

Congressional Budget Request

Energy Supply Research and Development
Nuclear Waste Fund
Isotope Production and Distribution Fund
Basic Research User Facilities

Volume 2

FY 1989



U.S. Department of Energy

Assistant Secretary,
Management and Administration
Office of the Controller
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DEPARTMENT OF ENERGY
FISCAL YEAR 1989 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY RESEARCH AND DEVELOPMENT
NUCLEAR WASTE FUND
ISOTOPE PRODUCTION AND DISTRIBUTION FUND
BASIC RESEARCH USER FACILITIES

VOLUME 2

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DEPARTMENT OF ENERGY
 FISCAL YEAR 1989 CONGRESSIONAL BUDGET REQUEST
 SUMMARY OF ESTIMATES BY APPROPRIATIONS
 BUDGET AUTHORITY IN THOUSANDS OF DOLLARS

	FY 1987 ACTUAL	FY 1988 ESTIMATE	FY 1989 REQUEST
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APPROPRIATIONS BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEES:			
ENERGY SUPPLY RESEARCH AND DEVELOPMENT..	\$1,258,137	\$1,860,087	\$1,969,760
URANIUM ENRICHMENT.....	1,209,494	950,000	1,184,000
GENERAL SCIENCE AND RESEARCH.....	326,596	355,108	364,986
ISOTOPE PRODUCTION AND DISTRIBUTION FUND	509	89	16,243
BASIC RESEARCH USER FACILITIES.....	473,206	574,945	972,613
ATOMIC ENERGY DEENSE ACTIVITIES.....	7,481,852	7,749,364	8,100,000
DEPARTMENTAL ADMINISTRATION.....	226,874	164,243	177,814
ALASKA POWER ADMINISTRATION.....	2,881	3,026	3,159
BONNEVILLE POWER ADMINISTRATION.....	432,259	165,000	136,000
SOUTHEASTERN POWER ADMINISTRATION.....	19,647	27,400	36,267
SOUTHEASTERN - CONTINUING FUND.....	3,772	---	---
SOUTHWESTERN POWER ADMINISTRATION.....	25,337	16,648	15,389
WESTERN AREA POWER ADMINISTRATION.....	238,008	249,515	298,413
WESTERN AREA POWER EMERGENCY FUND.....	225	24	---
FEDERAL ENERGY REGULATORY COMMISSION....	99,079	100,000	106,760
NUCLEAR WASTE FUND.....	499,000	360,000	448,832
GEOHERMAL RESOURCES DEVELOPMENT FUND....	72	72	75
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SUBTOTAL, APPROPRIATIONS BEFORE THE ENERGY AND WATER DEVELOPMENT SUBCOMMITTEES.....	12,296,948	12,575,521	13,830,311

DEPARTMENT OF ENERGY
 FISCAL YEAR 1989 CONGRESSIONAL BUDGET REQUEST
 SUMMARY OF ESTIMATES BY APPROPRIATIONS
 BUDGET AUTHORITY IN THOUSANDS OF DOLLARS

	FY 1987 ACTUAL -----	FY 1988 ESTIMATE -----	FY 1989 REQUEST -----
APPROPRIATIONS BEFORE THE INTERIOR AND RELATED AGENCIES SUBCOMMITTEES:			
ALTERNATIVE FUELS PRODUCTION.....	437	---	---
CLEAN COAL TECHNOLOGY.....	---	50,000	525,000
FOSSIL ENERGY RESEARCH AND DEVELOPMENT..	293,171	326,975	166,992
NAVAL PETROLEUM AND OIL SHALE RESERVES..	122,177	159,663	185,071
ENERGY CONSERVATION.....	232,362	309,517	89,359
ENERGY REGULATION.....	23,400	21,565	20,772
EMERGENCY PREPAREDNESS.....	6,044	6,172	6,154
STRATEGIC PETROLEUM RESERVE.....	147,433	164,162	173,421
STRATEGIC PETROLEUM ACCOUNT.....	---	438,744	1,017,907
ENERGY INFORMATION ACTIVITIES.....	60,301	61,398	62,856
	-----	-----	-----
SUBTOTAL, INTERIOR AND RELATED AGENCIES SUBCOMMITTEES.....	885,325	1,538,196	2,247,532
SUBTOTAL, ENERGY AND WATER DEVELOPMENT SUBCOMMITTEES.....	12,296,948	12,575,521	13,830,311
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SUBTOTAL, DEPARTMENT OF ENERGY.....	13,182,273	14,113,717	16,077,843
PERMANENT - INDEFINITE APPROPRIATIONS:			
PAYMENTS TO STATES.....	912	1,839	1,909
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TOTAL, DEPARTMENT OF ENERGY.....	\$13,183,185	\$14,115,556	\$16,079,752
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DEPARTMENT OF ENERGY
 FY 1989 CONGRESSIONAL STAFFING REQUEST
 TOTAL WORK FORCE

	FY1987 FTE USAGE	FY1988 -FY87	FY1988 CONGR REQ	FY1989 -FY88	FY1989 CONGR REQ
ENERGY & WATER SUBCOMMITTEE					
HEADQUARTERS	4,697	264	4,961	73	5,034
FIELD	9,356	58	9,414	-75	9,339
SUBCOMMITTEE TOTAL	14,053	322	14,375	-2	14,373
INTERIOR SUBCOMMITTEE					
HEADQUARTERS	1,181	66	1,247	-111	1,136
FIELD	882	25	907	-140	767
SUBCOMMITTEE TOTAL	2,063	91	2,154	-251	1,903
GRAND TOTAL	16,116	413	16,529	-253	16,276
ADJUSTMENT		-263	-263	-209	-472
ADJUSTED TOTAL	16,116	150	16,266	-462	15,804

DEPARTMENT OF ENERGY
 FY 1989 CONGRESSIONAL STAFFING REQUEST
 TOTAL WORK FORCE

	FY1987 FTE USAGE	FY1988 -FY87	FY1988 CONGR REQ	FY1989 -FY88	FY1989 CONGR REQ
10:ENERGY SUPPLY RESEARCH AND DEV	922	14	936	10	946
HEADQUARTERS	644	7	651	10	661
FIELD	278	7	285	0	285
15:URANIUM ENRICHMENT	59	8	67	0	67
HEADQUARTERS	48	8	56	0	56
FIELD	11	0	11	0	11
20:GENERAL SCIENCE AND RESEARCH	42	-3	39	7	46
HEADQUARTERS	42	-3	39	7	46
25:ATOMIC ENERGY DEFENSE ACTIVITI	2,782	88	2,870	40	2,910
HEADQUARTERS	492	62	554	21	575
FIELD	2,290	26	2,316	19	2,335
30:DEPARTMENTAL ADMINISTRATION	3,333	133	3,466	6	3,472
HEADQUARTERS	1,756	79	1,835	6	1,841
FIELD	1,577	54	1,631	0	1,631
34:ALASKA POWER ADMINISTRATION	36	-1	35	0	35
FIELD	36	-1	35	0	35
36:BONNEVILLE POWER ADMIN	3,398	-18	3,380	-50	3,330
FIELD	3,398	-18	3,380	-50	3,330
38:SOUTHEASTERN POWER ADMIN	38	2	40	0	40
FIELD	38	2	40	0	40
42:SOUTHWESTERN POWER ADMIN	192	-6	186	0	186
FIELD	192	-6	186	0	186
46:WAPA - POWER MARKETING	1,160	-21	1,139	0	1,139
FIELD	1,160	-21	1,139	0	1,139
50:WAPA - COLORADO RIVER BASIN	219	21	240	0	240
FIELD	219	21	240	0	240
52:FEDERAL ENERGY REGULATORY COMM	1,562	97	1,659	0	1,659
HEADQUARTERS	1,562	97	1,659	0	1,659
54:NUCLEAR WASTE FUND	307	8	315	-15	300
HEADQUARTERS	152	14	166	29	195
FIELD	155	-6	149	-44	105
56:GEOTHERMAL RESOURCES DEV FUND	1	0	1	0	1
HEADQUARTERS	1	0	1	0	1
63:CLEAN COAL TECHNOLOGY	0	45	45	13	58
HEADQUARTERS	0	21	21	5	26
FIELD	0	24	24	8	32
65:FOSSIL ENERGY RESEARCH AND DEV	709	-6	703	-133	570
HEADQUARTERS	141	-3	138	-10	128
FIELD	568	-3	565	-123	442
70:NAVAL PETROL & OIL SHALE RES	89	6	95	0	95
HEADQUARTERS	17	5	22	0	22
FIELD	72	1	73	0	73
75:ENERGY CONSERVATION	320	32	352	-109	243
HEADQUARTERS	197	30	227	-84	143
FIELD	123	2	125	-25	100
80:EMERGENCY PREPAREDNESS	64	7	71	0	71
HEADQUARTERS	64	7	71	0	71
81:ECONOMIC REGULATION	288	-13	275	-22	253
HEADQUARTERS	288	-13	275	-22	253
85:STRATEGIC PETROLEUM RESERVE	147	0	147	0	147
HEADQUARTERS	28	-1	27	0	27
FIELD	119	1	120	0	120
90:ENERGY INFORMATION ACTIVITIES	446	20	466	0	466
HEADQUARTERS	446	20	466	0	466
94:ADVANCES FOR CO-OP WORK	2	0	2	0	2
FIELD	2	0	2	0	2
 GRAND TOTAL	 16,116	 413	 16,529	 -253	 16,276
ADJUSTMENT		-263	-263	-209	-472
 ADJUSTED TOTAL	 16,116	 150	 16,266	 -462	 15,804

DEPARTMENT OF ENERGY
FY 1989 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY RESEARCH AND DEVELOPMENT

OVERVIEW

ADVISORY AND OVERSIGHT PROGRAM DIRECTION

This program provides the staffing resources and associated funding required by the Director of Energy Research to carry out his responsibilities under the Department of Energy Organization Act (P.L. 95-91) and as mandated by the Secretary in areas beyond the scope of the other assigned Energy Research programs. It supports the staff in the Office of Field Operations Management, Office of Program Analysis, Science and Technology Affairs Staff, and related program and management support staff.

The staff budgeted in this program supports the Director of Energy Research by providing technical assessments, independent peer reviews and program evaluations, and interagency coordination of research assessments. It oversees DOE's multiprogram nonweapons laboratories and develops and implements university research and manpower development programs in support of DOE goals and missions. This staff also provides ongoing support to the Energy Research Advisory Board and supports the Lawrence and Fermi Awards process.

DEPARTMENT OF ENERGY
 FY 1989 CONGRESSIONAL BUDGET REQUEST
 ENERGY SUPPLY RESEARCH AND DEVELOPMENT
 (dollars in thousands)

LEAD TABLE

Advisory and Oversight Program Direction

Activity	FY 1987 Actual	FY 1988 Appropriation	FY 1989 Base	FY 1989 Request	Program Change Request vs Base	
					Dollar	Percent
Energy Oversight, Research Analysis and University Support Advisory and Oversight Program Direction Operating Expenses.....	\$2,500	\$3,200	\$3,339	\$3,339	\$ -	- %
Staffing Total FTE's.....	42	44	44	44		

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

DEPARTMENT OF ENERGY
FY 1989 CONGRESSIONAL BUDGET REQUEST
ENERGY SUPPLY RESEARCH AND DEVELOPMENT
(dollars in thousands)

SUMMARY OF CHANGES

Advisory and Oversight Program Direction

FY 1988 Appropriation.....	\$ 3,200
Adjustments - Increased personnel costs.....	<u>+ 139</u>
FY 1989 Base and Congressional Budget Request.....	\$ 3,339

DEPARTMENT OF ENERGY
FY 1989 CONGRESSIONAL BUDGET REQUEST

ENERGY SUPPLY RESEARCH AND DEVELOPMENT
(dollars in thousands)

KEY ACTIVITY SUMMARY

ADVISORY AND OVERSIGHT PROGRAM DIRECTION

I. Preface: Advisory and Oversight Program Direction

This program provides the Federal staffing and associated funding resources required by the Director of Energy Research to carry out his responsibilities under the Department of Energy Organization Act (P.L. 95-91) and as mandated by the Secretary in areas beyond the scope of the other assigned Energy Research programs.

II. A. Summary Table

Program Activity -----	FY 1987 -----	FY 1988 -----	FY 1989 -----	% Change -----
Advisory and Oversight Program Direction.....	\$ 2,500 -----	\$ 3,200 -----	\$ 3,339 -----	+ 4% -----
Total, Advisory and Oversight Program Direction.....	\$ 2,500	\$ 3,200	\$ 3,339	+ 4%

III. Activity Descriptions

Program Activity -----	FY 1987 -----	FY 1988 -----	FY 1989 -----
Advisory and Oversight Program Direction	Provided funds for salaries, benefits and travel for 42 full-time equivalents (FTE's) in the Office of Field Operations Management, Office of Program Analysis, Science and Technology Affairs Staff, and related program and management support staff. (\$2,433)	Provide funds for salaries and related costs for 44 FTE's. Provide for normal increased personnel costs such as within-grade and merit increases, impact of the 1987 pay raise, and the increased agency contribution to the Federal Employees Retirement System (FERS). (\$3,100)	Provide funds for salaries, benefits, and travel related to continuation of 44 FTE's. Provide for normal increased salary costs, including impact of the FY 1988 pay raise. (\$3,239)

III. ADVISORY AND OVERSIGHT PROGRAM DIRECTION (Cont'd)

Program Activity -----	FY 1987 -----	FY 1988 -----	FY 1989 -----
Advisory and Oversight Program Direction (Cont'd)	<p>The Office of Program Analysis (OPA) provided technical assessments, independent peer reviews and program evaluations, and interagency coordination of research assessments. Represented DOE on the Interagency Task Force on Acid Precipitation Assessment Plan (NAPAP). Provided support for the first interim assessment required by the NAPAP and for DOE's participation in the Committee for Interagency Radiation Research and Policy Coordination.</p> <p>The Office of Field Operations Management continued to develop and implement university research and manpower development programs in support of DOE goals and missions, and managed the University Reactor Fuel Assistance program, the Laboratory Cooperative summer program, the Science Education Centers Program, and the University Research Instrumentation program. Supported the Director in oversight of DOE's multiprogram nonweapons laboratories, including management of the MEL-FS program, the R&D laboratory technology transfer program, and the expanded</p>	<p>Continue to provide technical assessments and independent peer reviews and program evaluations, including assessments deferred due to lowered FY 1987 funding. Support the 1988 second interim assessment as required by the National Acid Precipitation Assessment Plan.</p> <p>Continue program management as in FY 1987. Manage expansion of student/faculty research training opportunities at the Department's laboratories and conversion of university nuclear reactors to LEU fuel. Support the Task Force on Women, Minorities, and Handicapped. Provide increased oversight under the strengthened work for others policy and as a result of patent rights being granted to the labs by P.L. 96-517. Provide for increased responsibilities in R&D Laboratory Technology Transfer Program, including support to the ERAB Technology Transfer Panel, and for</p>	<p>Continue to provide technical assessments and independent peer reviews and program evaluations at the staffing level included in the FY 1988 budget. Review of the final NAPAP assessment for accuracy, completeness, and objectivity is required in FY 1989.</p> <p>Continue program management at the FY 1988 level of effort. Student/faculty and high school teacher support will continue to be enhanced. Implement as appropriate ERAB Education Panel recommendations on science education. Increased MEL-FS program activities designed to address a large backlog of needs will continue to depend heavily on outside support from operations offices and laboratories. All ER laboratories will need to be assessed and additional environmental projects identified and prioritized with other multiprogram general purpose projects in FY 1989. Also, additional</p>

III. ADVISORY AND OVERSIGHT PROGRAM DIRECTION (Cont'd)

Program Activity	FY 1987	FY 1988	FY 1989
Advisory and Oversight Program Direction (Cont'd)	<p>institutional planning process which now includes a total of 13 laboratories.</p> <p>The Science and Technology Affairs Staff provided ongoing support to the Energy Research Advisory Board (ERAB), supported the Lawrence and Fermi Awards process, and supported the Director of ER in his role as science advisor to the Secretary of Energy.</p> <p>Provided program and management support in the areas of budget and finance, personnel administration, acquisition and assistance, policy and coordination, and construction, environment and safety.</p> <p>Provided program support such as printing, small purchases of supplies and materials, timesharing on various information systems and communications networks such as electronic mail, and contractual support totaling \$174 of which \$107 was prior year unobligated carryover. (\$67)</p>	<p>new ER responsibility in support of the Departmental R&D Council, the latter to include the impact of special working groups and laboratory reviews on context of overall DOE site.</p> <p>Continue to support the ERAB and the Director of ER at the FY 1987 level of effort.</p> <p>Continue to provide staff support as in FY 1987.</p> <p>Provide for a variety of program support services similar to those in FY 1987. Also, provide for reimbursement of the Office of Scientific and Technical Information for services provided. (\$100)</p>	<p>technology transfer efforts are expected to be recommended by the ERAB Technology Transfer Panel.</p> <p>Continue to support the ERAB and the Director of ER at the FY 1988 level of effort.</p> <p>Continue staff activities at approximately the FY 1988 level of effort.</p> <p>Continue the level and variety of program support required in FY 1988. (\$100)</p>
Total, Advisory and Oversight Program Direction	\$ 2,500	\$ 3,200	\$ 3,339