

DEPARTMENT OF ENERGY
FY 1995 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY, RESEARCH AND DEVELOPMENT

OVERVIEW

ENERGY RESEARCH ANALYSES

The Office of Program Analysis (OPA) manages the Energy Research Analyses (ERA) Program to fulfill one of the major responsibilities of the Director of the Office of Energy Research. 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 and thus support the Department's core values dealing with excellence and quality. DOE Principal Officers responsible for energy R&D recognize that without these reviews less technically competitive projects might be continued. By helping program managers improve or replace projects that have significant shortcomings and capitalize on the strengths of strong projects, the reviews are a tool for quality management.

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. One research needs assessment can be performed at the requested level. In addition, state-of-the-science reviews by the Foreign Applied Sciences Assessment Center (FASAC), Japanese Technology Evaluation Center (JTEC) and JASON identify cutting edge research to overcome barriers to energy technologies, evaluating foreign research, or technically evaluating Department programs.

The ERA program also has the responsibility within DOE for providing financial support for management of the National Acid Precipitation Assessment Program (NAPAP) chartered 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.

The performance measures for the program are the number of projects reviewed and the number of assessments performed.

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

LEAD TABLE

Energy Research Analyses

<u>Activity</u>	<u>FY 1993 Adjusted</u>	<u>FY 1994 Appropriation</u>	<u>FY 1994 Adjustment</u>	<u>FY 1995 Request</u>
Energy Research Analyses				
Operating Expenses.....	\$3,961	\$4,020	-\$200	\$3,531
Subtotal, Energy Research Analyses.....	3,961 a/	4,020	-200	3,531
Adjustment.....	-104 b/	--	--	--
Total, Energy Research Analyses.....	<u>\$3,857 c/</u>	<u>\$4,020 d/</u>	<u>-\$200 e/</u>	<u>\$3,531</u>
Summary				
Operating Expenses.....	\$3,857	\$4,020	-\$200	\$3,531
Total Program.....	<u>\$3,857</u>	<u>\$4,020</u>	<u>-\$200</u>	<u>\$3,531</u>

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

- a/ Excludes \$59,000 which has been transferred to the SBIR program.
 b/ Amount of general reduction for use of prior year balances assigned to this program. The total will be taken at the Appropriation level.
 c/ Reflects general reduction for use of prior year balances of \$104,000.
 d/ Energy Supply R&D general reduction for use of prior year balances has not been spread by the Department.
 e/ Reflects reduction for contractor salary freeze of \$200,000.

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SUMMARY OF CHANGES

Energy Research Analyses

FY 1994 Request.....	\$ 4,020
- Adjustment- Contractor salary freeze.....	- <u>200</u>
FY 1994 Adjusted.....	\$ 3,820
- Decrease in support for peer reviews.....	- <u>289</u>
FY 1995 Congressional Budget Request.....	<u>\$ 3,531</u>

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KEY ACTIVITY SUMMARY

ENERGY RESEARCH ANALYSES

I. Preface: Energy Research Analyses

The Energy Research Analyses (ERA) program assesses research projects and programs in order to judge the significance of these efforts and to identify undesirable duplications and gaps. Peer reviews of individual research projects using outside experts are performed. Technical assessments to determine the direction of future research and state-of-the-science reviews are also performed. The ERA program also contributes DOE's share of support for management and technical staff for the National Acid Precipitation Assessment Program.

II. A. Summary Table: Energy Research Analyses

Program Activity	FY 1993 Enacted	FY 1994 Enacted	FY 1995 Request	% Change
Energy Research Analyses.....	\$ 3,961	\$ 3,820	\$ 3,531	- 8
Total, Energy Research Analyses	\$ 3,961	\$ 3,820	\$ 3,531	- 8

II. B. Major Laboratory and Facility Funding

OAK RIDGE NATIONAL LAB	\$ 2,730	\$ 1,000	\$ 1,000	0
PACIFIC NORTHWEST LAB	\$ 163	\$ 0	\$ 0	0

III. Activity Descriptions: (New BA in thousands of dollars)

Program Activity	FY 1993	FY 1994	FY 1995
Energy Research Analyses			
Energy Research Analyses	Peer reviews of 615 projects in ER and CE were performed. One technical assessment of research needs in FE, CE, or ER (e.g., fuel cells) was initiated. Reduced support for external R&D review through groups outside OPA, e.g., JASON, Foreign Applied Sciences Assessment Center (FASAC), Japanese Technology Evaluation Center (JTEC). Provided DOE's share of support for management and technical staff for interagency National Acid Precipitation Assessments Program (NAPAP).	Continue to perform peer reviews of projects in ER, FE and CE. Perform one technical assessment of research needs in FE, CE, or ER (e.g., waste plastics). Increase support for external R&D reviews 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.	Continue to perform peer reviews of projects in ER, FE and CE. Perform one technical assessment of research needs in FE, CE, or ER (e.g., advanced composite materials). Continue support for external R&D reviews 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.
	Funding in the amount of \$59,000 has been transferred to the SBIR program.	Funding in the amount of \$56,500 has been budgeted for the SBIR program.	Funding in the amount of \$71,000 has been budgeted for the SBIR program.
	\$ 3,961	\$ 3,820	\$ 3,531
Energy Research Analyses	\$ 3,961	\$ 3,820	\$ 3,531