### DEPARTMENT OF ENERGY FY 1994 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 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 ERA program funds outside experts to support the Secretary's Advisory Committee which addresses questions posed directly by the Secretary and provides views based upon their expertise.

OPA also 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 assessment reports useful for policy makers, as required by the CAAA.

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(Tabular dollars in thousands. Narrative in whole dollars.)

#### LEAD TABLE

#### **Energy Research Analyses**

Activity	FY 1992 Adjusted		FY 1993 Appropriation	FY 1993 Adjustment	-	FY 1994 Request
Energy Research Analyses						
Operating Expenses	\$3,983	a/	\$4,020	-\$104	b/	\$4,020
Subtotal	\$3,983		\$4,020	-\$104	-	\$4,020
Adjustment	.0		0	0	=	0
TOTAL	\$3,983	:	\$4,020	-\$104	b/	\$4,020
Summary						
Operating Expenses	\$3,983		\$4,020	-\$104	_	\$4,020
Total Program	\$3,983		\$4,020	-\$104	b/	\$4,020

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

a/ Total has been reduced by \$43,000 which has been transferred to the SBIR program. b/ General reduction for use of prior year balances.

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#### SUMMARY OF CHANGES

#### **Energy Research Analyses**

FY 1993 Appropriation	\$ 4,020
- Adjustment - General reduction for use of prior year balances	<u>- 104</u>
FY 1993 Adjusted	\$ 3,916
- Transfer - None	+ 0
FY 1993 Comparable	\$ 3,916
- Increase for peer reviews	+ 104
FY 1994 Congressional Budget Request	\$ 4,020

## DEPARTMENT OF ENERGY FY 1994 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 1992 Enacted		FY 1993 Enacted		FY 1994 Request		% Change	
	Energy Research Analyses	\$	3,983	\$	3,916	\$	4,020	+	3	
	Total, Energy Research Analyses	• • • • • • • • • • • • • • • • • • • •		3,916	• • • • • • • • • • • • • • • • •			+ 3		
II. B.	Major Laboratory and Facility Funding									
	OAK RIDGE NATIONAL LABORATORYPACIFIC NORTHWEST LABORATORY	\$ \$	2,624 191	\$ \$	2,400 163	\$ \$	2,400 0	-	0 100	

Program Activity	FY 1992 	FY 1993	FY 1994		
Energy Research Analyses			·		
Energy Research Analyses _	Performed peer reviews of 376 projects in ER and CE. Initiated three technical assessments of research needs in FE, CE, and ER (e.g., CO2 capture, CFC substitutes, Catalysis). Support external R&D review through groups outside OPA, e.g., JASON, FASAC, JTEC. Provide DOE's share of support for management and technical staff for NAPAP acid precipitation assessments. Supported the Secretary's Advisory Committee.	Redirect resources to perform peer reviews of approximately 600 projects in ER and CE. Initiate one technical assessment of research needs in FE, CE, or ER (e.g., transportation composite materials). Reduce support for external R&D review through groups outside OPA, e.g., JASON, FASAC, JTEC. Provide DOE's share of support for management and technical staff for NAPAP acid precipitation assessments. Support the Secretary's Advisory Committee.	Continue to perform peer reviews of approximately 700 projects in ER and CE. Perform one technical assessment of research needs in FE, CE, or ER (e.g., superconducting motors). Support external R&D review through groups outside OPA, e.g., JASON, FASAC, JTEC. Provide DOE's share of support for management and technical staff for NAPAP acid precipitation assessments. Support the Secretary's Advisory Committee.		
	Funding in the amount of \$43,000 has been transferred to the SBIR program.	Funding in the amount of \$59,000 has been budgeted for the SBIR program.	Funding in the amount of \$60,300 has been budgeted for the SBIR program.		
	\$ 3,983	<b>\$</b> 3,916	\$ 4,020		

Energy Research \$ 3,983 \$ 3,916 \$ 4,020 Analyses