# The original documents are located in Box 43, folder "4/16/76 S3108 Energy Research and Development Administration Authorization" of the White House Records Office: Legislation Case Files at the Gerald R. Ford Presidential Library.

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APRIVED 316

#### THE WHITE HOUSE

ACTION

WASHINGTON April 19, 1976 Last Day: April 19

MEMORANDUM FOR

THE PRESIDENT

JIM CANNO

S. 3108 - Energy Research and Development Administration

Authorization

Attached for your consideration is S. 3108, sponsored by Senators Pastore and Baker, which authorizes supplemental appropriations to the Energy Research and Development Administration of \$34 million for FY 76 and \$23 million for the transition quarter. These supplemental appropriations were requested by the Administration.

Additional information is provided in OMB's enrolled bill report at Tab A.

OMB, Max Friedersdorf, Counsel's Office (Lazarus), NSC and I recommend approval of the enrolled bill.

#### RECOMMENDATION

That you sign S. 3108 at Tab B.

FROM:
SUBJECT:
Attached by Senate



# EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503

APR 1 3 1976

#### MEMORANDUM FOR THE PRESIDENT

Subject: Enrolled Bill S. 3108 - Energy Research and

Development Administration (ERDA) Authorization

Sponsor - Sen. Pastore (D) Rhode Island and

Sen. Baker (R) Tenn.

# Last Day for Action

April 19, 1976 - Monday

# Purpose

To authorize supplemental appropriations to the Energy Research and Development Administration (ERDA) of \$34 million for fiscal year 1976 and \$23 million for the transition quarter.

## Agency Recommendations

Office of Management and Budget

Approval

Energy Research and Development Administration

Approval

# Discussion

The supplemental appropriations for ERDA authorized by the enrolled bill were requested by the Administration. The funds would:

- -- permit ERDA to retain approximately the same level of scientific manpower in its laboratories for nuclear weapons activities in fiscal year 1976 as in fiscal year 1975;
- -- allow ERDA to restore nuclear testing activities to a minimum required level;

- -- support the development of equipment, techniques, and data analysis needed for verifying that Soviet experiments are consistent with the Peaceful Nuclear Explosion agreement being negotiated with the Soviet Union; and
- -- allow the purchase, rather than further leasing, of a computer at the Lawrence Livermore Laboratory.

James M. Trey Assistant Director

for Legislative Reference

Enclosures

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# **UNITED STATES** ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION WASHINGTON, D.C. 20545

9 1976 APR

Mr. James M. Frey Assistant Director for Legislative Reference Office of Management and Budget

Dear Mr. Frey:

The Energy Research and Development Administration (ERDA) is pleased to respond to your invitation to comment on the Enrolled Bill S. 3108.

This bill amends P.L. 93-187, ERDA's FY 1976 authorization by substituting certain new totals for these now in the law. The effects of the S. 3108 modifications are: to increase the total for "Nuclear Energy and Other Programs," \$30 million; to increase "Capital Equipment," for nuclear energy authorization \$4 million; and to increase the authorization for the transition period (July 1, 1976 through September 30, 1976) for nuclear energy by \$23 million.

These supplemental authorizations were supported by ERDA during the legislative process and this agency now recommends that the President sign S. 3108.

Sincerely.

Robert C. Seamans, Jr.

Administrator



ACTION MEMORANDUM

WASHINGTON

LOG NO .:

Date: April 13

Time: 530pm

FOR ACTION:

Glenn Schleede & cc (for information): Max Friedersdorf

Jack Marsh Jim Cavanaugh Ed Schmults

Ken Lazarus

NSC/S ax

FROM THE STAFF SECRETARY

DUE: Date:

April 14

Time:

300pm

SUBJECT:

S. 3108 - ERDA Authorization

#### **ACTION REQUESTED:**

For Necessary Action

\_\_\_\_ For Your Recommendations

Prepare Agenda and Brief

\_ Draft Reply

For Your Comments

\_\_ Draft Remarks

#### REMARKS:

Please return to Judy Johnston, Ground Floor West Wing

Lannon 4/14 630 pm

# PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please K. R. COLE, JR. telephone the Staff Secretary immediately.

For the President

- ACTION MEMORANDUM

WASHINGTON

LOG NO .:

Date: April 13

Time: 530pm

FOR ACTION:

Glenn Schleede

Max Friedersdorf

Ken Lazarus

NSC/S

cc (for information):

Jack Marsh Jim Cavanaugh

Ed Schmults

FROM THE STAFF SECRETARY

DUE: Date:

April 14

Time:

mq008

SUBJECT:

S. 3108 - ERDA Authorization

# ACTION REQUESTED:

\_\_\_\_ For Necessary Action

\_\_\_\_For Your Recommendations

Prepare Agenda and Brief

.\_\_\_ Draft Reply

\_x\_ For Your Comments

\_\_\_\_ Draft Remarks

### REMARKS:

Please return to Judy Johnston, Ground Floor West Wing
No objection -- Ken Lazarus 4/14/76

# PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

James M. Cannon ... For the President

ACTION MEMORANDUM

WASHINGTON

LOG NO.:

Date: April 13

Time: 530pm

FOR ACTION:

Glenn Schleede

Max Friedersdorf

Ken Lazarus

NSC/S

cc (for information):

Jack Marsh Jim Cavanaugh

Ed Schmults

FROM THE STAFF SECRETARY

DUE: Date:

April 14

Time:

mq008

SUBJECT:

S. 3108 - ERDA Authorization

## ACTION REQUESTED:

\_\_\_\_ For Necessary Action

\_\_\_ For Your Recommendations

Prepare Agenda and Brief

\_\_\_\_ Draft Reply

\_x\_ For Your Comments

\_\_\_ Draft Remarks

#### REMARKS:

Please return to Judy Johnston, Ground Floor West Wing

Remorphileede

# PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

James M. Cannon ... For the President

WASHINGTON

April 14, 1976

MEMORANDUM FOR:

JIM CAVANAUGH

FROM:

MAX L. FRIEDERSDORF M. U.

SUBJECT:

S.3108 - ERDA Authorization

The Office of Legislative Affairs concurs with the agencies that the subject bill be signed.

Attachments

# NATIONAL SECURITY COUNCIL

April 14, 1976

MEMORANDUM FOR:

JAMES CANNON

FROM:

Jeanne W. Davi

SUBJECT:

S. 3108

The NSC Staff concurs in the proposed Enrolled Bill S. 3108 - ERDA Authorization.

# AUTHORIZING SUPPLEMENTAL APPROPRIATIONS TO THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION FOR FISCAL YEAR 1976 AND THE TRANSITION PERIOD

# REPORT

BY THE

JOINT COMMITTEE ON ATOMIC ENERGY

[To accompany H.R. 12388]



MARCH 19, 1976.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

> U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1976

JOHN O. PASTORE, Rhode Island, Chairman MELVIN PRICE, Illinois, Vice Chairman

#### SENATE

HENRY M. JACKSON, Washington STUART SYMINGTON, Missouri JOSEPH M. MONTOYA, New Mexico JOHN V. TUNNEY, California HOWARD H. BAKER, Jr., Tennessee CLIFFORD P. CASE, New Jersey JAMES B. PEARSON, Kansas JAMES L. BUCKLEY, New York

#### HOUSE OF REPRESENTATIVES

JOHN YOUNG, Texas TENO RONCALIO, Wyoming MIKE McCORMACK, Washington JOHN E. MOSS, California JOHN B. ANDERSON, Illinois MANUEL LUJAN, JR., New Mexico FRANK HORTON, New York ANDREW J. HINSHAW, California

GEORGE F. MURPHY, Jr., Executive Director JAMES B. GRAHAM, Assistant Director ALBION W. KNIGHT, Jr., Professional Staff Member WILLIAM C. PARLER, Committee Counsel JAMES K. ASSELSTINE, Assistant Counsel NORMAN P. KLUG, Technical Consultant STEPHEN J. LANES, Technical Consultant BEVERLY A. BAUGHMAN, Research Assistant MICHAEL R. KEPPEL, GAO Consultant CHRISTOPHER C. O'MALLEY, Printing Editor

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AUTHORIZING SUPPLEMENTAL APPROPRIATIONS TO THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION FOR FISCAL YEAR 1976 AND THE TRANSITION PERIOD

MARCH 19, 1976.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. Price, from the Joint Committee on Atomic Energy, submitted the following

#### REPORT

[To accompany H.R. 12388]

The Joint Committee on Atomic Energy, having considered H.R. 12388, to authorize supplemental appropriations to the Energy Research and Development Administration for fiscal year 1976 and the transition period, hereby report without amendment the bill and recommend that the bill do pass.

#### SUMMARY OF THE BILL

This bill authorizes supplemental appropriations of \$34,000,000 to the Energy Research and Development Administration for fiscal year 1976 and \$23,000,000 for the transition period in budget authority and \$26,500,000 and \$17,500,000 in budget outlays for the respective periods. The supplemental request is needed primarily to provide a balanced nuclear weapons research, development, and testing program, a capability to verify the peaceful nuclear explosive agreement now being negotiated with the Soviet Union as part of the Threshold Test Ban Treaty, and to purchase at reduced cost a needed computer now being leased for the Lawrence Livermore Laboratory.

#### BACKGROUND

On October 22, 1975, the President submitted to Congress amendments to the Energy Research and Development Administration's Weapons program for fiscal year 1976 and the transition period. Due to the lateness of the request, the Congress was unable to initiate action prior to adjournment of the 1st Session of the 94th Congress.

As a result, Public Law 94-187, Authorization of Appropriations for Fiscal Year 1976 and Transition Period for the Energy Research and Development Administration dated December 31, 1975, did not provide this increased funding.

On January 13, 1976, the Energy Research and Development Administration transmitted to the Congress a request for increase in appropriations for fiscal year 1976 of \$34,000,000 and for the transition period of \$23,000,000 (see Appendix). On March 9, 1976 Senator John O. Pastore, Chairman of the Joint Committee on Atomic Energy, introduced, by request, S. 3108, to amend Public Law 94–187 to increase the authorization for appropriations to the Energy Research and Development Administration in accordance with section 261 of the Atomic Energy Act of 1954, as amended, section 305 of the Energy Reorganization Act of 1974, and section 16 of the Federal Nonnuclear Energy Research and Development Act of 1974, and for other purposes. The bill was referred to the Joint Committee on Atomic Energy.

On March 9, 1976, Representative Melvin Price, Vice Chairman of the Joint Committee, introduced an identical bill, H.R. 12388 by request, which was referred to the Joint Committee on Atomic Energy.

The Joint Committee met in executive session on March 12, 1976, and voted without dissent to report the bill favorably to the House. The Joint Committee met in executive session on March 18, 1976, and voted without dissent to file this report.

#### HEARINGS

On February 3, 1976, the Subcommittee on Legislation of the Joint Committee on Atomic Energy held an executive hearing on the request for authorization of supplemental appropriations for fiscal year 1976 and the transitional period as well as for fiscal year 1977. Testimony was presented on behalf of the Energy Research and Development Administration by Dr. Robert C. Seamans, Jr., Administrator; Alfred D. Starbird, Assistant Administrator for National Security; and Major General Joseph K. Bratton, U.S. Army, Director of Military Application.

Testimony was also heard from Dr. Harold M. Agnew, Director of Los Alamos Scientific Laboratory; Dr. Roger M. Batzel, Director of Lawrence Livermore Laboratory; and Dr. Morgan Sparks, President of Sandia Laboratories, Brigadier General William B. Maxson, USAF, Deputy Assistant to the Secetary of Defense (Atomic Energy) was present and expressed Department of Defense support for the ERDA request for supplemental appropriations.

#### COMMITTEE COMMENTS

The ERDA request was for an increase of \$34,000,000 for fiscal year 1976 and \$23,000,000 for the transition period in budget authority and \$26,500,000 and \$17,500,000 in budget outlays for the respective periods. ERDA states this supplemental would provide amounts for the following purposes:

(1) Research and Development. The level of scientific manpower in the ERDA laboratories for nuclear weapon activities has declined

from about 9,800 man-years in fiscal year 1970 to about 7,900 man-years in fiscal year 1975. Since the Department of Defense requirements for engineering development of current weapons has not diminished over this period, the major impact of this reduction has been particularly serious in advanced development for future weapons where the level of efforts has reduced from about 2,150 man-years in fiscal year 1970 to about 1,450 in fiscal year 1975. Without the supplemental the total laboratories' effort will reduce to 7,600 man-years and advanced development to 1,250 in fiscal year 1976, whereas the supplemental will permit holding to approximately the fiscal year 1975 levels.

(2) Nuclear Testing. To accomplish all required high yield nuclear testing prior to the proposed March 31, 1976, effective date of the Threshold Test Ban Treaty, ERDA deferred all advanced development tests for over a year. Funds, which remain for the fourth quarter of fiscal year 1976 and fiscal year 1976T, will support only a few low yield tests, only 60 percent of that for recent years. Without this supplement ERDA would be unable to restore testing to a minimum required level. In addition ERDA would have to make a force reduction of approximately 800 test personnel, an area where there had already been a reduction in strength of about 50 percent during the past five years.

(3) Special Test Detection. Negotiations between the United States and the Soviet Union are going on and are directed toward reaching a Peaceful Nuclear Explosion (PNE) agreement by March 31, 1976. The supplemental would provide the necessary funds for development of equipment, techniques, and data analysis needed for accomplishing verification that the Soviet PNE experiments are consistent with the agreement. Without these requested amounts, the United States could find itself unprepared to take the necessary Treaty verification actions for U.S.S.R. nuclear explosions. This would be an important element in completing the Threshold Test Ban Treaty signed in July 1974 between the United States and the Soviet Union.

(4) Capital Equipment. Because the new Control Data Corporation Star computers installed at the Lawrence Livermore Laboratory (LLL) have not yet reached anticipated capability, it was been necessary for the laboratory to hold a leased CDC 7600 computer longer than expected. Purchase rather than further leasing of that computer offers substantial financial advantages to the Government. Without this computer there would be a severe shortage of weapons program computing capacity in LLL.

The Joint Committee concurs with the request of the Energy Research and Development Administration.

#### SECTION-BY-SECTION ANALYSIS

Title I amends Section 101(a) (5) of Public Law 94–187 by providing an increase of \$34 million for the operating expenses of the Energy Research and Development Administration.

Title II amends Section 201(a)(5) of Public Law 94-187 by providing for an increase of \$23 million for the operating expenses of the Energy Research and Development Administration for the period July 1, 1976, through September 30, 1976.

### Cost of Legislation and Budget Impact

In accordance with Section 252(a) of the Legislative Reorganization Act of 1970 (Public Law 91-510), the Joint Committee estimates that the following costs will be incurred if this bill and the subsequent appropriations are enacted into law.

Fiscal years:	Millions
1976	. \$26.5
1976 transition period	. 17. 5
1977	. 13.0
Total costs	57.0

# Oversight Findings and Recommendations

No oversight findings and recommendations pursuant to clause 2(1)(3)(A), rule XI, under the authority of rule X, clause 2(b)(1) of the Rules of the House of Representatives are included, inasmuch as the Joint Committee is not subject to rule X, clause 2(b)(1), and no relevant oversight findings in addition to those reflected in the body of this report have been prepared by the Joint Committee since the convening of the 94th Congress.

#### ESTIMATE AND COMPARISON, CONGRESSIONAL BUDGET OFFICE

Pursuant to clause 2(1)(3)(C) of rule XI of the Rules of the House of Representatives, the following report has been submitted to the Joint Committee by the Congressional Budget Office:

Congress of the United States, Congressional Budget Office, Washington, D.C., March 18, 1976.

Hon. John O. Pastore, Chairman, Joint Committee on Atomic Energy, U.S. Senate, Washington, D.C.

Dear Mr. Chairman: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 3108 and H.R. 12388 (identical) to authorize supplemental appropriations for the Energy Research and Development Administration for Fiscal Year 1976 and the Transition Period.

Should the Committee so desire, we would be pleased to provide further details of the attached cost estimate.

Sincerely,

ALICE M. RIVLIN, Director.

Attachment.

#### CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

March 16, 1976.

1. Bill Number: S. 3108 and H.R. 12388 (identical).

2. Bill title: To amend Public Law 94-187 to increase authorization appropriations to the Energy Research and Development Administration for fiscal year 1976 and the Transition Period.

3. Purpose of the bill: This bill authorizes supplemental appropriations of \$34,000,000 to the Energy Research and Development Administration for fiscal year 1976 and \$23,000,000 for the transition period. The supplemental request is for weapons research and development testing, development of equipment and techniques and data analysis required for accomplishing verification of Soviet Peaceful Nuclear Explosions, and purchase of a CDC 7600 computer currently being leased.

4. Budget impact:

[In millions of dollars]

	Fiscal year 1976	Transition quarter	Fiscal year 1977	
Operating expenses: Authorization amounts Estimated costs	30. 0 22. 5	23.0	13.0	
Plant and capital equipment: Authorization amounts	4.0 4.0	17.5 13.0		

5. Basis for estimate: The estimates assume that funds will be appropriated for the full amount of the authorization, and available for obligation not later than March 31, 1976 for fiscal year 1976 funds and July 1, 1976 for transition quarter funds.

6. Estimate comparison: The CBO estimate is identical to the estimate contained in the President's Budget, the current Energy Research and Development Administration estimate, and the estimate of the Joint Committee.

7. Previous CBO estimate: None.

8. Estimate prepared by: Robert E. Schafter (225-4844).

9. Estimate approved by: James L. Blum, Assistant Director for Budget Analysis.

# OVERSIGHT FINDINGS AND RECOMMENDATIONS, COMMITTEE ON GOVERNMENT OPERATIONS

No findings or recommendations on oversight activity pursuant to clause 2(b)(2), rule X, and clause 2(l)(3)(D), rule XI, of the Rules of the House of Representatives have been submitted by the Committee on Government Operations for inclusion in this report.

#### EFFECT OF LEGISLATION ON INFLATION

In accordance with rule XI, clause 2(1)(4) of the Rules of the House of Representatives, this legislation is assessed to have no known significant inflationary effect on prices and costs in the operation of the national economy in that it does not provide for any major new programs and provides only for modest increases to permit the continuation of existing programs.

#### CHANGES IN EXISTING LAW

In accordance with clause (3) of rule XII of the Rules of the House of Representatives, changes in existing law recommended by the bill accompanying this report are shown as follows (deleted matter is shown enclosed in black brackets and new matter is printed in italic; and existing law in which no change is proposed is shown in roman):

#### PUBLIC LAW 94-187

AN ACT To authorize appropriations to the Energy Research and Development Administration in accordance with Section 261 of the Atomic Energy Act of 1954, as amended, Section 305 of the Energy Reorganization Act of 1974, and Section 16 of the Federal Non-nuclear Energy Research and Development Act of 1974, and for other purposes

Sec. 101 \* \* \*

(a) \* \* \*

(5) NUCLEAR ENERGY AND OTHER PROGRAMS.—[\$3,158,970,000] \$3,188,970,000, of which a sum of dollars for the following programs equal to the total of the following amounts is included:

(15) \* \* \*

(g) Nuclear Energy and Other Programs.—[\$237,502,000] \$241,502,000.

Sec. 201 \* \* \*

- (a) \* \* \*
- (5) NUCLEAR ENERGY AND OTHER PROGRAMS.—[\$914,849,000] \$937,849,000, of which a sum of dollars for the following programs equal to the total of the following amounts is included:

#### APPENDIX

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, Washington, D.C., January 13, 1976.

Hon. John O. Pastore, Chairman, Joint Committee on Atomic Energy, Congress of the United States.

Dear Mr. Charman: On October 22, 1976, the President forwarded to the Congress an amendment to the ERDA weapons program request. The amendment was for budget authority of \$34 million for fiscal year 1976 and \$23 million for the fiscal year 1976 transition quarter (fiscal year 1976T). This amendment arrived too late for Congressional action prior to the authorization bill. Therefore, I am forwarding separately to you and to the appropriations committees a request to convert this amendment into a supplemental fiscal year 1976

appropriation.

I do want to inform you that I consider this supplemental to be of major importance to our nuclear weapons program and to our national defense posture. It has the full support of the Secretary of Defense as well as the President. It is particularly important that the fiscal year 1976 portion be authorized and appropriated as early as possible to be available in time to prevent a further decrease in laboratory strength, a reduction in nuclear testing to an unacceptably low level, a possible shortfall in capability to verify the peaceful nuclear explosives agreement now being negotiated, and a severe computing shortage at one laboratory.

This supplemental is to provide amounts for the following essential

purposes:

Research and Development.—The level of scientific manpower in the ERDA laboratories for nuclear weapon activities has declined from about 9800 man-years (MY) in fiscal year 1970 to about 7900 MY in fiscal year 1975. Since the DOD requirements for engineering development of current weapons has not diminished over this period, the major impact of this reduction has been particularly serious in advanced development for future weapons where the level of effort has reduced from about 2150 MY in fiscal year 1970 to about 1450 in fiscal year 1975. If the supplemental request is not approved the total laboratories' effort will reduce to 7600 MY and advanced development to 1250 in fiscal year 1976, whereas the supplemental will permit holding to approximately the fiscal year 1975 levels.

Nuclear Testina.—To accomplish all required high yield nuclear testing prior to the proposed March 31, 1976, effective date of the Threshold Test Ban Treaty, we have had to defer all advanced development tests for over a year. Funds, which remain for the fourth

quarter of fiscal year 1976 and fiscal year 1976T, will support only a few low yield tests, only 60 percent of that for recent years. Without this supplement we would be unable to restore testing to a minimum required level. In addition we would have to make a force reduction of

approximately 800 test personnel.

Special Test Detection.—Negotiations between the U.S. and U.S.S.R. are on-going and directed toward reaching a Peaceful Nuclear Explosion (PNE) agreement by March 31, 1976. This supplemental will provide the necessary funds for development of equipment, techniques, and data analysis needed for accomplishing verification that the Soviet PNE experiments are consistent with the agreement. Without these requested amounts, the United States could find itself unprepared to take the necessary Treaty verification actions for U.S.S.R. nuclear

Capital Equipment.—Because the new CDC Star computers installed at the Lawrence Livermore Laboratory (LLL) have not yet reached anticipated capability, it has been necessary for the laboratory to hold a leased CDC 7600 longer than expected. Purchase rather than further leasing offers substantial financial advantages to the government. Without this computer there would be a severe shortage of weapons program computing capacity in LLL.

I would appreciate your assistance on this important matter. My staff and I are ready to provide additional information and assistance

at any time.

Sincerely,

ROBERT C. SEAMANS, Jr., Administrator.

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, Washington, D.C., January 13, 1976.

Hon. CARL ALBERT. Speaker of the House of Representatives.

DEAR MR. PRESIDENT: On October 22, 1975, the President submitted to Congress amendments to the Energy Research and Development Administration's Weapons program for fiscal year 1976 and the transition period. Those amendments totaled \$34.0 million for fiscal year 1976 and \$23.0 million for the transition period in budget authority and \$26.5 million and \$17.5 million in budget outlays for the respective periods. Unfortunately, due to the lateness of the request, the Congress was unable to complete action prior to its recess. As a result, the Congressional action authorizing appropriations to the Energy Research and Development Administration for fiscal year 1976 did not provide this increased funding.

Specifically, this supplemental funding will provide a balanced weapons research and development and testing program, a capability to verify the peaceful nuclear explosives agreement now being negotiated as part of the Threshold Test Ban Treaty, and to purchase a needed computer for the Lawrence Livermore Laboratory. The Office of Management and Budget agrees that these funds are still urgently needed and will identify this request as a 1976 supplemental in the President's budget being submitted to Congress later this month.

Enclosed is additional detailed justification for this increased funding. I consider this supplemental authorization and appropriation request to be of utmost importance to our nuclear weapons program and hope that it can be given early consideration.

Sincerely,

ROBERT C. SEAMANS, Jr., Administrator.

#### [ENCLOSURES]

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, FISCAL YEAR 1976 SUPPLEMENTAL BUDGET REQUESTS

#### NATIONAL SECURITY—WEAPONS PROGRAM—OPERATING

The weapons program provides for research, development, testing, and production of nuclear weapons for the national defense. Budgetary constraints, inflation, and high-yield and other weaponization requirements have reduced and narrowed the scope of weapons research and development and testing over the last several years. Present fiscal year 1976 funding provides for only half the advanced development effort supported in fiscal year 1974. This severely reduced effort will not build an adequate technological foundation to assure the future effectiveness of our nuclear deterrent posture. The requested supplemental will maintain weapons research and development effort at a level comparable to fiscal year 1975, and allow for testing of advanced development concepts in the fourth quarter of fiscal year 1976 and the Transition Quarter.

#### SUMMARY OF ESTIMATES BY SUBPROGRAM [In thousands of dollars]

	Actual, fiscal year—		Fiscal year 1976			Transition quarter		
Subprogram	1974	1975	Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
Production and surveillance Research and development Testing of atomic weapons Special test detection	374, 380 243, 097 160, 867 7, 530	377, 195 257, 644 179, 669 8, 095	357, 540 284, 465 199, 500 7, 610	0 10,000 10,000 2,500	357, 540 294, 465 209, 500 10, 110	96, 085 78, 515 43, 500 1, 900	3, 000 13, 000 1, 500	96, 085 81, 515 56, 500 3, 400
Total	785, 874	822, 603	1 849, 115	22, 500	871, 615	220, 000	17, 500	237, 500

<sup>1</sup> Excludes fiscal year 1975 pay raise provisions.

## Research and Development, \$10,000,000

Insufficient funding each year to offset the effects of inflation has caused manpower levels in this subprogram to decrease 22 percent from 9764 in fiscal year 1970 to 7600 in fiscal year 1976. The effect has been to constrain both weaponization and advanced development for future weapons below prudent levels. Under such constraints, the development and testing of high-yield weapons (B77 FUFO Bomb, W78 (MK-12A) Minuteman III warhead, and the MK-80 MIRV warhead) have proceeded on an austere, high-risk basis, effort on W76 Trident, B61 Bomb, and W79 projectile are at less than optimum effort, and advanced development has been reduced to half its fiscal vear 1973 level.

The supplemental will allow an increase of 266 man-years in the fiscal year 1976 R. & D. level from 7600 to 7866 which will maintain manpower at the fiscal year 1975 level. Of the 266 man-years covered by this weapons supplemental, 180 will be directed toward advanced development as follows:

Weapons safety and security	30
Minimal residual radiation	30
Pure fusion	25
Other new designs	30
Hydrodynamics	20
Materials and effects	20
Insertable-convertible designs	$\frac{20}{25}$
Total	180

#### Testing of Atomic Weapons, \$10,000,000

Testing is an integral part of weapons research and development. The weapons budget currently provides only for high-vield and other Phase 3 weaponization tests in fiscal year 1976 and a severely reduced level of testing in the Transition Quarter. The additional \$10 million will support the development of Insensitive High Explosives, Minimal Residual Radiation, and Insertable-Convertible Designs.

In the Transition Quarter, the requested additional \$13 million will avoid a severe manpower reduction in the test organization and maintain it near its fiscal year 1974 and fiscal year 1975 levels. Weapons testing will be maintained through the four quarters of fiscal year 1976 and the Transition Quarter at nearly the same level as in fiscal year 1975.

# Special Test Detection Activities, \$2,500,000

In the ongoing negatiations in Moscow aimed at concluding a PNE agreement, as called for in the Threshold Test Ban Treaty, a number of technical verification procedures, other than national technical means including onsite activities and measurements and data analysis. have been proposed. All of these proposed procedures have been used, to varying degrees, in the U.S. weapons test or PNE programs. However, these procedures have not been used under the conditions that will prevail during a verification mission and, in most cases, data were not obtained for the specific verification procedures envisaged since their use was for other purposes. Therefore, research and development are needed to optimize the proposed equipment, techniques, and data analysis procedures in order to ensure the availability of an effective verification system.

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION—FISCAL YEAR 1976 SUPPLEMENTAL BUDGET ESTIMATES

NATIONAL SECURITY: WEAPONS PROGRAM—PLANT AND CAPITAL EQUIPMENT OBLIGATIONS

Program statement	Fiscal vear	Fiscal	Fiscal year 1976			Transition quarter		
	1974 actual	1975	Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
A—Obligations for construc- tion projects	\$60, 786	\$101, 084	\$104, 726	0	\$104, 722	\$13,500	0	\$13, 500
equipment not related to construction	68, 093	68, 706	1 59, 650	\$4,000	63, 650	14, 870	0	14, 870
Total obligations for plant and capital equipment	128, 879	169, 790	164, 376	4, 000	168, 372	28, 370	0	28, 370

<sup>1</sup> Includes \$1,500,000 carryover.

11 SEC. B-OBLIGATIONS FOR CAPITAL EQUIPMENT NOT RELATED TO CONSTRUCTION

Program statement	Fiscal Fiscal		Fiscal year 1976			Transition quarter		
	1974 actual	year year 1974 1975 actual actual	Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
Weapons program	\$68, 093	\$68, 706	\$59, 650	\$4, 000	<b>\$</b> 63, 650	\$14, 870	0	\$14, 870

#### JUSTIFICATION

The requested equipment funds for fiscal year 1976 will be used to exercise an existing purchase option on a CDC 7600 computer and accessories situated at the Lawrence Livermore Laboratory in Livermore, California. This computer was provided to ERDA at no cost in 1973 as a result of delays in delivery of CDC STAR computers. This agreement allowed lease credits to be applied to purchase should ERDA desire to exercise the purchase option at a later time. This computer, currently list priced at \$7,500,000, may be purchased outright for \$4,000,000 and will be used at LLL to support heavy computational demands of weapons systems currently in Phase 3 development.

The retention of the computer is also necessary because of the transfer of a CDC 7600 from LLL to Sandia Laboratories, Albuquerque, compounded by the longer-than-anticipated checkout, debugging, and attaining operational mode for the two Star computers delivered in fiscal year 1975.

The computer will also serve as an ERDA asset for other locations dependent on computational workload for energy-related or weapons program requirements.

Note: Obligations for the weapons program for the fiscal year 1976 supplemental are estimated at \$4,000,000, all of which is for capital equipment not related to construction justified in sec. B below.

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

# Operating Expenses

For an additional amount for "Operating expenses", \$30,000,000, to remain available until expended.

For an additional amount for "Operating expenses" for the period July 1, 1976, through September 30, 1976, \$23,000,000, to remain available until expended.

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION—OPERATING EXPENSES, PROGRAM AND FINANCING

#### [In thousands of dollars]

	1976 presently available	1976 revised estimate	1976 proposed supplemental
Program by activities: Direct program: National security: Weapons Items not changed	849, 115 3, 041, 072	871, 615 3, 041, 072	22, 500
Total direct program costs	3, 890, 187 383, 093	3, 912, 687 383, 093	22, 500
Total program costs, funded	4, 273, 280 361, 347	4, 295, 780 368, 847	22, 500 7, 500
Total obligations	4, 634, 627 391, 868 670, 000 15, 000	-670, 000	30,000
Budget authority	3, 557, 759	3, 587, 759	30,000
Relation of obligations to outlays: Obligations incurred, net. Obligated balance, start of year. Obligated balance, end of year	3, 572, 759 1, 008, 772 1, 439, 088	3, 602, 759 1, 088, 772 -1, 446, 588	30, 000 —7, 500
Outlays	3, 222, 443	3, 244, 943	22, 500

(12)

# 13

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION OPERATING EXPENSES PROGRAM AND FINANCING

#### [In thousands of dollars]

	Transition quarter presently available	Transition quarter revised estimate	Transition quarter proposed supplemental
Program by activities: Direct program: 1. National security: Weapons Items not changed	220, 000 801, 749	237, 500 801, 749	
Total direct program costsReimbursable program	1, 021, 749 104, 485	1, 039, 249 104, 485	17, 500
Total program costs, funded	1, 126, 234 137, 909	1, 143, 734 143, 409	17, 500 5, 500
Total obligations	1, 264, 143	1, 287, 143	23, 000
Financing: Receipts and reimbursements from: Federal funds			
Budget authority			23, 000
Relation of obligations to outlays: Obligated balance, start of year Obligated balance, end of year	-1, 567, 982	1, 073, 463 1, 446, 588 —1, 580, 982 939, 069	-13, 000
Outlays	321, 303	333,003	

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

# Operating Expenses

#### JUSTIFICATION

This supplemental appropriation is for additional funds to provide a strong weapons research and development and testing program, and to support verification under the Peaceful Nuclear Explosives Agreement being negotiated as called for in the Threshold Test Ban Treaty as requested in the President's letter dated October 22, 1975 (Senate Document 94-112).



DATE: 4-14-76

TO:

Bob Linder

FROM:

Jim Frey

Attached is the Senate Report on S. 3108. Please have it included in the enrolled bill file. Thanks.

94TH Congress }

SENATE

REPORT No. 94-707

# AUTHORIZING SUPPLEMENTAL APPROPRIATIONS TO THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION FOR FISCAL YEAR 1976 AND THE TRANSITION PERIOD

# $R \to P O R T$

BY THE

# JOINT COMMITTEE ON ATOMIC ENERGY

[To accompany S. 3108]



MARCH 22, 1976.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1976

57-010

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(II)

# Calendar No. 677

94TH CONGRESS 2d Session

SENATE

REPORT No. 94-707

AUTHORIZING SUPPLEMENTAL APPROPRIATIONS TO THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION FOR FISCAL YEAR 1976 AND THE TRANSITION PERIOD

MARCH 22, 1976.—Ordered to be printed

Mr. Pastore, from the Joint Committee on Atomic Energy, submitted the following

## REPORT

[To accompany S. 3108]

The Joint Committee on Atomic Energy, having considered S. 3108, to authorize supplemental appropriations to the Energy Research and Development Administration for fiscal year 1976 and the transition period, hereby report without amendment the bill and recommend that the bill do pass.

#### SUMMARY OF THE BILL

This bill authorizes supplemental appropriations of \$34,000,000 to the Energy Research and Development Administration for fiscal year 1976 and \$23,000,000 for the transition period in budget authority and \$26,500,000 and \$17,500,000 in budget outlays for the respective periods. The supplemental request is needed primarily to provide a balanced nuclear weapons research, development, and testing program, a capability to verify the peaceful nuclear explosive agreement now being negotiated with the Soviet Union as part of the Threshold Test Ban Treaty, and to purchase at reduced cost a needed computer now being leased for the Lawrence Livermore Laboratory.

#### BACKGROUND

On October 22, 1975, the President submitted to Congress amendments to the Energy Research and Development Administration's Weapons program for fiscal year 1976 and the transition period. Due to the lateness of the request, the Congress was unable to initiate action prior to adjournment of the 1st Session of the 94th Congress.

As a result, Public Law 94-187, Authorization of Appropriations for Fiscal Year 1976 and Transition Period for the Energy Research and Development Administration dated December 31, 1975, did not provide this increased funding.

On January 13, 1976, the Energy Research and Development Administration transmitted to the Congress a request for increase in appropriations for fiscal year 1976 of \$34,000,000 and for the transition period of \$23,000,000 (see Appendix). On March 9, 1976 Senator John O. Pastore, Chairman of the Joint Committee on Atomic Energy, introduced, by request, S. 3108, to amend Public Law 94-187 to increase the authorization for appropriations to the Energy Research and Development Administration in accordance with section 261 of the Atomic Energy Act of 1954, as amended, section 305 of the Energy Reorganization Act of 1974, and section 16 of the Federal Nonnuclear Energy Research and Development Act of 1974, and for other purposes. The bill was referred to the Joint Committee on Atomic

On March 9, 1976, Representative Melvin Price, Vice Chairman of the Joint Committee, introduced an identical bill, H.R. 12388, by request, which was referred to the Joint Committee on Atomic Energy.

The Joint Committee met in executive session on March 12, 1976, and voted without dissent to report the bill favorably to the Senate. The Joint Committee met in executive session on March 18, 1976, and voted without dissent to file this report.

#### HEARINGS

On February 3, 1976, the Subcommittee on Legislation of the Joint Committee on Atomic Energy held an executive hearing on the request for authorization of supplemental appropriations for fiscal year 1976 and the transitional period as well as for fiscal year 1977. Testimony was presented on behalf of the Energy Research and Development Administration by Dr. Robert C. Seamans, Jr., Administrator; Alfred D. Starbird, Assistant Administrator for National Security; and Major General Joseph K. Bratton, U.S. Army, Director of Military Application.

Testimony was also heard from Dr. Harold M. Agnew, Director of Los Alamos Scientific Laboratory; Dr. Roger M. Batzel, Director of Lawrence Livermore Laboratory; and Dr. Morgan Sparks, President of Sandia Laboratories. Brigadier General William B. Maxson, USAF, Deputy Assistant to the Secretary of Defense (Atomic Energy), was present and expressed Department of Defense support for the ERDA request for supplemental appropriations.

#### COMMITTEE COMMENTS

The ERDA request was for an increase of \$34,000,000 for fiscal year 1976 and \$23,000,000 for the transition period in budget authority and \$26,500,090 and \$17,500,000 in budget outlays for the respective periods. ERDA states this supplemental would provide amounts for the following purposes:

(1) Research and Development. The level of scientific manpower in the ERDA laboratories for nuclear weapon activities has declined

from about 9,800 man-years in fiscal year 1970 to about 7,900 manyears in fiscal year 1975. Since the Department of Defense requirements for engineering development of current weapons has not diminished over this period, the major impact of this reduction has been particularly serious in advanced development for future weapons where the level of efforts has reduced from about 2,150 man-years in fiscal year 1970 to about 1,450 in fiscal year 1975. Without the supplemental the total laboratories' effort will reduce to 7,600 man-years and advanced development to 1,250 in fiscal year 1976, whereas the supplemental will permit holding to approximately the fiscal year

(2) Nuclear Testing. To accomplish all required high yield nuclear testing prior to the proposed March 31, 1976, effective date of the Threshold Test Ban Treaty, ERDA deferred all advanced development tests for over a year. Funds, which remain for the fourth quarter of fiscal year 1976 and fiscal year 1976T, will support only a few low yield tests, only 60 percent of that for recent years. Without this supplement ERDA would be unable to restore testing to a minimum required level. In addition ERDA would have to make a force reduction of approximately 800 test personnel, an area where there had already been a reduction in strength of about 50 percent during the

past five years.

(3) Special Test Detection. Negotiations between the United States and the Soviet Union are going on and are directed toward reaching a Peaceful Nuclear Explosion (PNE) agreement by March 31, 1976. The supplemental would provide the necessary funds for development of equipment, techniques, and data analysis needed for accomplishing verification that the Soviet PNE experiments are consistent with the agreement. Without these requested amounts, the United States could find itself unprepared to take the necessary Treaty verification actions for U.S.S.R. nuclear explosions. This would be an important element in completing the Threshold Test Ban Treaty signed in July 1974 between the United States and the Soviet Union.

(4) Capital Equipment. Because the new Control Data Corporation Star computers installed at the Lawrence Livermore Laboratory (LLL) have not yet reached anticipated capability, it was been necessary for the laboratory to hold a leased CDC 7600 computer longer than expected. Purchase rather than further leasing of that computer offers substantial financial advantages to the Government. Without this computer there would be a severe shortage of weapons program

computing capacity in LLL.

The Joint Committee concurs with the request of the Energy Research and Development Administration.

# SECTION-BY-SECTION ANALYSIS

Title I amends Section 101(a) (5) of Public Law 94-187 by providing an increase of \$34 million for the operating expenses of the Energy Research and Development Administration.

Title II amends Section 201(a) (5) of Public Law 94-187 by providing for an increase of \$23 million for the operating expenses of the Energy Research and Development Administration for the period July 1, 1976, through September 30, 1976.

## COST OF LEGISLATION AND BUDGET IMPACT

In accordance with Section 252(a) of the Legislative Reorganization Act of 1970 (Public Law 91-510), the Joint Committee estimates that the following costs will be incurred if this bill and the subsequent appropriations are enacted into law.

Fiscal years:	_	lillions
1976		\$26.5
1976 transition period		17. 5
		13 0
1977		10.0
Total costs		57. 0

# ESTIMATE AND COMPARISON, CONGRESSIONAL BUDGET OFFICE

Pursuant to section 403 of the Congressional Budget Act of 1974, the following report has been submitted to the Joint Committee by the Congressional Budget Office:

Congress of the United States, Congressional Budget Office, Washington, D.C., March 18, 1976.

Hon. John O. Pastore, Chairman, Joint Committee on Atomic Energy, U.S. Senate, Washington, D.C.

Dear Mr. Chairman: Pursuant to Section 403 of the Congressional Budget Act of 1974, the Congressional Budget Office has prepared the attached cost estimate for S. 3108 and H.R. 12388 (identical) to authorize supplemental appropriations for the Energy Research and Development Administration for Fiscal Year 1976 and the Transition Period.

Should the Committee so desire, we would be pleased to provide

further details of the attached cost estimate.

Sincerely,

ALICE M. RIVLIN, Director.

Attachment.

# CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

MARCH 16, 1976.

1. Bill number: S. 3108 and H.R. 12388 (identical).

2. Bill title: To amend Public Law 94–187 to increase authorization appropriations to the Energy Research and Development Administration for fiscal year 1976 and the Transition Period.

3. Purpose of the bill: This bill authorizes supplemental appropriations of \$34,000,000 to the Energy Research and Development Administration for fiscal year 1976 and \$23,000,000 for the transition period. The supplemental request is for weapons research and development testing, development of equipment and techniques and data

analysis required for accomplishing verification of Soviet Peaceful Nuclear Explosions, and purchase of a CDC 7600 computer currently being leased.

4. Budget impact:

Operating expenses:	
Fiscal year 1976:	Millions
Authorization amounts	_ \$30.0
Estimated costs	22. 5
Transition quarter:	
Authorization amounts	_ 23. 0
Estimated costs	_ 17. 5
Fiscal year 1977: Estimated costs	13. 0
Plant and capital equipment:	
Fiscal year 1976:	
Authorization amounts	4.0
Estimated costs	4.0

5. Basis for estimate: The estimates assume that funds will be appropriated for the full amount of the authorization, and available for obligation not later than March 31, 1976 for fiscal year 1976 funds and July 1, 1976 for transition quarter funds.

6. Estimate comparison: The CBO estimate is identical to the estimate contained in the President's Budget, the current Energy Research and Development Administration estimate, and the estimate

of the Joint Committee.

7. Previous CBO estimate: None.

8. Estimate prepared by: Robert E. Schafter.

9. Estimate approved by: James L. Blum, Assistant Director for Budget Analysis.

#### CHANGES IN EXISTING LAW

In accordance with subsection (4) of rule XXIX of the Standing Rules of the Senate, changes in existing law recommended by the bill accompanying this report are shown as follows (deleted matter is shown in black brackets and new matter is printed in italic; and existing law in which no change is proposed is shown in roman):

#### PUBLIC LAW 94-187

AN ACT To authorize appropriations to the Energy Research and Development Administration in accordance with Section 261 of the Atomic Energy Act of 1954, as amended, Section 305 of the Energy Reorganization Act of 1974, and Section 16 of the Federal Non-nuclear Energy Research and Development Act of 1974, and for other purposes

Sec. 101 \* \* \* \* (a) \* \* \*

(5) NUCLEAR ENERGY AND OTHER PROGRAMS.—[\$3,158,970,000] \$3.188,970.000, of which a sum of dollars for the following programs equal to the total of the following amounts is included:

(b) \* \* \*

(15) \* \* \* (g) Nuclear Energy and Other Programs.—[\$237,502,000] \$241,502,000.
Sec. 201 \* \* \*

(a) \* \* \*

(5) Nuclear Energy and Other Programs.—[\$914,849,000] \$937,849,000, of which a sum of dollars for the following programs equal to the total of the following amounts is included:

## APPENDIX

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, Washington, D.C., January 13, 1976.

Hon. John O. Pastore, Chairman, Joint Committee on Atomic Energy, Congress of the United States.

Dear Mr. Chairman: On October 22, 1976, the President forwarded to the Congress an amendment to the ERDA weapons program request. The amendment was for budget authority of \$34 million for fiscal year 1976 and \$23 million for the fiscal year 1976 transition quarter (fiscal year 1976T). This amendment arrived too late for Congressional action prior to the authorization bill. Therefore, I am forwarding separately to you and to the appropriations committees a request to convert this amendment into a supplemental fiscal year 1976

appropriation.

I do want to inform you that I consider this supplemental to be of major importance to our nuclear weapons program and to our national defense posture. It has the full support of the Secretary of Defense as well as the President. It is particularly important that the fiscal year 1976 portion be authorized and appropriated as early as possible to be available in time to prevent a further decrease in laboratory strength, a reduction in nuclear testing to an unacceptably low level, a possible shortfall in capability to verify the peaceful nuclear explosives agreement now being negotiated, and a severe computing shortage at one laboratory.

This supplemental is to provide amounts for the following essential

nurnoses

Research and Development.—The level of scientific manpower in the ERDA laboratories for nuclear weapon activities has declined from about 9800 man-years (MY) in fiscal year 1970 to about 7900 MY in fiscal year 1975. Since the DOD requirements for engineering development of current weapons has not diminished over this period, the major impact of this reduction has been particularly serious in advanced development for future weapons where the level of effort has reduced from about 2150 MY in fiscal year 1970 to about 1450 in fiscal year 1975. If the supplemental request is not approved the total laboratories' effort will reduce to 7600 MY and advanced development to 1250 in fiscal year 1976, whereas the supplemental will permit holding to approximately the fiscal year 1975 levels.

Nuclear Testing.—To accomplish all required high yield nuclear testing prior to the proposed March 31, 1976, effective date of the Threshold Test Ban Treaty, we have had to defer all advanced development tests for over a year. Funds, which remain for the fourth

quarter of fiscal year 1976 and fiscal year 1976T, will support only a few low yield tests, only 60 percent of that for recent years. Without this supplement we would be unable to restore testing to a minimum required level. In addition we would have to make a force reduction of

approximately 800 test personnel.

Special Test Detection.—Negotiations between the U.S. and U.S.S.R. are on-going and directed toward reaching a Peaceful Nuclear Explosion (PNE) agreement by March 31, 1976. This supplemental will provide the necessary funds for development of equipment, techniques, and data analysis needed for accomplishing verification that the Soviet PNE experiments are consistent with the agreement. Without these requested amounts, the United States could find itself unprepared to take the necessary Treaty verification actions for U.S.S.R. nuclear explosions.

Capital Equipment.—Because the new CDC Star computers installed at the Lawrence Livermore Laboratory (LLL) have not yet reached anticipated capability, it has been necessary for the laboratory to hold a leased CDC 7600 longer than expected. Purchase rather than further leasing offers substantial financial advantages to the government. Without this computer there would be a severe shortage of

weapons program computing capacity in LLL.

I would appreciate your assistance on this important matter. My staff and I are ready to provide additional information and assistance at any time.

Sincerely,

ROBERT C. SEAMANS, Jr., Administrator.

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, Washington, D.C., January 13, 1976.

Hon. Nelson Rockefeller, President of the Senate.

Dear Mr. President: On October 22, 1975, the President submitted to Congress amendments to the Energy Research and Development Administration's Weapons program for fiscal year 1976 and the transition period. Those amendments totaled \$34.0 million for fiscal year 1976 and \$23.0 million for the transition period in budget authority and \$26.5 million and \$17.5 million in budget outlays for the respective periods. Unfortunately, due to the lateness of the request, the Congress was unable to complete action prior to its recess. As a result, the Congressional action authorizing appropriations to the Energy Research and Development Administration for fiscal year 1976 did not provide this increased funding.

Specifically, this supplemental funding will provide a balanced weapons research and development and testing program, a capability to verify the peaceful nuclear explosives agreement now being negotiated as part of the Threshold Test Ban Treaty, and to purchase a needed computer for the Lawrence Livermore Laboratory. The Office of Management and Budget agrees that these funds are still urgently needed and will identify this request as a 1976 supplemental in the President's budget being submitted to Congress later this month.

Enclosed is additional detailed justification for this increased funding. I consider this supplemental authorization and appropriation request to be of utmost importance to our nuclear weapons program and hope that it can be given early consideration.

Sincerely,

ROBERT C. SEAMANS, Jr., Administrator.

#### [ENCLOSURES]

U.S. Energy Research and Development Administration, Fiscal Year 1976 Supplemental Budget Requests

#### NATIONAL SECURITY—WEAPONS PROGRAM—OPERATING

The weapons program provides for research, development, testing, and production of nuclear weapons for the national defense. Budgetary constraints, inflation, and high-yield and other weaponization requirements have reduced and narrowed the scope of weapons research and development and testing over the last several years. Present fiscal year 1976 funding provides for only half the advanced development effort supported in fiscal year 1974. This severely reduced effort will not build an adequate technological foundation to assure the future effectiveness of our nuclear deterrent posture. The requested supplemental will maintain weapons research and development effort at a level comparable to fiscal year 1975, and allow for testing of advanced development concepts in the fourth quarter of fiscal year 1976 and the Transition Quarter.

SUMMARY OF ESTIMATES BY SUBPROGRAM
[In thousands of dollars]

	Actual fiscal year—		Fiscal year 1976			Transition quarter		
Subprogram	1974	1975	Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
Production and surveillance_ Research and development Testing of atomic weapons Special test detection	374, 380 243, 097 160, 867 7, 530	377, 195 257, 644 179, 669 8, 095	357, 540 284, 465 199, 500 7, 610	0 10, 000 10, 000 2, 500	357, 540 294, 465 209, 500 10, 110	96, 085 78, 515 43, 500 1, 900	3, 000 13, 000 1, 500	96, 085 81, 515 56, 500 3, 400
Total	785, 874	822, 603	1 849, 115	22, 500	871, 615	220, 000	17, 500	237, 500

<sup>1</sup> Excludes fiscal year 1975 pay raise provisions.

## Research and Development, \$10,000,000

Insufficient funding each year to offset the effects of inflation has caused manpower levels in this subprogram to decrease 22 percent from 9764 in fiscal year 1970 to 7600 in fiscal year 1976. The effect has been to constrain both weaponization and advanced development for future weapons below prudent levels. Under such constraints, the development and testing of high-yield weapons (B77 FUFO Bomb, W78 (MK-12A) Minuteman III warhead, and the MK-80 MIRV warhead) have proceeded on an austere, high-risk basis, effort on W76 Trident, B61 Bomb, and W79 projectile are at less than optimum effort, and advanced development has been reduced to half its fiscal year 1973 level.

The supplemental will allow an increase of 266 man-years in the fiscal year 1976 R. & D. level from 7600 to 7866 which will maintain

manpower at the fiscal year 1975 level. Of the 266 man-years covered by this weapons supplemental, 180 will be directed toward advanced development as follows:

Weapons safety and security	30
Minimal residual radiation	30
Pure fusion	25
Other new designs	30
Hydrodynamics	20
Materials and effects	20
Insertable-convertible designs	25
Total	180

## Testing of Atomic Weapons, \$10,000,000

Testing is an integral part of weapons research and development. The weapons budget currently provides only for high-yield and other Phase 3 weaponization tests in fiscal year 1976 and a severely reduced level of testing in the Transition Quarter. The additional \$10 million will support the development of Insensitive High Explosives, Minimal Residual Radiation, and Insertable-Convertible Designs.

In the Transition Quarter, the requested additional \$13 million will avoid a severe manpower reduction in the test organization and maintain it near its fiscal year 1974 and fiscal year 1975 levels. Weapons testing will be maintained through the four quarters of fiscal year 1976 and the Transition Quarter at nearly the same level as in fiscal year 1975.

# Special Test Detection Activities, \$2,500,000

In the ongoing negotiations in Moscow aimed at concluding a PNE agreement, as called for in the Threshold Test Ban Treaty, a number of technical verification procedures, other than national technical means including onsite activities and measurements and data analysis, have been proposed. All of these proposed procedures have been used, to varying degrees, in the U.S. weapons test or PNE programs. However, these procedures have not been used under the conditions that will prevail during a verification mission and, in most cases, data were not obtained for the specific verification procedures envisaged since their use was for other purposes. Therefore, research and development are needed to optimize the proposed equipment, techniques, and data analysis procedures in order to ensure the availability of an effective verification system.

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION—FISCAL YEAR 1976 SUPPLEMENTAL BUDGET ESTIMATES

NATIONAL SECURITY: WEAPONS PROGRAM-PLANT AND CAPITAL EQUIPMENT OBLIGATIONS

Program statement	Fiscal year 1974 actual	Fiscal year 1975 actual	Fiscal year 1976			Transition quarter		
			Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
A—Obligations for construc- tion projects	\$60, 786	\$101, 084	\$104, 726	0	\$104, 722	\$13,500	0	\$13, 500
equipment not related to construction	68, 093	68, 706	1 59, 650	\$4, 000	63, 650	14, 870	0	14, 870
Total obligations for plant and capital equipment	128, 879	169, 790	164, 376	4, 000	168, 372	28, 370	0	28, 370

<sup>1</sup> Includes \$1,500,000 carryover.

SEC. B.—OBLIGATIONS FOR CAPITAL EQUIPMENT NOT RELATED TO CONSTRUCTION

Program statement	Fiscal year 1974 actual	Fiscal year 1975 actual	Fiscal year 1976			Transition quarter		
			Previous estimate	Supple- mental	Revised estimate	Previous estimate	Supple- mental	Revised estimate
Weapons program	<b>\$</b> 68, 093	\$68, 706	\$59, 650	\$4, 000	\$63, 650	\$14,870	0	\$14, 870

#### JUSTIFICATION

The requested equipment funds for fiscal year 1976 will be used to exercise an existing purchase option on a CDC 7600 computer and accessories situated at the Lawrence Livermore Laboratory in Livermore, California. This computer was provided to ERDA at no cost in 1973 as a result of delays in delivery of CDC STAR computers. This agreement allowed lease credits to be applied to purchase should ERDA desire to exercise the purchase option at a later time. This computer, currently list priced at \$7,500,000, may be purchased outright for \$4,000,000 and will be used at LLL to support heavy computational demands of weapons systems currently in Phase 3 development.

The retention of the computer is also necessary because of the transfer of a CDC 7600 from LLL to Sandia Laboratories, Albuquerque, compounded by the longer-than-anticipated checkout, debugging, and attaining operational mode for the two Star computers delivered in fiscal year 1975.

The computer will also serve as an ERDA asset for other locations dependent on computational workload for energy-related or weapons program requirements.

Note: Obligations for the weapons program for the fiscal year 1976 supplemental are estimated at \$4,000,000, all of which s for capital equipment not related to construction justified in sec. B below.

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

## Operating Expenses

For an additional amount for "Operating expenses", \$30,000,000, to

remain available until expended.

For an additional amount for "Operating expenses" for the period July 1, 1976, through September 30, 1976, \$23,000,000, to remain available until expended.

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION—OPERATING EXPENSES, PROGRAM AND FINANCING

#### [In thousands of dollars]

1976 proposed supplementat	1976 revised estimate	1976 presently available	
22, 500	871, 615 3, 041, 072	849, 115 3, 041, 072	Program by activities: Direct program: National security: Weaponsttems not changed.
22, 500	3, 912, 687 383, 093	3, 890, 187 383, 093	Total direct program costsReimbursable program
22, 500 7, 500	4, 295, 780 368, 847	4, 273, 280 361, 347	Total program costs, funded
30, 000	4, 664, 627	4, 634, 627	Total obligationsFinancing:
	-670,000	-391, 868 -670, 000 -15, 000	Receipts and reimbursements from: Federal funds
30, 000	3, 587, 759	3, 557, 759	Budget authority
30, 000 -7, 500	3, 602, 759 1, 088, 772 —1, 446, 588	3, 572, 759 1, 008, 772 —1, 439, 088	Relation of obligations to outlays: Obligations incurred, net Obligated balance, start of yearObligated balance, end of year
<b>2</b> 2, 500	3, 244, 943	3, 222, 443	Outlays

(12)

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION OPERATING EXPENSES

13

# PROGRAM AND FINANCING [In thousands of dollars]

	Transition quarter presently available	Transition quarter revised estimate	Transition quarter proposed supplemental
Program by activities: Direct program: 1. National security: Weapons	220, 000 801, 749	237, 500 801, 749	17, 500
Total direct program costs	1, 021, 749 104, 485	1, 039, 249 104, 485	17, 500
Total program costs, funded	1, 126, 234 137, 909	1, 143, 734 143, 409	17, 500 5, 500
Total obligations	1, 264, 143	1, 287, 143	23, 000
Financing:  Receipts and reimbursements from: Federal funds Non-Federal sources. Unobligated balance available, start of year			
Budget authority		<del></del>	
Relation of obligations to outlays: Obligations incurred, net. Obligated balance, start of year. Obligated balance, end of year		1, 073, 463 1, 446, 588 —1, 580, 982	23, 000 7, 500 —13, 000
Outlays	921, 569	939, 069	17, 500

# U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

# Operating Expenses

#### JUSTIFICATION

This supplemental appropriation is for additional funds to provide a strong weapons research and development and testing program, and to support verification under the Peaceful Nuclear Explosives Agreement being negotiated as called for in the Threshold Test Ban Treaty as requested in the President's letter dated October 22, 1975 (Senate Document 94–112).

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# Ainety-fourth Congress of the United States of America

# AT THE SECOND SESSION

Begun and held at the City of Washington on Monday, the nineteenth day of January, one thousand nine hundred and seventy-six

# An Act

To amend Public Law 94-187 to increase the authorization for appropriations to the Energy Research and Development Administration in accordance with section 261 of the Atomic Energy Act of 1954, as amended, section 305 of the Energy Reorganization Act of 1974, and section 16 of the Federal Nonnuclear Energy Research and Development Act of 1974, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

# TITLE I—AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 1976

That section 101(a) (5) of Public Law 94-187 is hereby amended by striking therefrom the figure "\$3,158,970,000" and substituting the figure "\$3,188,970,000".

figure "\$3,188,970,000".

Sec. 2. Section 101(b) of Public Law 94–187 is hereby amended by striking from subsection (15)(G), capital equipment, the figure "\$237,502,000" and substituting the figure "\$241,502,000".

TITLE II—AUTHORIZATION OF APPROPRIATIONS FOR THE PERIOD JULY 1, 1976, THROUGH SEPTEMBER 30, 1976

That section 201(a) (5) of Public Law 94–187 is hereby amended by striking therefrom the figure "\$914,849,000" and substituting the figure "\$937,849,000".

Speaker of the House of Representatives.

Vice President of the United States and President of the Senate.

# April 7, 1976

## Dear Mr. Director:

The following bills were received at the White House on April 7th:

s. 719
s. 720
s. 721
s. 804
s. 832
s. 2308
s. 3108

Please let the President have reports and recommendations as to the approval of these bills as soon as possible.

Sincerely,

Robert D. Linder Chief Executive Clerk

The Honorable James T. Lynn Director Office of Management and Budget Washington, D. C.