

DEPARTMENT OF ENERGY  
FY 1992 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. 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 significance 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 perform 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 on 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 contractors 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 Committees, partially supported by this office, address questions posed directly by the Secretary or the Director, Office of Energy Research, and provides 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. The Integrated Assessment report is to be completed in FY 1991, as is a new research plan called for by the CAAA. In FY 1992 ongoing monitoring/research in key areas will be assessed and interagency peer reviews will be conducted.

DEPARTMENT OF ENERGY  
 FY 1992 CONGRESSIONAL BUDGET REQUEST  
 ENERGY SUPPLY RESEARCH AND DEVELOPMENT  
 (dollars in thousands)

LEAD TABLE

Energy Research Analyses

Activity -----	FY 1990 Enacted -----	FY 1991 Enacted -----	FY 1992 Base -----	FY 1992 Request -----	Program Change Request vs Base	
					Dollar -----	Percent -----
<b>Operating Expenses</b>						
Energy Research Analyses (OE)	\$3,760 a/	\$3,659	\$3,659	\$4,026	+ 367	+ 10
Subtotal Operating Expenses...	\$3,760	\$3,659	\$3,659	\$4,026	+ 367	+ 10
Total.....	\$3,760	\$3,659	\$3,659	\$4,026	+ 367	+ 10
Operating Expenses.....	(\$3,760)	(\$3,659)	(\$3,659)	(\$4,026)	+ 367	+ 10

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

a/ Total has been reduced by \$40,000, which has been transferred to the SBIR program.

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(dollars in thousands)

SUMMARY OF CHANGES

Energy Research Analyses

FY 1991 Enacted Appropriation .....	<u>\$ 3,659</u>
FY 1992 Base .....	3,659
Increased funding for assessments and peer reviews.....	<u>+ 367</u>
FY 1992 Congressional Budget Request.....	\$ 4,026

DEPARTMENT OF ENERGY  
 FY 1992 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 manages the Energy Research Analyses program to fulfill one of the responsibilities of the Director, Office of Energy Research. 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 1990 Actual	FY 1991 Estimate	FY 1992 Request	% Change
Program Technology Assessment.....	\$ 2,771	\$ 2,766	\$ 3,426	+ 24
Environmental Issues Support.....	989	893	600	- 33
<b>Total, Energy Research Analyses</b>	<b>\$ 3,760</b>	<b>\$ 3,659</b>	<b>\$ 4,026</b>	<b>+ 10</b>

II. B. Major Laboratory and Facility Funding

Argonne National Laboratory .....	\$ 328	\$ 150	\$ 150	0
Brookhaven National Laboratory .....	\$ 126	\$ 100	\$ 100	0
Oak Ridge National Laboratory .....	\$ 2,014	\$ 600	\$ 650	+ 8
Pacific Northwest Laboratory .....	\$ 555	\$ 300	\$ 350	+ 17

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

Program Activity	FY 1990	FY 1991	FY 1992
<b>Energy Research Analyses</b>			
<b>Program Technology Assessment</b>	Perform technical assessments in Energy Research, Fossil Energy (FE), and Conservation and Solar Renewable (CE) areas (e.g., catalysis, transportation, materials). Perform peer reviews for programs in Fossil, Energy Research and Conservation and Solar Renewables. Support external R&D review through groups outside OPA; e.g., FPAC, JASON, FASAC, JTEC, and SBIR.	Perform technical assessments in Fossil Energy, Conservation & Solar Renewables, and Energy Research areas (e.g., recyclable plastics, polymer composites). Perform peer reviews in FE and CE. Support external R&D review through groups outside OPA; e.g., the Secretary's Advisory Committees, JASON, FASAC, JTEC, and SBIR.	Perform technical assessments which focus on quality control and quality assurance in Fossil Energy, Conservation & Solar Renewables, and Energy Research areas (e.g., environment, energy biomass, transportation, and superconductivity). Perform peer reviews in FE and CE. Support external R&D review through groups outside OPA; e.g., the Secretary's Advisory Committees, JASON, FASAC, JTEC, and SBIR.
	\$ 2,771	\$ 2,766	\$ 3,426
<b>Environmental Issues Support</b>	Provide DOE share of NAPAP management and technical staff under P.L. 96-294. Draft portions of final assessment for 1990 concluding the 10-year NAPAP program. Complete analysis of advance models of aquatic chemistry and regional ozone estimates and aerosol health effects. Provide peer review of environmental program.	Provide DOE share of support for management and technical staff for acid precipitation assessments. Support remainder of final assessment and review of ongoing research and monitoring of environmental issues. Support response to critical reviews of NAPAP final assessment, as well as peer review and other scientific analyses of other environmental issues.	Provide DOE share of support for management and technical staff for acid precipitation and other assessments. Review ongoing research and monitoring of environmental issues. Provide support for peer reviews and scientific analyses of environmental issues.
	\$ 989	\$ 893	\$ 600
<b>Energy Research Analyses</b>	<b>\$ 3,760</b>	<b>\$ 3,659</b>	<b>\$ 4,026</b>