DEPARTMENT OF ENERGY FY 1993 CONGRESSIONAL BUDGET REQUEST ENERGY SUPPLY. RESEARCH AND DEVELOPMENT

OVERVIEW

ENERGY RESEARCH ANALYSES

The Office of Program Analysis (OPA) manages the Energy Research Analyses Program to fulfill one of the major responsibilities of the Director of the Office of Energy Research/Science and Technology Advisor. The Department of Energy Organization Act (Public Law 95-91) states "...It shall be the duty and responsibility of the Director [of the Office of Energy Research] (1) to advise the Secretary with respect to the physical research program...[and] (2) to monitor the Department's energy research and development programs in order to advise the Secretary with respect to any undesirable duplication or gaps in such programs...". Accordingly, the Office of Program Analysis arranges for and participates in the assessments of research projects and programs in order to judge the quality and impact of these efforts and to identify undesirable duplications and gaps.

There are two principal types of independent technical assessments performed by OPA on research programs throughout the Department. First, OPA staff organize comprehensive project by project evaluations of major programs using outside experts from industry, academia and the National Laboratories. These peer reviews of ongoing projects provide the basis for judgments on the quality of the research and its impact. DOE Principal Officers responsible for energy R&D recognize that without these reviews less technically competitive projects might be continued.

Second, technical assessments provide independent views of the directions that future R&D in specific areas should take to be more productive and relevant to DOE missions. Research assessments are performed by outside experts and OPA staff drawing on the world's leading experts in the specific fields being addressed. State-of-the-science reviews by the Foreign Applied Sciences Assessment Center (FASAC), Japanese Technology Evaluation Center (JTEC) and JASON's are also performed.

In addition, the Secretary's Advisory Committee, partially supported by this office, addresses questions posed directly by the Secretary or the Director, Office of Energy Research/Science Technology Advisor, and provide views based upon their expertise. In addition, OPA has the responsibility within DOE for providing financial support for management of the National Acid Precipitation Assessment Program (NAPAP) created by the Acid Precipitation Act of 1980 (P.L. 96-294) and rechartered by the Clean Air Act Amendment of 1990 (CAAA). Under NAPAP, OPA summarizes and synthesizes the state of the science in acid rain research and produces research plans and assessment reports useful for policy makers, as required by the CAAA.

DEPARTMENT OF ENERGY FY 1993 CONGRESSIONAL BUDGET REQUEST ENERGY SUPPLY, RESEARCH AND DEVELOPMENT (dollars in thousands)

KEY ACTIVITY SUMMARY

ENERGY RESEARCH ANALYSES

I. Preface: Energy Research Analyses

The Office of Program Analysis (OPA) manages the Energy Research Analyses program to fulfill one of the responsibilities of the Director, Office of Energy Research/Science and Technology Advisor. The Department of Energy's Organization Act (Public Law 95-91) states "It shall be the duty and responsibility of the Director (Office of Energy Research) (1) to advise the Secretary with respect to the physical research program...(and) (2) to monitor the Department's energy research and development programs in order to advise the Secretary with respect to any undesirable duplication or gaps in such programs...". Accordingly, the Office of Program Analysis assesses research projects and programs in order to judge the significance of these efforts and to identify undesirable duplications and gaps.

II. A. Summary Table: Energy Research Analyses

	Program Activity		FY 1991 Enacted		FY 1992 Enacted		Y 1993 equest	% Change
	Program Technology Assessment	\$	2,740 882	\$	3,426 600	\$	3,420 600	0 0
	Total, Energy Research Analyses	\$ ====	3,622 	\$ ====	4,026 ==== =	\$ ===	4,020 ======	. 0 =========
II. B.	Major Laboratory and Facility Funding							
	Argonne National Laboratory (East)	\$ \$ \$	113 129 586 610	\$ \$ \$	0 0 600 160	\$ \$ \$	0 0 2,000 200	0 0 +233 + 25

DEPARTMENT OF ENERGY FY 1993 CONGRESSIONAL BUDGET REQUEST ENERGY SUPPLY RESEARCH AND DEVELOPMENT (dollars in thousands)

LEAD TABLE

Energy Research Analyses

	FY 1991	FY 1992	FY 1993	FY 1993	Program Change Request vs Base	
<u>Activity</u>	Enacted	Enacted	Base	Request	Dollar	Percent
Energy Research Analyses						
Operating Expenses	\$3,622 a/	\$4,026	\$4,026	\$4,020	(\$6)	
TOTAL	\$3,622	\$4,026	\$4,026	\$4,020	(\$6)	
Summary						
Operating Expenses	\$3,622	\$4,026	\$4,026	\$4,020	(\$6)	
Total Program	\$3,622	\$4,026	\$4,026	\$4,020	(\$6)	

Authorization: Section 209, P.L. 95-91.

a/ Total has been reduced as follows: \$40,000 which has been transferred to the SBIR program and \$21,000 for General Reduction.

DEPARTMENT OF ENERGY FY 1993 CONGRESSIONAL BUDGET REQUEST ENERGY SUPPLY RESEARCH AND DEVELOPMENT (dollars in thousands)

SUMMARY OF CHANGES

Energy Research Analyses

FY 1992 Appropriation	\$ 4,026
FY 1993 Base	4,026
Slight decrease in funding for assessments and peer reviews	_ 6
FY 1993 Congressional Budget Request	\$ 4,020

Program Activity

FY 1991

FY 1992

FY 1993

Energy Research Analyses

Program Technology Assessment

Perform technical assessment of research needs in Fossil Energy. Conservation and Renewable Energy, and Energy Research areas (e.g., recyclable plastics, biotechnology). Perform peer reviews of ongoing research in ER. FE. and CE. Support external R&D review through groups outside OPA; e.g., the Secretary's Advisory Committee, JASON, FASAC, and JTEC.

Perform technical assessment of research needs in Fossil Energy. Conservation and Renewable Energy, and Fnergy Research areas (e.g., combined cycle, environment). Perform peer reviews in ER. FE, and CE. Support external R&D review through groups outside OPA: e.g., the Secretary's Advisory Committee, JASON, FASAC, and JTEC.

Perform technical assessment of research needs in Fossil Energy. Conservation and Renewable Energy, and Energy Research areas (e.g., materials, transportation, and solar technologies). Perform peer reviews in ER. FE and CE. Support external R&D review through groups outside OPA: e.g., the Secretary's Advisory Committee, JASON, FASAC, and JTEC.

\$ 2,740

Support

Environmental Issues Provide DOE share of support for management and technical staff for NAPAP acid precipitation assessments. Support remainder of integrated assessment and review of ongoing research and monitoring of environmental issues. Support response Clean Air Act. Provide support for to critical reviews of NAPAP integrated reviews and scientific analyses of assessment. Participate in interagency environmental issues. effort to continue NAPAP as required by Clean Air Act of 1990.

\$ 3,426

Provide DOE share of support for management and technical staff for NAPAP acid precipitation and other assessments. Review ongoing research and monitoring of environmental issues and prepare analyses as required by the \$ 3,420

Provide DOE share of support for management and technical staff for acid precipitation and other assessments. Review ongoing research and monitoring of environmental issues and prepare analyses as required by the Clean Air Act. Provide support for reviews and scientific analyses of environmental issues.

\$ 882

\$ 600

\$ 600

Energy Research Analyses

\$ 3.622

\$ 4.026

\$ 4.020