a position compensated in accordance with the Executive Schedule prescribed in chapter 53 of title 5 of the United States Code, and who, without a break in service, is appointed in the Administration to a position having duties comparable to those performed immediately preceding his appointment shall continue to be compensated in his new position at not less than the rate provided for this previous position."

EMPLOYMENT UNDER THE EXCEPTED PERSONNEL SYSTEM OF SECTION 161D.
OF THE ATOMIC ENERGY ACT

Employee Pay.—There would be no change in the pay received by Federal employees transferred to ERDA or NSLL. ERDA and NSLC would continue to apply a salary schedule under the authority of section 161d. of the Atomic Energy Act which is equivalent to that provided by law for the competitive service. Within-grade increases would be earned at the same rates as in the competitive service. Future pay increases authorized under the Classification Act for Federal employees would apply to ERDA and NSLC employees. With respect to wage board employees, their ratios of pay would continue to be based on local prevailing rates as provided by the applicable local wage board pay schedule. Moreover, section 105(b) of S. 2749 specifically states that the "transfer of non-temporary personnel pursuant to this Act [from Interior and NSF to ERDA] shall not cause any such employee to be separated or reduced in grade or compensation for one year after such transfer".

Employee Status.—The interchange agreement between the Civil Service Commission and the AEC would be applicable. Federal employees having "Career" appointments in the competitive service would receive "Regular (Excepted)" appointments based on their having three years of service for "career" tenure. Federal employees with "Career-Conditional" appointments (those with less than three years of service) would receive "Regular (Excepted) (Conditional)" appointments. In accordance with the interchange agreement, employees of ERDA and NSLC would be eligible to transfer to any agencies in the competitive service without regard to the competitive examination procedures administered by the Civil Service Commission.

Retention/Reduction-in-Force Rights.—Employees transferred to ERDA and NSLC would come under reduction-in-force procedures which differ from those of the competitive service only in that they do not provide for "retreat" rights, and do not include performance ratings in determining retention rights. In the "AEC" system, a reduction in force (RIF) is confined to a "competitive level", i.e., the grade level, occupation, and location in which a reduction is required. Within the competitive level, the employee with the lowest retention rights,

i.e., least Federal service, status, and veteran-nonveteran status, is the employee who is reduced in force.

Since "retreat" rights (movement of an employee back through positions and grade levels previously held in lieu of separation) are not a part of the AEC system, there is relatively less job protection for certain employees who might be involved in a RIF. However, other employees, e.g., those in the same competitive area but at different grade levels (different competitive levels), could actually have better employment protection than would be available to them under the competitive civil service system. The AEC reduction-in-force procedures, which have been approved by the Civil Service Commission as meeting the requirements of the Veterans Preference Act, are designed to confine the program disruption and employee morale problems to the single "competitive level" in which a reduction is to take place. The AEC procedures avoid the problems of employees at higher grades "retreating" to lower grades with attendant lowered morale of those employees and those they displace who in turn "retreat" and displace others.

Employee "Fringe" Benefits.—There would be no significant changes in "fringe" benefits coverages available to Federal employees transferring to ERDA or NSLC. The types of leave programs, life and health insurance programs, and retirement benefits would be the same in ERDA and NSLC as in the rest of the Federal service. Since ERDA would be covered by the retirement system administered by the Civil Service Commission, employees transferring to ERDA from other Federal agencies would be entitled to all the same civil service retirement benefits.

Summary.—A review of the rights, protections and benefits that would be available to employees of ERDA and NSLC reveals that there would be no significant difference from the rights, protections and benefits available to all Federal employees. Except for the differences in the reduction-in-force procedures cited above, which involve advantages to employees as well as disadvantages, employees transferring from other Federal agencies to ERDA or NSLC would be unable to discern any real changes in their rights, protections and benefits. However, the excepted personnel system provided by Section 161d. of the Atomic Energy Act would provide significant systems advantages which would benefit employees as well as benefit ERDA and NSLC organizations.

COMPARISON OF THE EXCEPTED PERSONNEL SYSTEM OF SECTION 161D. OF
THE ATOMIC ENERGY ACT WITH THE COMPETITIVE CIVIL SERVICE SYSTEM

The basic difference between the excepted personnel system provided by Section 161d. of the Atomic Energy Act and the competitive civil service system is that the excepted system is designed to be uniquely responsive to the management needs of a highly technical research, development and regulatory program. The competitive civil service system is designed to implement the Civil Service Act of 1883 and related civil service laws, which require a broad merit employment program covering as much Government activity as possible and

which emphasize fair and equitable treatment of all citizens applying for positions in, or employed by, the Government.

The excepted personnel system under section 161d. was developed because of a clear Congressional intent to have a personnel program that would be as effective as possible in supporting technical research, development and regulatory activities, and at the same time, assure fair and equitable treatment of all candidates and employees of the organization. This Congressional intent has been successfully carried out. Significant improvements in recruitment methods, selection procedures, job evaluation and pay methods, and executive manpower management techniques, as well as positive modifications in other functional areas, can be demonstrated and confirmed in the excepted personnel program of Section 161d. of the Atomic Energy Act.

IX. TEXT OF S. 27744, AS REPORTED

A BILL

To reorganize and consolidate certain functions of the Federal Government in a new Energy Research and Development Administration and in a new Nuclear Safety and Licensing Commission in order to promote more efficient management of such functions

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Energy Reorganization Act of 1974".

DECLARATION OF PURPOSE

Sec. 2. (a) The Congress hereby declares that the general welfare and the common defense and security require effective action to develop, and increase the efficiency and reliability of use of, all energy sources to meet the needs of present and future generations, to increase the productivity of the national economy and strengthen its position in regard to international trade, to make the Nation self-sufficient in energy, to advance the goals of restoring, protecting, and enhancing environmental quality, and to assure public health and safety.

(b) The Congress finds that, to best achieve these objectives, improve Government operations, and assure the coordinated and effective development of all energy sources, it is necessary to establish an Energy Research and Development Administration to bring together and direct Federal activities relating to research and development on the various sources of energy, to increase the efficiency and reliability in the use of energy, and to carry out the performance of other functions, including the Atomic Energy Commission's military and production activities: *Provided, That, in establishing an Energy Research and Development Administration to achieve these objectives, the Congress intends that no energy technology be given an unwarranted priority.*

(c) The Congress further declares and finds that it is in the public interest that the licensing and related regulatory functions of the Atomic Energy Commission be separated from the performance of the other functions of the Commission, and that this separation be effected in an orderly manner, pursuant to this Act, assuring adequacy of technical and other resources necessary for the performance of each.

(d) The Congress further declares that it is in the public interest and is hereby stated to be the policy of Congress that small business concerns be given an opportunity to participate, insofar as is possible, in a fair and equitable proportion of grants, contracts, purchases, and other Federal activities relating to research, and development, and demonstration of sources of energy efficiency and utilization of energy and conservation of energy.

TITLE I—ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

ESTABLISHMENT

SEC. 101. There is hereby established an independent executive agency to be known as the Energy Research and Development Administration (hereinafter in this Act referred to as the "Administration").

OFFICERS

SEC. 102. (a) There shall be at the head of the Administration an Administrator of Energy Research and Development (hereinafter in this Act referred to as the "Administrator"), who shall be appointed from civilian life by the President by and with the advice and consent of the Senate. A person may not be appointed as Administrator within five years after release from active duty as a commissioned officer of a regular component of an Armed Force. The Administrator shall receive compensation at the rate now or hereafter prescribed for offices and positions at level II of the Executive Schedule (5 U.S.C. 5313). The Administration shall be administered under the supervision and direction of the Administrator, who shall be responsible for the efficient and coordinated management of the Administration.

(b) There shall be in the Administration a Deputy Administrator, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall receive compensation at the rate now or hereafter prescribed for offices and positions at level III of the Executive Schedule (5 U.S.C. 5314). The Deputy Administrator shall have special responsibility, subject to the Administrator's authority, for international cooperation in all energy and related environmental research and development.

(c) The President shall appoint the Administrator and Deputy Administrator from among individuals who, by reason of their training and experience are specially qualified to manage a full range of energy research and development programs.

(d) There shall be in the Administration six Assistant Administrators, one of whom shall be responsible for fossil energy, another for nuclear energy, another for environment and safety, another for conservation, another for solar, geothermal, and advanced energy systems, and another for defense programs. The Assistant Administrators shall be appointed by the President, by and with the advice and consent of the Senate, and shall receive compensation at the rate now or hereafter prescribed for offices and positions at level IV of the Executive Schedule (5 U.S.C. 5315). The President shall appoint each

Assistant Administrator from among individuals who, by reason of training and experience, are specially qualified to manage the energy technology area assigned to such Assistant Administrator.

(e) There shall be in the Administration a General Counsel who shall be appointed by the Administrator and who shall serve at the pleasure of and be removable by the Administrator. The General Counsel shall receive compensation at the rate now or hereafter prescribed for offices and positions at level V of the Executive Schedule (5 U.S.C. 5316).

(f) There shall be in the Administration not more than eight additional officers appointed by the Administrator, who shall serve at the pleasure of and be removable by the Administrator and shall receive compensation at the rate now or hereafter prescribed for offices and positions of level V of the Executive Schedule (5 U.S.C. 5316).

(g) The Division of Military Application transferred to and established in the Administration by section 104(d) of this Act shall be under the direction of a Director of Military Application, who shall be appointed by the Administrator and who shall serve at the pleasure of and be removable by the Administrator and shall be an active commissioned officer of the Armed Forces serving in general or flag officer rank or grade. The functions, qualifications, and compensation of the Director of Military Application shall be the same as those provided under the Atomic Energy Act of 1954, as amended, for the Assistant General Manager for Military Application.

(h) Officers appointed pursuant to this section shall perform such functions as the Administrator shall specify from time to time.

(i) The Deputy Administrator (or in the absence or disability of the Deputy Administrator, or in the event of a vacancy in the office of the Deputy Administrator, an Assistant Administrator, the General Counsel or such other official, determined according to such order as the Administrator shall prescribe) shall act for and perform the functions of the Administrator during any absence or disability of the Administrator or in the event of a vacancy in the office of the Administrator.

RESPONSIBILITIES OF THE ADMINISTRATOR

SEC. 103. (a) The responsibilities of the Administrator shall include, but not be limited to—

(1) exercising central responsibility for policy planning, coordination, support, and management of research and development programs respecting all energy sources, including assessing the requirements or research and development in regard to various energy sources in relation to near-term and long-range needs, policy planning in regard to meeting those requirements, undertaking programs for the optimal development of the various forms of energy sources, managing such programs, and disseminating information resulting therefrom;

(2) encouraging and conducting research, development and demonstration of commercial feasibility and practical applications of the extraction, conversion, storage, transmission, and utilization phases related to the development and use of energy from fossil, nuclear, solar, geothermal, and other energy sources; in-

cluding such nonnuclear research and development programs as may hereafter be authorized by the Congress;

(3) engaging in and supporting environmental, biomedical, physical, and safety research related to the development of energy sources and utilization technologies;

(4) taking into account the existence, progress, and results of other public and private research and development activities, including those activities of the Federal Energy Administration relating to the development of energy resources using currently available technology in promoting increased utilization of energy resources, relevant to the Administration's mission in formulating its own research and development programs;

(5) participating in and supporting cooperative research and development projects which may involve contributions by public or private persons or agencies, of financial or other resources to the performance of the work;

(6) developing, collecting, distributing, and making available for distribution, scientific and technical information concerning the manufacture or development of energy and its efficient extraction, conversion, transmission, and utilization;

(7) encouraging and conducting research and development in energy conservation, which shall be directed toward the goals of reducing total energy consumption to the maximum extent practicable, and toward maximum possible improvement in the efficiency of energy use. Development of new and improved conservation measures shall be conducted with the goal of the most expeditious possible application of these measures; and

(8) encouraging and participating in international cooperation in energy and related environmental research and development.

(b) In carrying out his responsibilities under this Act, the Administrator shall consult with the Administrator of the Small Business Administration and take the appropriate action to help assure that small business concerns receive an opportunity to participate in a fair and equitable proportion of grants, contracts, purchases, and other Federal activities relating to research, development, and demonstration of sources of energy, efficiency and utilization of energy and conservation of energy.

ABOLITION AND TRANSFERS

SEC. 104. (a) The Atomic Energy Commission is hereby abolished. Sections 21 and 22 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2031 and 2032) are repealed.

(b) All other functions of the Commission, the Chairman and members of the Commission, and the officers and components of the Commission are hereby transferred or allowed to lapse pursuant to the provisions of this Act.

(c) There are hereby transferred to and vested in the Administrator all functions of the Atomic Energy Commission, the Chairman and members of the Commission, and the officers and components of the Commission, except as otherwise provided in this Act.

(d) The General Advisory Committee established pursuant to section 26 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2036), the Patent Compensation Board established pursuant to section 157 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2187), and the Divisions of Military Application and Naval Reactors established pursuant to section 25 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2035), are transferred to the Energy Research and Development Administration and the functions of the Commission with respect thereto, and with respect to relations with the Military Liaison Committee established by section 27 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2037), are transferred to the Administrator.

(e) There are hereby transferred to and vested in the Administrator such functions of the Secretary of the Interior, the Department of the Interior, and officers and components of such department—

(1) as relate to or are utilized by the Office of Coal Research established pursuant to the Act of July 1, 1960 (74 Stat. 336; 30 U.S.C. 661-668);

(2) as relate to or are utilized in connection with fossil fuel energy research and development programs and related activities conducted by the Bureau of Mines "energy centers" and synthane plant to provide greater efficiency in the extraction, processing, and utilization of energy resources for the purpose of conserving those resources, developing alternative energy resources, such as oil and gas secondary and tertiary recovery, oil shale and synthetic fuels, improving methods of managing energy-related wastes and pollutants, and providing technical guidance needed to establish and administer national energy policies;

(3) as relate to or are utilized for underground electric power transmission research; and

(4) as relate to the acquisition, production, distribution, and storage of helium.

(f) There are hereby transferred to and vested in the Administrator such functions of the National Science Foundation as relate to or are utilized in connection with—

(1) solar heating and cooling development; and

(2) geothermal power development.

(g) To the extent necessary or appropriate to perform functions and carry out programs transferred by this Act, the Administrator and Commission may exercise, in relation to the functions so transferred, any authority or part thereof available by law, including appropriation Acts, to the official or agency from which such functions were transferred.

(h) In the exercise of his responsibilities under section 103, the Administrator shall utilize to the fullest extent practicable the technical and management capabilities of other executive agencies having facilities, personnel, or other resources which can assist or advantageously be expanded to assist in carrying out such responsibilities. The Administrator shall consult with the head of each agency with such facilities, personnel, or other resources and assign, with their consent, responsibility for specific programs or projects in energy research and development as appropriate: *Provided*, That (1) such

assignments shall be in addition to and not detract from the basic mission responsibilities of the agency, and (2) such assignments shall be carried out under the policy guidance of the Administrator.

TRANSFER OF PERSONNEL AND OTHER MATTERS

SEC. 105. (a) Except as provided in the next sentence, the personnel employed in connection with, and the personnel positions, assets, liabilities, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds employed, held, used, arising from, available to or to be made available in connection with the functions and programs transferred by this Act, are, subject to section 202 of the Budget and Accounting Procedures Act of 1950 (31 U.S.C. 581c), correspondingly transferred for appropriate allocation. Personnel positions expressly created by law, personnel occupying those positions on the effective date of this Act, and personnel authorized to receive compensation at the rate prescribed for offices and positions at levels II, III, IV, or V of the Executive Schedule (5 U.S.C. 5313-5316) on the effective date of this Act shall be subject to the provisions of subsection (c) of this section and section 301 of this Act.

(b) Except as provided in subsection (c), transfer of nontemporary personnel pursuant to this Act shall not cause any such employee to be separated or reduced in grade or compensation for one year after such transfer.

(c) Any person who, on the effective date of this Act, held a position compensated in accordance with the Executive Schedule prescribed in chapter 53 of title 5 of the United States Code, and who, without a break in service, is appointed in the Administration to a position having duties comparable to those performed immediately preceding his appointment shall continue to be compensated in his new position at not less than the rate provided for his previous position.

ADMINISTRATIVE PROVISIONS

Sec. 106. (a) The Administrator is authorized to prescribe such policies, standards, criteria, procedures, rules, and regulations as he may deem to be necessary or appropriate to perform functions now or hereafter vested in him.

(b) The Administrator shall engage in such policy planning, and perform such program evaluation analyses and other studies, as may be necessary to promote the efficient and coordinated administration of the Administration and properly assess progress toward the achievement of its missions.

(c) Except as otherwise expressly provided by law, the Administrator may delegate any of his functions to such officers and employees of the Administration as he may designate, and may authorize such successive redelegations of such functions as he may deem to be necessary or appropriate.

(d) Except as provided in section 102 and in section 104(d), the Administrator may organize the Administration as he may deem to be necessary or appropriate.

(e) The Administrator is authorized to establish, maintain, alter, or discontinue such State, regional, district, local, or other field offices as he may deem to be necessary or appropriate to perform functions now or hereafter vested in him.

(f) The Administrator shall cause a seal of office to be made for the Administration of such device as he shall approve, and judicial notice shall be taken of such seal.

(g) The Administrator is authorized to establish a working capital fund, to be available without fiscal year limitation, for expenses necessary for the maintenance and operation of such common administrative services as he shall find to be desirable in the interests of economy and efficiency. There shall be transferred to the fund the stocks of supplies, equipment, assets other than real property, liabilities, and unpaid obligations relating to the services which he determines will be performed through the fund. Appropriations to the fund, in such amounts as may be necessary to provide additional working capital, are authorized. The working capital fund shall recover, from the appropriations and funds for which services are performed, either in advance or by way of reimbursement, amounts which will approximate the costs incurred, including the accrual of annual leave and the depreciation of equipment. The fund shall also be credited with receipts from the sale or exchange of its property, and receipts in payment for loss or damage to property owned by the fund.

(h) Each department, agency, and instrumentality of the executive branch of the Government is authorized to furnish to the Administrator, upon his request, any information or other data which the Administrator deems necessary to carry out his duties under this title.

PERSONNEL AND SERVICES

SEC. 107. (a) The Administrator is authorized to select, appoint, employ, and fix the compensation of such officers and employees, including attorneys, pursuant to section 161d. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2201(d)) as are necessary to perform the functions now or hereafter vested in him and to prescribe their functions.

(b) The Administrator is authorized to obtain services as provided by section 3109 of title 5 of the United States Code.

(c) The Administrator is authorized to provide for participation of military personnel in the performance of his functions. Members of the Army, the Navy, the Air Force, or the Marine Corps may be detailed for service in the Administration by the appropriate military Secretary, pursuant to cooperative agreements with the Secretary, for service in the Administration in positions other than a position the occupant of which must be approved by and with the advice and consent of the Senate.

(d) Appointment, detail, or assignment to, acceptance of, and service in, any appointive or other position in the Administration under this section shall in no way affect the status, office, rank, or grade which such officers or enlisted men may occupy or hold, or any emolument, perquisite, right, privilege, or benefit incident to or arising out of any such status, office, rank, or grade. A member so appointed, detailed, or assigned shall not be subject to direction or control by his Armed

Force, or any officer thereof, directly or indirectly, with respect to the responsibilities exercised in the position to which appointed, detailed, or assigned.

(e) The Administrator is authorized to pay transportation expenses, and per diem in lieu of subsistence expenses, in accordance with chapter 57 of title 5 of the United States Code for travel between places of recruitment and duty, and while at places of duty, of persons appointed for emergency, temporary, or seasonal services in the field service of the Administration.

(f) The Administrator is authorized to utilize, on a reimbursable basis, the services of any personnel made available by any department, agency, or instrumentality, including any independent agency of the Government.

(g) The Administrator is authorized to establish advisory boards, in accordance with the provisions of the Federal Advisory Committee Act (Public Law 92-463), to advise with and make recommendations to the Administrator on legislation, policies, administration, research, and other matters.

(h) The Administrator is authorized to employ persons who are not citizens of the United States in expert, scientific, technical, or professional capacities whenever he deems it in the public interest.

POWERS

Sec. 108. (a) The Administrator is authorized to exercise his powers in such manner as to insure the continued conduct of research and development and related activities in areas or fields deemed by the Administrator to be pertinent to the acquisition of an expanded fund of scientific, technical, and practical knowledge in energy matters. To this end, the Administrator is authorized to make arrangements (including contracts, agreements, and loans) for the conduct of research and development activities with private or public institutions or persons, including participation in joint or cooperative projects of a research, developmental, or experimental nature; to make payments (in lump sum or installments, and in advance or by way of reimbursement, with necessary adjustments on account of overpayments or underpayments); and generally to take such steps as he may deem necessary or appropriate to perform functions now or hereafter vested in him. Such functions of the Administrator under this Act as are applicable to the nuclear activities transferred pursuant to this title shall be subject to the provisions of the Atomic Energy Act of 1954, as amended, and to other authority applicable to such nuclear activities. The nonnuclear responsibilities and functions of the Administrator referred to in sections 103 and 104 of this Act shall be carried out pursuant to the provisions of this Act, applicable authority existing immediately before the effective date of this Act, or in accordance with the provisions of chapter 4 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2051-2053).

(b) Except for public buildings as defined in the Public Buildings Act of 1959, as amended, and with respect to leased space subject to the provisions of Reorganization Plan Numbered 18 of 1950, the Administrator is authorized to acquire (by purchase, lease, condemnation, or otherwise), construct, improve, repair, operate, and maintain facili-

ties and real property as the Administrator deems to be necessary in and outside of the District of Columbia. Such authority shall apply only to facilities required for the maintenance and operation of laboratories, research and testing sites and facilities, quarters, and related accommodations for employees and dependents of employees of the Administration, and such other special-purpose real property as the Administrator deems to be necessary in and outside the District of Columbia. Title to any property or interest therein, real, personal, or mixed, acquired pursuant to this section, shall be in the United States.

(c) (1) The Administrator is authorized to provide, construct, or maintain, as necessary and when not otherwise available, the following for employees and their dependents stationed at remote locations:

- (A) emergency medical services and supplies;
- (B) food and other subsistence supplies;
- (C) messing facilities;
- (D) audiovisual equipment, accessories, and supplies for recreation and training;
- (E) reimbursement for food, clothing, medicine, and other supplies furnished by such employees in emergencies for the temporary relief of distressed persons;
- (F) living and working quarters and facilities; and
- (G) transportation for school-age dependents of employees to the nearest appropriate educational facilities.

(2) The furnishing of medical treatment under subparagraph (A) of paragraph (1) and the furnishing of services and supplies under paragraphs (B) and (C) of paragraph (1) shall be at prices reflecting reasonable value as determined by the Administrator.

(3) Proceeds from reimbursements under this section shall be deposited in the Treasury and may be withdrawn by the Administrator to pay directly the cost of such work or services, to repay or make advances to appropriations or funds which do or will bear all or a part of such cost, or to refund excess sums when necessary; except that such payments may be credited to a service or working capital fund otherwise established by law, and used under the law governing such funds, if the fund is available for use by the Administrator for performing the work or services for which payment is received.

(d) The Administrator is authorized to acquire any of the following described rights if the property acquired thereby is for use in, or is useful to, the performance of functions vested in him:

- (1) copyrights, patents, and applications for patents, designs, processes, specifications, and data;
- (2) licenses under copyrights, patents, and applications for patents; and
- (3) releases, before suit is brought, for past infringement of patents or copyrights.

(e) Subject to the provisions of chapter 12 of the Atomic Energy Act (42 U.S.C. 2161-2166), and other applicable law, the Administrator shall disseminate scientific, technical, and practical information acquired pursuant to this title through information programs and other appropriate means, and shall encourage the dissemination of scientific, technical, and practical information relating to energy so as to enlarge the fund of such information and to provide that free inter-

change of ideas and criticism which is essential to scientific and industrial progress and public understanding.

(f) The Administrator is authorized to accept, hold, administer, and utilize gifts, and bequests of property, both real and personal, for the purpose of aiding or facilitating the work of the Administration. Gifts and bequests of money and proceeds from sales of other property received as gifts or bequests shall be deposited in the Treasury and shall be disbursed upon the order of the Administrator. For the purposes of Federal income, estate, and gift taxes, property accepted under this section shall be considered a gift or bequest to the United States.

COUNCIL ON ENERGY POLICY

SEC. 109. (a) The Congress finds and declares that—

(1) there are many Federal agencies, created at different times and for different purposes to handle specialized problems, all directly or indirectly involved in the establishment of energy policy;

(2) there is no comprehensive national energy policy but instead Federal energy activities consist of a myriad of laws, regulations, actions, and inactions resulting in narrow, short range, and often conflicting decisionmaking by individual agencies without adequate consideration of the impact on the overall energy policy, not future national energy needs; and

(3) as a consequence of not having a comprehensive national energy policy, the Nation faces mismanagement of energy resources, unacceptably high adverse environmental impacts, inadequate incentives for efficient utilization and conservation of energy resources, shortages of supply, and soaring energy prices.

(b) Therefore, it is declared to be the purpose of the Congress to protect and promote the interest of the people of the United States as energy users by establishing a Council on Energy Policy to serve as a focal point for—

(1) the collection, analysis, and interpretation of energy statistics and data necessary to formulate policies for wise energy management and conservation and to anticipate social, environmental, and economic problems associated with existing and emerging energy technologies;

(2) the coordination of all energy activities of the Federal Government, and provision of leadership to State and local governments and other persons involved in energy activities; and

(3) the preparation, after consultation with other interested organizations and agencies, of a long-range comprehensive plan (hereinafter referred to as the "energy plan") for energy development, utilization, and conservation to foster improvement in the efficiency of energy production and utilization, reduction of the adverse environmental impacts of energy production and utilization, conservation of energy resources for the use of future generations, reduction of excessive energy demands, and development of new technologies to produce clean energy.

(c)(1) The policies, regulations, and public laws of the United States shall be interpreted and administered to the fullest extent possible in accordance with the policies set forth in this section; and

(2) All agencies of the Federal Government shall to the fullest extent possible—

(A) utilize a systematic interdisciplinary approach which will insure the integrated use of both physical and social sciences in producing, conserving, and utilizing the Nation's energy resources;

(B) submit prior to the review process established pursuant to the Budget and Accounting Act of 1972, as amended, to the Council on Energy Policy established by this section for comment all legislative recommendations and reports, to the extent that such recommendations and reports, deal with or have a bearing on energy matters;

(C) gather data and information pursuant to guidelines promulgated by the Council on Energy Policy; develop analytical techniques for the management, conservation, use, and development of energy resources, and make such data available to the Council on Energy Policy;

(D) recognize the worldwide and long-range character of energy concerns and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to foster international cooperation in anticipating and resolving energy-related problems;

(d) There shall be established in the Executive Office of the President a Council on Energy Policy (hereinafter referred to as the "Council"). The Council shall be composed of three members who shall be appointed by the President to serve at his pleasure by and with the advice and consent of the Senate. The President shall at the time of nomination designate one of the members of the Council to serve as Chairman. Each member shall be a person, who as a result of his training, experience, and attainment, is well qualified to analyze and interpret energy trends and information of all kinds; to appraise programs and activities of the Federal Government in light of the energy needs of the Nation; to be conscious of and responsive to the environmental, social, cultural, economic, scientific, and esthetic needs and interests of the Nation; and to formulate a national energy plan and recommend national policies with respect to wise energy management.

(e) (1) The Council shall serve as the principal adviser to the President on energy policy and shall exercise leadership in the formulation of Government policy concerning domestic and international issues relating to energy.

(2) The Council shall make recommendations to the President and the Congress for resolving conflicts between the policies relating to energy of different Federal agencies and recommend measures to improve the implementation of Federal energy policies or the management of energy resources with particular emphasis upon policies and activities involving two or more departments or independent agencies.

(3) The Council shall develop within eighteen months after the date of enactment of this Act and thereafter shall annually update an energy plan for energy development, utilization, and conservation in the United States to carry out the purposes as stated in subsection (b) of this section. Copies of such plans shall be distributed on January 1 of each year to the President, to the Congress, and to all Federal

and State agencies concerned with energy, and upon request to local agencies and nongovernmental entities.

(4) The Council shall promptly review all legislative recommendations and reports sent to Congress to the extent that such recommendations and reports have a bearing on energy matters, and it shall send to the President and the involved Federal agency a statement in writing of its position and the reasons therefor.

(5) The Council shall keep Congress fully and currently informed of all of its activities. Neither the Council nor its employees may refuse to testify before or submit information to Congress or any duly authorized committee thereof.

(6) The Council shall conduct annual public hearings on the energy plan and may hold public hearings when there is substantial public interest in other pending matters.

(7) In carrying out its collection, analysis, and interpretation of energy statistics function, the Council shall, as quickly as possible and after appropriate study, promulgate guidelines for the collection and initial analysis of energy data by other Federal agencies, after published notice in the Federal Register and opportunity for comment. Such guidelines shall be designed to make such data compatible, useful, and comprehensive. Where relevant data is not now available or reliable and is beyond the authority of other agencies to collect, then the Council shall recommend to the Congress the enactment of appropriate legislation. Pending congressional consideration, the Council may gather such data directly. The Council shall have the power to require by special or general orders any person to submit in writing such energy data as the Council may prescribe. Such submission shall be made within such reasonable period and under oath or otherwise as the Council may direct.

(f) (1) In exercising its powers, functions, and duties, the Council shall—

(A) consult with the Interagency Energy Advisory Committee established under subsection (g) of this section and with representatives of science, industry, agriculture, labor, conservation organizations, State and local governments, and other groups, as it deems advisable; and

(B) employ a competent, independent staff which shall utilize, to the fullest extent possible, the services, facilities, and information (including statistical information) of public and private agencies and organizations, and individuals, to avoid duplication of effort and expense, thus assuring that the Council's activities will not unnecessarily overlap or conflict with similar activities authorized by law and performed by other agencies.

(2) Members of the Council shall serve full time and the Chairman of the Council shall be compensated at the rate provided for level II of the Executive Schedule Pay Rates (5 U.S.C. 5313). The other members of the Council shall be compensated at the rate provided for level IV of the Executive Schedule Pay Rates (5 U.S.C. 5315).

(3) The Council may employ such officers and employees as may be necessary to carry out its functions. The Council may also employ and fix the compensation of such experts, consultants, or contractors

to conduct detailed studies as may be necessary for the carrying out of its functions to the same extent as is authorized under section 3109 of title 5, United States Code (but without regard to the last sentence thereof).

(g) (1) There is also created in the Executive Office of the President an Interagency Energy Resources Advisory Committee (hereinafter in this section referred to as the "Energy Committee"). The Energy Committee shall be composed of the Chairman of the Council, the Secretary of the Interior, the Administrator of the Federal Energy Administration, the Administrator of the Energy Research and Development Administration, Secretary of State, the Secretary of the Treasury, Director, Office of Management and Budget, and such other officials of the Federal Government as the President may designate. The Chairman of the Energy Committee shall be selected by its members.

(2) It shall be the duty and function of the Energy Committee to assist the Council in insuring communication and coordination among Energy Committee member agencies in the development and implementation of energy policy or the management of energy resources, and in such other matters as the Council may determine.

(3) The Chairman of the Energy Committee may not refuse to testify before the Congress or any duly authorized committee thereof regarding the activities of the Energy Committee or other matters concerning interagency coordination of energy policy and activities.

(4) This subsection (g) shall be effective no later than sixty days after the enactment of this Act or such earlier date as the President shall prescribe and publish in the Federal Register, and shall terminate upon enactment of a permanent department responsible for energy and natural resources or two years after such effective date, whichever shall occur first.

(h) The Council shall prepare and submit to the President and the Congress on or before January 1, 1975, and annually thereafter, an energy report to accompany the energy plan. This report shall include—

(1) an estimate of energy needs of the United States for the ensuing ten-year period to meet the requirements of the general welfare of the people of the United States and the commercial and industrial life of the Nation;

(2) an estimate of the domestic and foreign energy supply on which the United States will be expected to rely to meet such needs in an economic manner with due regard for the protection of the environment, the conservation of natural resources, and the implementation of foreign policy objectives;

(3) current and foreseeable trends in the price, quality, management, and utilization of energy resources and the effects of those trends on the social, environmental, economic, and other requirements of the Nation;

(4) a catalog of research and development efforts funded by the Federal Government to develop new technologies, to forestall energy shortages, to reduce waste, to foster recycling, and to encourage conservation practices; and recommendations for developing technology capable of improving the quality of the en-

vironment, increasing efficiency, and protecting employee health and safety in energy industries;

(5) recommendations for improving the energy data and information available to the Federal agencies by improving monitoring systems, standardizing data, and securing additional needed information;

(6) a review and appraisal of the adequacy and appropriateness of technologies, procedures, and practices (including competitive and regulatory practices), employed by Federal, State, and local governments and nongovernmental entities to achieve the purposes of this section; and

(7) recommendations concerning the level of funding for the development and application of new technologies, as well as new procedures and practices which the Council may determine to be required to achieve the purposes of this section and improve energy management and conservation together with recommendations for additional legislation, including the preparation of the reorganization recommendations required by section 110 of this Act.

(i) (1) Copies of any communications, documents, reports, or information received or sent by any member of the Council shall be made available to the public upon identifiable request, and at reasonable cost, unless such information may not be publicly released under the terms of paragraph (2) of this subsection.

(2) The Council or any officer or employee of the Council shall not disclose information obtained under this section which concerns or relates to a trade secret referred to in section 1905 of title 18, United States Code, except that such information may be disclosed in a manner designed to preserve its confidentiality—

(A) to other Federal Government departments, agencies, and officials for official use upon request;

(B) to committees of Congress having jurisdiction over the subject matter to which the information relates;

(C) to a court in any judicial proceeding under court order formulated to preserve the confidentiality of such information without impairing the proceedings; and

(D) to the public in order to protect their health and safety after notice and opportunity for comment in writing or for discussion in closed session within fifteen days by the party to whom the information pertains (if the delay resulting from such notice and opportunity for comment would not be detrimental to the public health and safety).

In no event shall the names or other means of identification of injured persons be made public without their express written consent. Nothing contained in this section shall be deemed to require the release of any information described by subsection (b) of section 552, title 5, United States Code, or which is otherwise protected by law from disclosure to the public.

(j) (1) The Comptroller General of the United States shall continuously monitor and evaluate the operations of the Council including its reporting requirements. Upon his own initiative or upon the request of a committee of the Congress or, to the extent personnel are

available, upon the request of a Member of Congress, the Comptroller General shall (A) conduct studies of existing statutes and regulations governing Federal energy programs, (B) review the policies and practices of Federal agencies administering such programs, (C) review and evaluate the procedures followed by such agencies, in gathering, analyzing, and interpreting energy statistics, data, and information related to the management and conservation of energy, including but not limited to data related to energy costs, demand, industry structure, environmental impacts, and research and development, and (D) evaluate particular projects or programs. The Comptroller General shall have access to such data from any public or private source whatever, notwithstanding the provisions of any other law, as is necessary to carry out his responsibilities under this section and shall report to the Congress at such times as he deems appropriate with respect to Federal energy programs, including his recommendations for such modifications in existing laws, regulations, procedures, and practices as will, in his judgment, best serve the Congress in the formulation of a national energy policy.

(2) In carrying out his responsibilities as provided in paragraph (1) of this subsection, the Comptroller General shall give particular attention to the need for improved coordination of the work of the Federal Government related to energy policies and programs and the attendant need for a central source of energy statistics and information.

(3) The Comptroller General or any of his authorized representatives in carrying out his responsibilities under this section shall have access to any books, documents, papers, statistics, data, information, and records of any private organization relating to the management and conservation of energy, including but not limited to energy costs, demand, supply, reserves, industry structure, environmental impacts, and research and development. The Comptroller General may require any private organization to submit in writing such energy data as he may prescribe. Such submission shall be made within such reasonable period and under oath or otherwise as he may direct.

(4) To assist in carrying out his responsibilities, the Comptroller General may sign and issue subpoenas requiring the production of the books, documents, papers, statistics, data, information, and records referred to in paragraph (3) of this subsection.

(5) In case of contumacy, or refusal to obey a subpoena of the Comptroller General issued under this section, by any person who resides, is found or transacts business within the jurisdiction of any district court of the United States, such district court shall, upon the request of the Comptroller General, have jurisdiction to issue to such person an order requiring such person to comply forthwith. Failure to obey such an order is punishable by such court as a contempt of court.

(6) Reports submitted by the Comptroller General to the Congress shall be available to the public at reasonable cost and upon identifiable request, except that the Comptroller General may not disclose to the public any information which could not be disclosed to the public by the Council under the provisions of subsection (i) (2) if the information were held by the Council.

(k) (1) There are authorized to be appropriated to carry out the provisions of this section not to exceed \$1,000,000 for fiscal year ending

June 30, 1975, \$2,000,000 for fiscal year ending June 30, 1976, and \$4,000,000 for each fiscal year thereafter.

(2) All sums appropriated under this section shall remain available for obligation or expenditure in the fiscal year for which appropriated and in the fiscal year next following.

FUTURE REORGANIZATION

SEC. 110. (a) Not later than January 31, 1975, the President shall transmit to the Congress his recommendations for such organizational arrangements for the management of energy and natural resources by the Federal Government as he deems advisable. Such recommendations shall include—

(1) the appropriate organizational arrangements for long-term implementation of the functions of the Energy Research and Development Administration and of the Federal Energy Administration, and the energy related functions of the Department of the Interior,

(2) the appropriate means for improving coordination among the energy activities of the Federal Government, and

(3) the appropriate organizational arrangements to coordinate energy functions with other natural resources management functions of the Federal Government.

(b) This report shall replace and serve the purposes of the report required by section 15(a)(4) of the Federal Energy Administration Act.

COORDINATION WITH ENVIRONMENTAL EFFORTS

SEC. 111. The Administrator is authorized to establish programs to utilize research and development performed by other Federal agencies to minimize the adverse environmental effects of energy projects. The Administrator of the Environmental Protection Agency, as well as other affected agencies and departments, shall cooperate fully with the Administrator in establishing and maintaining such programs, and in establishing appropriate interagency agreements to develop cooperative programs and to avoid unnecessary duplication.

TITLE II—NUCLEAR SAFETY AND LICENSING COMMISSION

ESTABLISHMENT AND TRANSFERS

SEC. 201. (a) There is established an independent regulatory commission to be known as the Nuclear Safety and Licensing Commission which shall be composed of five members; each of whom shall be a citizen of the United States. The President shall designate one member of the Commission as Chairman thereof to serve as such during the pleasure of the President. The Chairman may from time to time designate any other member of the Commission as Acting Chairman to act in the place and stead of the Chairman during his absence. The Chairman (or the Acting Chairman in the absence of the Chairman) shall preside at all meetings of the Commission and a quorum for the transaction of business shall consist of at least three members present.

Each member of the Commission, including the Chairman, shall have equal responsibility and authority in all decisions and actions of the Commission, shall have full access to all information relating to the performance of his duties or responsibilities, and shall have one vote. Action of the Commission shall be determined by a majority vote of the members present. The Chairman (or Acting Chairman in the absence of the Chairman) shall be the official spokesman of the Commission in its relations with the Congress, Government agencies, persons, or the public, and, on behalf of the Commission, shall see to the faithful execution of the policies and decisions of the Commission, and shall report thereon to the Commission from time to time or as the Commission may direct. The Commission shall have an official seal which shall be judicially noticed.

(b)(1) Members of the Commission shall be appointed by the President, by and with the advice and consent of the Senate.

(2) The President in selecting the members of the Commission, shall have due regard to a fair representation of expertise in nuclear safety technology, health science, and environmental science.

(3) Appointments of members pursuant to this subsection shall be made in such a manner that not more than three members of the Commission shall be members of the same political party.

(c) Each member shall serve for a term of five years, each such term to commence on July 1, except that of the five members first appointed to the Commission, one shall serve for one year, one for two years, one for three years, one for four years, and one for five years, to be designated by the President at the time of appointment.

(d) Such initial appointments shall be submitted to the Senate within sixty days of the signing of this Act. Any individual who is serving as a member of the Atomic Energy Commission at the time of the enactment of this Act, and who may be appointed by the President to the Commission, shall be appointed for a term designated by the President, but which term shall terminate not later than the end of his present term as a member of the Atomic Energy Commission, without regard to the requirements of subsections (b) (2) and (3) of this section. Any subsequent appointment of such individuals shall be subject to the provisions of this section.

(e) The Chairman shall receive compensation at the rate now or hereafter prescribed for offices and positions at level II of the Executive Schedule (5 U.S.C. 5313). Other members shall receive compensation at the rate now or hereafter prescribed for offices and positions at level III of the Executive Schedule (5 U.S.C. 5314).

(f) Any member of the Commission may be removed by the President for inefficiency, neglect of duty, or malfeasance in office. No member of the Commission shall engage in any business, vocation, or employment other than that of serving as a member of the Commission.

(g) There are hereby transferred to the Commission all the licensing and related regulatory functions of the Atomic Energy Commission, the Chairman and members of the Commission, the General Counsel, and other officers and components of the Commission—which functions officers, components, and personnel are excepted from the transfer to the Administrator by section 104(c) of this Act.

(h) In addition to other functions and personnel transferred to the Commission, there are also transferred to the Commission—

(1) the Advisory Committee on Reactor Safeguards, the Atomic Safety and Licensing Board Panel, and the Atomic Safety and Licensing Appeal Panel;

(2) all personnel whose primary responsibility is research related to confirmatory assessment of the safety of reactors licensed under the provisions of the Atomic Energy Act of 1954 as amended, and of this Act, with the exception of such personnel as the Director of the Office of Management and Budget determines are necessary to assist in reactor developmental research.

LICENSING AND RELATED REGULATORY FUNCTIONS RESPECTING SELECTED
ADMINISTRATION FACILITIES

SEC. 202. Notwithstanding the exclusions provided for in section 110a. or any other provisions of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2140(a)), the Nuclear Safety and Licensing Commission shall, except as otherwise specifically provided by section 110b. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2140(b)), or other law, have licensing and related regulatory authority pursuant to chapters 6, 7, 8, and 10 of the Atomic Energy Act of 1954, as amended, as to the following facilities of the Administration:

(1) demonstration Liquid Metal Fast Breeder Reactors when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the commercial feasibility of such a reactor for a power generation system;

(2) other demonstration nuclear reactors—except those in existence on the effective date of this Act—when operated as part of the power generation facilities of an electric utility system, or when operated in any other manner for the purpose of demonstrating the commercial feasibility of such a reactor for a power generation system;

(3) facilities used primarily for the receipt and storage of high-level radioactive wastes resulting from activities licensed under such Act; and

(4) Retrievable Surface Storage Facilities and other facilities authorized for the express purpose of subsequent long-term storage of high-level radioactive waste generated by the Administration, which are not used for, or are part of, research and development activities.

OFFICE OF NUCLEAR SAFETY RESEARCH

SEC. 203. (a) There is hereby established in the Nuclear Safety and Licensing Commission an Office of Nuclear Safety Research under the direction of a Director of Nuclear Safety Research who shall be appointed by the Commission, who shall report directly to the Commission, and who shall serve at the pleasure of and be removable by the Commission. The Director shall receive compensation at the rate now or hereafter prescribed for officers and positions at level IV of the Executive Schedule (5 U.S.C. 5315).

(b) Subject to the provisions of this Act, the Director of Nuclear Safety Research shall engage in or contract for research which the Director recommends and the Commission deems necessary for the discharge of the licensing and related regulatory functions of the Commission.

(c) In order to carry out the provisions of subsection (b) of this section, the Administrator of the Energy Research and Development Administration and the head of every other Federal agency shall—

(1) cooperate with respect to the establishment of priorities for the furnishing of such research services as requested by the Commission for the conduct of its functions;

(2) furnish to the Commission, when requested, on a reimbursable basis, through its own facilities or by contract or other arrangement, such research services as the Commission deems necessary for the conduct of its functions; and

(3) consult and cooperate with the Nuclear Safety and Licensing Commission on research and development matters of mutual interest including the provision of information on, and of physical access to, Administration facilities for the sole purpose of assisting the Commission to acquire the expertise necessary to perform its licensing and regulatory functions, as provided in this Act.

(d) Nothing in subsections (a) and (b) of this section or section 201 of this Act shall be construed to limit in any way the functions of any office of the Administration relating to the safety of activities within the jurisdiction of the Administration.

BUREAU OF NUCLEAR MATERIALS SECURITY

SEC. 204. (a) There is hereby established in the Nuclear Safety and Licensing Commission a Bureau of Nuclear Materials Security under the direction of a Director of Nuclear Materials Security, who shall be appointed by the Commission, who shall report directly to the Commission, and who shall serve at the pleasure of and be removable by the Commission. The Director shall receive compensation at the rate now or hereafter prescribed for officers and positions at level IV of the Executive Schedule (5 U.S.C. 5315).

(b) Subject to the provisions of this Act, the Director of Nuclear Materials Security shall—

(1) recommend regulations relating to safeguarding against threats, thefts, and sabotage involving special nuclear materials, high-level radioactive wastes, and nuclear facilities resulting from all activities licensed under the Atomic Energy Act of 1954, as amended;

(2) enforce such regulations which are promulgated by the Commission;

(3) monitor, test, and recommend upgrading internal accounting systems for special nuclear materials licensed under the Atomic Energy Act of 1954, as amended;

(4) develop, in consultation and coordination with the Energy Research and Development Administration, contingency plans

for dealing with threats, thefts, and sabotage relating to special nuclear materials, high-level radioactive wastes and nuclear facilities resulting from all activities licensed under the Atomic Energy Act of 1954, as amended;

(5) conduct a thorough review of the desirability and feasibility of establishing a security agency within the Bureau to execute some or all of the functions of the Bureau, and report his recommendations to the Commission within one year of the effective date of this Act; and such report shall be transmitted to the Congress by the Commission as soon as it is received; and

(6) engage in or contract for research which the Director of Materials Security deems necessary for the discharge of the functions of the Bureau.

(c) Nothing in this section shall be construed to limit in any way the functions of any office of the Energy Research and Development Administration relating to the safeguarding of special nuclear materials, high-level radioactive wastes and nuclear facilities resulting from all activities within the jurisdiction of the Administration pursuant to this Act.

NONCOMPLIANCE

SEC. 205. (a) Any individual director, officer, or employee of a firm constructing, owning, operating, or supplying the components of any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954 as amended, or pursuant to this Act, who obtains information reasonably indicating that such facility or activity or basic components supplied to such facility or activity—

(1) fails to comply with the Atomic Energy Act of 1954, as amended, or any applicable rule, regulation, order, or license of the Commission, or

(2) contains a defect which could create a substantial safety hazard,

shall immediately notify the Commission of such failure to comply, or of such defect, unless such person has actual knowledge that the Commission has been adequately informed of such defect or failure to comply.

(b) Any person who knowingly fails to provide the notice required by subsection (a) of this section shall be subject to a civil penalty in an amount equal to the amount provided by section 234 of the Atomic Energy Act of 1954, as amended.

(c) Any person who knowingly and willfully fails to provide the notice required by subsection (a) of this section shall be subject to a criminal penalty of a fine not to exceed \$50,000 or imprisonment of not more than one year, or both.

(d) The requirements of this section shall be prominently posted on the premises of any facility licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954, as amended.

(e) The Commission is authorized to conduct such reasonable inspections and other enforcement activities as needed to insure compliance with the provisions of this section.

INFORMATION AND STUDIES

SEC. 206. (a) The Commission shall accept requests made in good faith for relevant studies or reports from any party to a licensing proceeding or rulemaking hearing. If such studies or reports are existing, the Commission shall make them available to the requesting party in a timely manner, subject to appropriate provisions of existing law regarding public disclosure. If such studies or reports must be especially prepared, the Atomic Safety and Licensing Board shall determine, subject to review under normal Commission review procedures, if such studies or reports are reasonably necessary for the requesting party to present its position in the proceeding or hearing, and are in the public interest. The requesting party shall be promptly notified of any determination by the Board or by the Commission.

(b) When it has been determined that studies or reports must be especially prepared at the request of a party, the Commission shall prepare such studies or reports, request them to be prepared by other Federal agencies, or have them prepared by contract. Such studies or reports shall be funded by the Commission: *Provided*, That the Commission shall seek contributions or reimbursement, in whole or in part, to the extent that the party requesting such studies or reports is financially capable of providing such contributions or reimbursement.

(c) When the Commission, in making a determination under subsection (a) of this section, shall be of the opinion that such determination involves a controlling question of law as to which there is substantial ground for difference of opinion and that an immediate appeal from the determination may materially advance the ultimate termination of the litigation, it shall so state in writing in such determination. The Court of Appeals for the District of Columbia may thereupon, in its discretion, permit an appeal to be taken from such determination, if application is made to it within ten days of the time the requesting party is notified of the determination of the Commission: *Provided, however*, That application for an appeal hereunder shall not stay proceedings of the Commission unless the Commission or the court of appeals or a judge thereof shall so order.

(d) Studies and reports made available by the Commission pursuant to this section shall be offered as part of the record of the proceeding or hearing.

ABNORMAL OCCURRENCE REPORTS

SEC. 207. The Commission shall submit to the Congress each quarter a report listing for that period any abnormal occurrences at any facility or activity which is licensed or otherwise regulated pursuant to the Atomic Energy Act of 1954 as amended, or pursuant to this Act.

Each such report shall contain—

- (1) the date and place of each occurrence;
- (2) the nature of each incident;
- (3) the cause or causes of each; and
- (4) any action taken to prevent recurrence;

the Commission shall also provide as wide dissemination to the public of the information specified in clauses (1) and (2) of this section as reasonably possible within five days of its receiving information of

each abnormal occurrence and shall provide as wide dissemination to the public as reasonably possible of the information specified in clauses (3) and (4) as soon as such information becomes available to it.

OTHER OFFICERS

SEC. 208. (a) The Commission shall appoint a Director of Nuclear Reactor Safety who shall report directly to the Commission, who shall serve at the pleasure of and be removable by the Commission and who shall receive compensation at the rate now or hereafter prescribed for officers and positions at level IV of the Executive Schedule (5 U.S.C. 5315).

(b) There shall be in the Commission not more than nine additional officers appointed by the Commission who shall serve at the pleasure of and be removable by the Commission and who shall receive compensation at the rate now or hereafter prescribed for officers and positions at level V of the Executive Schedule (5 U.S.C. 5316).

TITLE III—MISCELLANEOUS AND TRANSITIONAL PROVISIONS

TRANSITIONAL PROVISIONS

SEC. 301. (a) Except as otherwise provided in this Act, whenever all of the functions or programs of an agency, or other body, or any component thereof, affected by this Act, have been transferred from that agency, or other body, or any component thereof by this Act, the agency, or other body, or component thereof shall lapse. If an agency, or other body, or any component thereof, lapses pursuant to the preceding sentence, each position and office therein which was expressly authorized by law, or the incumbent of which was authorized to receive compensation at the rate prescribed for an office or position at level II, III, IV, or V of the Executive Schedule (5 U.S.C. 5313-5316), shall lapse.

(b) All orders, determinations, rules, regulations, permits, contracts, certificates, licenses, and privileges—

(1) which have been issued, made, granted, or allowed to become effective by the President, any Federal department or agency or official thereof, or by a court of competent jurisdiction, in the performance of functions which are transferred under this Act, and

(2) which are in effect at the time this Act takes effect, shall continue in effect according to their terms until modified, terminated, superseded, set aside, or revoked by the President, the Administrator, the Commission, or other authorized officials, a court of competent jurisdiction, or by operation of law.

(c) The provisions of this Act shall not affect any proceeding pending, at the time this section takes effect, before the Atomic Energy Commission or any department or agency (or component thereof) functions of which are transferred by this Act; but such proceedings, to the extent that they relate to functions so transferred, shall be con-

tinued. Orders shall be issued in such proceedings, appeals shall be taken therefrom, and payments shall be made pursuant to such orders, as if this Act had not been enacted; and orders issued in any such proceedings shall continue in effect until modified, terminated, superseded, or revoked by a duly authorized official, by a court of competent jurisdiction, or by operation of law. Nothing in this subsection shall be deemed to prohibit the discontinuance or modification of any such proceeding under the same terms and conditions and to the same extent that such proceeding could have been discontinued if this Act had not been enacted.

(d) Except as provided in subsection (f)—

(1) the provisions of this Act shall not affect suits commenced prior to the date this Act takes effect, and

(2) in all such suits proceedings shall be had, appeals taken, and judgments rendered, in the same manner and effect as if this Act had not been enacted.

(e) No suit, action, or other proceeding commenced by or against any officer in his official capacity as an officer of any department or agency, functions of which are transferred by this Act, shall abate by reason of the enactment of this Act. No cause of action by or against any department or agency, functions of which are transferred by this Act, by or against any officer thereof in his official capacity shall abate by reason of the enactment of this Act. Causes of actions, suits, actions, or other proceedings may be asserted by or against the United States or such official as may be appropriate and, in any litigation pending when this section takes effect, the court may at any time, on its own motion or that of any party, enter any order which will give effect to the provisions of this section.

(f) If, before the date on which this Act takes effect, any department or agency, or officer thereof in his official capacity, is a party to a suit, and under this Act any function of such department, agency, or officer is transferred to the Administrator or Commission, or any other official, then such suit shall be continued as if this Act had not been enacted, with the Administrator or Commission, or other official, as the case may be, substituted.

(g) Final orders and actions of any official or component in the performance of functions transferred by this Act shall be subject to judicial review to the same extent and in the same manner as if such orders or actions had been made or taken by the officer, department, agency, or instrumentality in the performance of such functions immediately preceding the effective date of this Act. Any statutory requirements relating to notices, hearings, action upon the record, or administrative review that apply to any function transferred by this Act shall apply to the performance of those functions by the Administrator or Commission, or any officer or component.

(h) With respect to any function transferred by this Act and performed after the effective date of this Act, reference in any other law to any department or agency, or any officer or office, the functions of which are so transferred, shall be deemed to refer to the Administration, the Administrator or Commission, or other office or official in which this Act vests such functions.

(i) Nothing contained in this Act shall be construed to limit, curtail, abolish, or terminate any function of the President which he had immediately before the effective date of this Act; or to limit, curtail, abolish, or terminate his authority to perform such function; or to limit, curtail, abolish, or terminate his authority to delegate, redelegate, or terminate any delegation of functions.

(j) Any reference in this Act to any provision of law shall be deemed to include, as appropriate, references thereto as now or hereafter amended or supplemented.

(k) Except as may be otherwise expressly provided in this Act, all functions expressly conferred by this Act shall be in addition to and not in substitution for functions existing immediately before the effective date of this Act and transferred by this Act.

INCIDENTAL DISPOSITIONS

SEC. 302. The Director of the Office of Management and Budget is authorized to make such additional incidental dispositions of personnel, personnel positions, assets, liabilities, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds held, used, arising from, available to or to be made available in connection with functions transferred by this Act, as he may deem necessary or appropriate to accomplish the intent and purpose of this Act.

DEFINITIONS

SEC. 303. As used in this Act—

(1) any reference to "function" or "functions" shall be deemed to include references to duty, obligation, power, authority, responsibility, right, privilege, and activity, or the plural thereof, as the case may be; and

(2) any reference to "perform" or "performance", when used in relation to functions, shall be deemed to include the exercise of power, authority, rights, and privileges.

AUTHORIZATION FOR APPROPRIATIONS

SEC. 304. (a) Except as otherwise provided by law, appropriations made under this Act shall be subject to annual authorization.

(b) Beginning in fiscal year 1976, and in every fiscal year thereafter, in the absence of a specific nonnuclear energy research and development policy enacted by Congress for the Administration, of the amounts appropriated for the nondefense programs of the Administration, not less than 7 per centum shall be available for each of the research and development functions assigned to each of the nondefense Assistant Administrators under subsection 102(d) of this Act.

(c) Authorization of appropriations to the Commission shall reflect the need for effective licensing and other regulation of the nuclear power industry in relation to the growth of such industry.

COMPTROLLER GENERAL AUDIT

SEC. 305. (a) Section 166. "Comptroller General Audit" of the Atomic Energy Act of 1954, as amended, shall be deemed to be applicable, respectively, to the nuclear and nonnuclear activities under title I and to the activities under title II.

(b) The Comptroller General of the United States shall audit, review, and evaluate the implementation of the provisions of title II of this Act by the Nuclear Safety and Licensing Commission—

(1) Not less than fifty-four months nor more than sixty months after the effective date of this Act, the Comptroller General shall prepare and submit to the Congress a report on his audit, which shall contain, but not be limited to, the following:

(A) an evaluation of the effectiveness of the licensing and related regulatory activities of the Commission and the operations of the Office of Nuclear Safety Research and the Bureau of Nuclear Materials Security;

(B) an evaluation of the effect of such Commission activities on the efficiency, effectiveness, and safety with which the activities licensed under the Atomic Energy Act of 1954, as amended, are carried out;

(C) recommendations concerning any legislation he deems necessary, and the reasons therefor, for improving the implementation of title II.

(2) Copies of the report shall be furnished to the Chairman, Nuclear Safety and Licensing Commission, the chairman of the Senate Committee on Government Operations, the chairman of the Committee on Government Operations of the House of Representatives, and the chairman of the Joint Committee on Atomic Energy.

REPORTS

SEC. 306. (a) The Administrator shall, as soon as practicable after the end of each fiscal year, make a report to the President for submission to the Congress on the activities of the Administration during the preceding fiscal year. Such report shall include a statement of the short-range and long-range goals, priorities, and plans of the Administration together with an assessment of the progress made toward the attainment of those objectives and toward the more effective and efficient management of the Administration and the coordination of its functions.

(b) During the first year of operation of the Administration, the Administrator, in collaboration with the Secretary of Defense, shall conduct a thorough review of the desirability and feasibility of transferring to the Department of Defense or other Federal agencies the functions of the Administrator respecting military application and restricted data, and within one year after the Administrator first takes office the Administrator shall make a report to the President, for submission to the Congress, setting forth his comprehensive analysis, the principal alternatives, and the specific recommendations of the Administrator and the Secretary of Defense.

(c) The Commission shall, as soon as practicable after the end of each fiscal year, make a report to the President for submission to the Congress on the activities of the Commission during the preceding fiscal year. Such report shall, in layman's language, include a statement of the short-range and long-range goals, priorities, and plans of the Commission as they relate to the relative benefits, costs, and risks of commercial nuclear power. Such assessment shall be based on a complete accounting of the Commission's activities and findings in the following areas—

- (1) insuring the safe design of nuclear powerplants and other licensed facilities;
- (2) investigating abnormal occurrences and defects in nuclear powerplants and other licensed facilities;
- (3) safeguarding special nuclear materials at all stages of the nuclear fuel cycle;
- (4) investigating suspected, attempted, or actual thefts of special nuclear materials in the licensed sector and developing contingency plans for dealing with such incidents;
- (5) insuring the safe, permanent disposal of high-level radioactive wastes through the licensing of nuclear activities and facilities;
- (6) protecting the public against the hazards of low-level radioactive emissions from licensed nuclear activities and facilities.

INFORMATION TO COMMITTEES

SEC. 307. Except as provided in section 304(b) of this Act, the Administrator shall keep the appropriate congressional committees fully and currently informed with respect to all of the Administration's activities.

TRANSFER OF FUNDS

SEC. 308. The Administrator, when authorized in an appropriation Act, may, in any fiscal year, transfer funds from one appropriation to another within the Administration: *Provided*, That no appropriation shall be either increased or decreased pursuant to this section by more than 5 per centum of the appropriation of such fiscal year.

CONFORMING AMENDMENTS TO CERTAIN OTHER LAWS

SEC. 309. Subchapter II (relating to Executive Schedule pay rates) of chapter 53 of title 5, United States Code, is amended as follows:

- (1) Section 5313 is amended by striking out "(8) Chairman, Atomic Energy Commission." and inserting in lieu thereof "(8) Chairman, Nuclear Safety and Licensing Commission.", and by adding at the end thereof the following:
"(22) Administrator of Energy Research and Development."
- (2) Section 5314 is amended by striking out "(42) Members, Atomic Energy Commission." and inserting in lieu thereof "(42) Members, Nuclear Safety and Licensing Commission.", and by adding at the end thereof the following:

“(60) Deputy Administrator, Energy Research and Development Administration.”

(3) Section 5315 is amended by striking out paragraph (50), and by adding at the end thereof the following:

“(99) Assistant Administrators, Energy Research and Development Administration (6);

“(100) Director of Nuclear Reactor Safety, Nuclear Safety and Licensing Commission;

“(101) Director of Nuclear Materials Security, Nuclear Safety and Licensing Commission;

“(102) Director of Nuclear Safety Research, Nuclear Safety and Licensing Commission.”

(4) Section 5316 is amended by striking out paragraphs (29), (69), and (102), by striking out “(62) Director of Regulation, Atomic Energy Commission.”; by striking out “(81) General Counsel of the Atomic Energy Commission,” and inserting in lieu thereof “(81) General Counsel of the Nuclear Safety and Licensing Commission.”, and by adding at the end thereof the following:

“(133) General Counsel, Energy Research and Development Administration.

“(134) Additional officers, Energy Research and Development Administration (8).

“(135) Additional officers, Nuclear Safety and Licensing Commission (9).”

SEPARABILITY

SEC. 310. If any provision of this Act, or the application thereof to any person or circumstance, is held valid, the remainder of this Act, and the application of such provision to other persons or circumstances, shall not be affected thereby.

EFFECTIVE DATE AND INTERIM APPOINTMENTS

Sec. 311. (a) This Act shall take effect one hundred and twenty days after the date of its enactment, or on such earlier date as the President may prescribe and publish in the Federal Register; except that any of the officers provided for in this Act may be nominated and appointed, as provided by this Act, at any time after the date of enactment of this Act. Funds available to any department or agency (or any official or component thereof), any functions of which are transferred to the Administrator and the Commission by this Act, may, with the approval of the President, be used to pay the compensation and expenses of any officer appointed pursuant to this subsection until such time as funds for that purpose are otherwise available.

(b) In the event that any officer required by this Act to be appointed by and with the advice and consent of the Senate shall not have entered upon office on the effective date of this Act, the President may designate any officer, whose appointment was required to be

made by and with the advice and consent of the Senate and who was such an officer immediately prior to the effective date of this Act, to act in such office until the office is filled as provided in this Act. While so acting, such persons shall receive compensation at the rates provided by this Act for the respective offices in which they act.

TITLE IV—SEX DISCRIMINATION

SEC. 401. No person shall on the ground of sex be excluded from participation in, be denied a license under, be denied the benefits of, or be subjected to discrimination under any program or activity carried on or receiving Federal assistance under any title of this Act. This provision will be enforced through agency provisions and rules similar to those already established, with respect to racial and other discrimination, under title VI of the Civil Rights Act of 1964. However, this remedy is not exclusive and will not prejudice or cut off any other legal remedies available to a discriminatee.

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