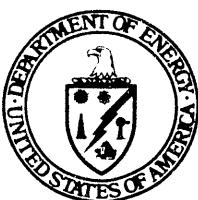


DOE/IG-0010/8

**U.S. Department of Energy  
Office of Inspector General  
Assistant Inspector General for Audits  
Washington, DC 20585**

## **Annual Work Plan for FY 1992**



Issue Date: September 30, 1991

## DISTRICT OF COLUMBIA

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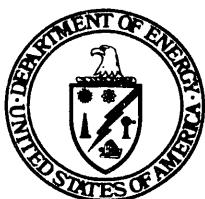
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**U.S. Department of Energy  
Office of Inspector General  
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Washington, DC 20585**

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**Annual Work Plan for FY 1992**

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Issue Date: September 30, 1991

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**U.S. DEPARTMENT OF ENERGY  
OFFICE OF AUDIT  
FY 1992 ANNUAL WORK PLAN**

**This plan is hereby published pursuant to requirements of OMB Circular A-73 and DOE 2321.1.**

*Gordon W. Harvey*  
**Gordon W. Harvey  
Assistant Inspector General  
for Audits**

**September 30, 1991**

**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
<b>INTRODUCTION.....</b>	<b>1</b>
<b>OVERVIEW.....</b>	<b>2</b>
<b>AUDIT ORGANIZATION CHART.....</b>	<b>3</b>
<b>FY 1991 BUDGET OVERVIEW.....</b>	<b>4</b>
<b>PLANNING FACTORS.....</b>	<b>12</b>
<b>MAJOR PROGRAM AREA AUDITS.....</b>	<b>15</b>
Environment, Safety and Health.....	17
Weapons Program.....	23
Nuclear Waste Disposal.....	27
Safeguards and Security.....	30
Procurement and Grants Management.....	34
Expansion of the Mission of the Laboratories.....	38
Deterrents.....	42
Naval Reactors.....	44
Strategic Petroleum Reserve.....	47
Power Marketing Administrations.....	50
Superconducting Super Collider.....	56
Financial Management.....	59
<b>FY 1990 AUDIT SCHEDULES</b>	
Headquarters.....	62
Capital Regional Office.....	63
Eastern Regional Office.....	66
Western Regional Office.....	70
<b>LIST OF ABBREVIATIONS.....</b>	<b>74</b>
<b>LIST OF MAJOR ISSUE AREA CODES.....</b>	<b>76</b>

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL  
OFFICE OF AUDITS**

**FISCAL YEAR 1992 ANNUAL WORK PLAN**

**INTRODUCTION**

The Office of Inspector General (OIG) has an overall mission to prevent and detect fraud, waste, and mismanagement in Department of Energy (DOE) programs. As part of its responsibility in accomplishing its mission, the DOE Office of Audits publishes an "Annual Work Plan" in September of each year. The prime focus of the plan is to identify opportunities for audits to enhance the effectiveness, efficiency, and integrity of the DOE'S programs and operations. Through this plan, we are able to maximize the effectiveness of our resources and to avoid duplicating audit coverage being provided by other audit groups, such as the U.S. General Accounting Office (GAO) to U.S. Department of Energy programs. Such planning is required by Office of Management and Budget Circular A-73 and DOE Order 2321.1A.

The work planning process continues to evolve over the course of the year. In an ideal planning environment, the plan would represent a program of audit starts and completions for the year with little room for deviation. Experience shows, however, that such a planning environment rarely exists in an organization where audit resources are limited, external oversight is extensive, and departmental priorities are in a state of redefinition.

This work plan, includes those audits that are to be carried over from Fiscal Year 1991 and those that are to be started during Fiscal Year 1992. Audits identified in this plan will be performed by OIG audit staff, as supplemented by contracted audit services. Internal auditors of the Department's integrated contractors provide additional audit coverage, and, to the extent possible, their efforts are coordinated with those of the Inspector General. Audits are also conducted by the GAO, which has independent external audit authority over the Department's programs, and the Defense Contract Audit Agency and Department of Health and Human Services, both of which provide contract audit services to the Department on a reimbursable basis.

## OVERVIEW

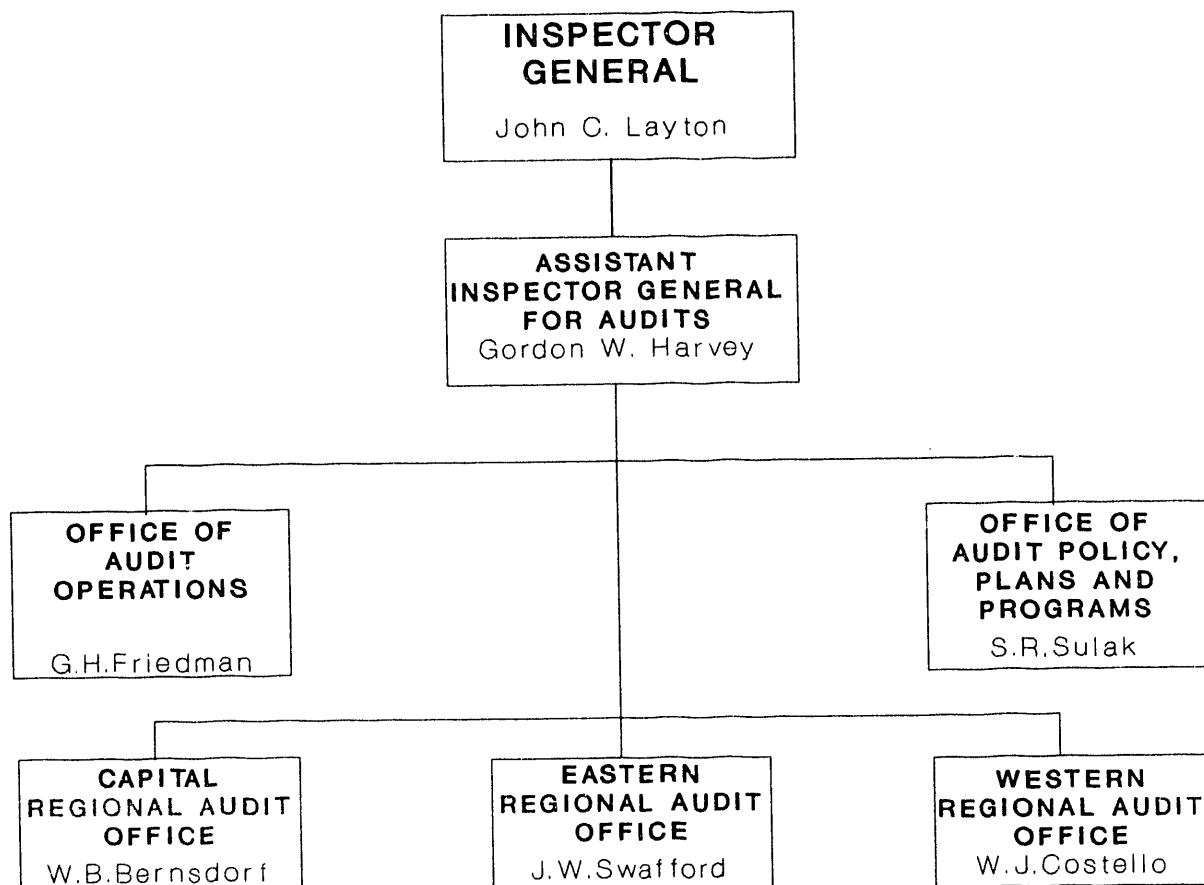
The Office of Inspector General was established by the Department of Energy Organization Act of 1977 to provide audit, investigative, and related services to the Department. Under the Act, the Inspector General is responsible for audits and investigations and for recommending policies for the purpose of promoting economy and efficiency in the administration of, and preventing and detecting fraud and abuse in, the programs and operations of the Department. The Office of Audits is responsible for performing independent audits of all DOE programs.

The basic mission of the OIG remains unchanged by enactment of the Inspector General Act Amendments of 1988, P.L. 100-504, which, effective April 16, 1989, placed the DOE OIG under the authority of the Inspector General Act of 1978, as amended, 5 U.S.C., App. 3.

The Office of Audits also issues audit policy and guidance to other Departmental elements, and is responsible for assuring that all audit work done in the Department, including that done by the integrated contractors, meet Government Audit Standards or the audit standards issued by the Institute of Internal Auditors.

Three Assistant Inspectors General (AIG's) report directly to the Inspector General. They include AIG's for Inspections, Investigations, and Audits. The current organization of the Office of Audits is shown on the following page.

Department of Energy  
Office of Assistant Inspector General  
for Audits



Audit Groups

Germantown, MD  
Pittsburgh, PA  
Washington, DC

Audit Groups

Chicago, IL  
Cincinnati, OH  
New Orleans, LA  
Oak Ridge, TN  
Princeton, NJ  
Savannah River, SC

Audit Groups

Albuquerque, NM  
Denver, CO  
Idaho Falls, ID  
Las Vegas, NV  
Livermore, CA  
Los Alamos, NM  
Portland, OR  
Richland, WA

## FY 1992 DOE BUDGET OVERVIEW

The work planning strategy for the Office of Audits has for a number of years been driven by the overall budget of the Department. As such it is important to keep in mind the size of DOE, the nature of DOE's mission and the budget for that mission.

There are almost 160,000 personnel working at DOE facilities throughout the country (see map on p.11) employed either directly or indirectly by the DOE. Approximately 141,000 of the employees work for the contractors that operate the Department's laboratories and industrial facilities. The remaining employees are Federal workers who, among other things, provide administrative services and programmatic and management direction of the work done for the DOE by its operating contractors.

The Department's FY 1992 budget is being presented in a structure that ties directly to the recently announced National Energy Strategy (NES). The NES, which was announced by President Bush in February 1991, is based on public input through hearings, written submissions and publicly available reports; all of which were aimed at reconciling our need for secure, competitively priced supplies of energy with environment, safety and health requirements. To be meaningful, the findings of the National Energy Strategy must be integrated into the Department's budget. The NES concentrates on energy issues and does not, therefore, encompass all of the activities of the Department, which has major defense and scientific missions as well as a large management oversight function to perform.

Following is a brief overview of the NES areas making up the FY 1992 budget request:

- **Enhancing Environmental Quality** – includes all activities associated with environment, safety and health, such as waste management operations, environmental restoration, technology development, corrective activities, and policy and management. Also included in this area are all activities dealing with nuclear waste disposal such as Civilian Radioactive Waste Research and Development and the Nuclear Waste Fund. The FY 1992 request for new funds is about 10% higher than the FY 1991 estimate. This area accounts for slightly more than 25% of the total FY 1992 budget request of the Department.
- **Increasing Energy Efficiency** – includes activities dealing with energy conservation and efficiency improvements in homes, buildings, transportation and industry. The FY 1992 budget request is almost 50% higher than the FY 1991

Activities related to increasing energy efficiency represent about 1.6% of the Department's FY 1992 request.

- **Securing Future Energy Supplies** – is directed at assuring that future U.S. energy supplies are adequate. Activities include basic research and applied technology development aimed at developing alternatives to imported oil, including fusion energy, and promoting increased use of domestically available resources, including oil, gas, coal, nuclear and renewable energy. Activities related to the Power Marketing Administrations, Strategic Petroleum Reserve, Naval Petroleum and Oil Shale Reserves, and efforts to increase the efficiency of electric energy distribution and storage are also included in this area. Although the FY 1992 request is about 10% lower than the FY 1991 estimate, this area accounts for almost 13% of the Department's FY 1992 budget request.
- **Fortifying Foundations** – deals with maintaining the United States' preeminence in the scientific and technical arenas and, as a consequence, its economic competitiveness in the world. DOE funds basic research and development at its National Laboratories, at universities, and in corporations to maintain this preeminence. The Department is also committed to improving science and mathematics education in the United States and transferring technologies developed by the Department into the commercial marketplace. Major activities include basic and applied research and development in high energy physics, nuclear physics, the superconducting super collider, basic energy sciences and biological and environmental research. The FY 1992 budget request is about 16% higher than the FY 1991 budget estimate, and accounts for over 14% of the FY 1992 budget request.
- **Meeting National Defense Needs** – includes a variety of activities that contribute to national security through DOE's defense programs and through certain non-defense activities in preparation for potential energy emergencies. Included in this category are areas such as weapons activities, materials production, new production reactors, verification and control technology, safeguards and security, and the Naval Reactors program. The FY 1992 budget request is about 1% lower than the FY 1991 budget estimate. However, Meeting National Defense Needs accounts for the largest share of DOE's FY 1992 budget request, over 43%.
- **Management and Other Activities** – includes conservation grants, activities of the Energy Information Administration, administering energy laws and regulations, and Departmental management. This year's budget request represents a 37% decrease from the FY 1991 estimate, and

accounts for slightly more than 2% of the total FY 1992 DOE budget request.

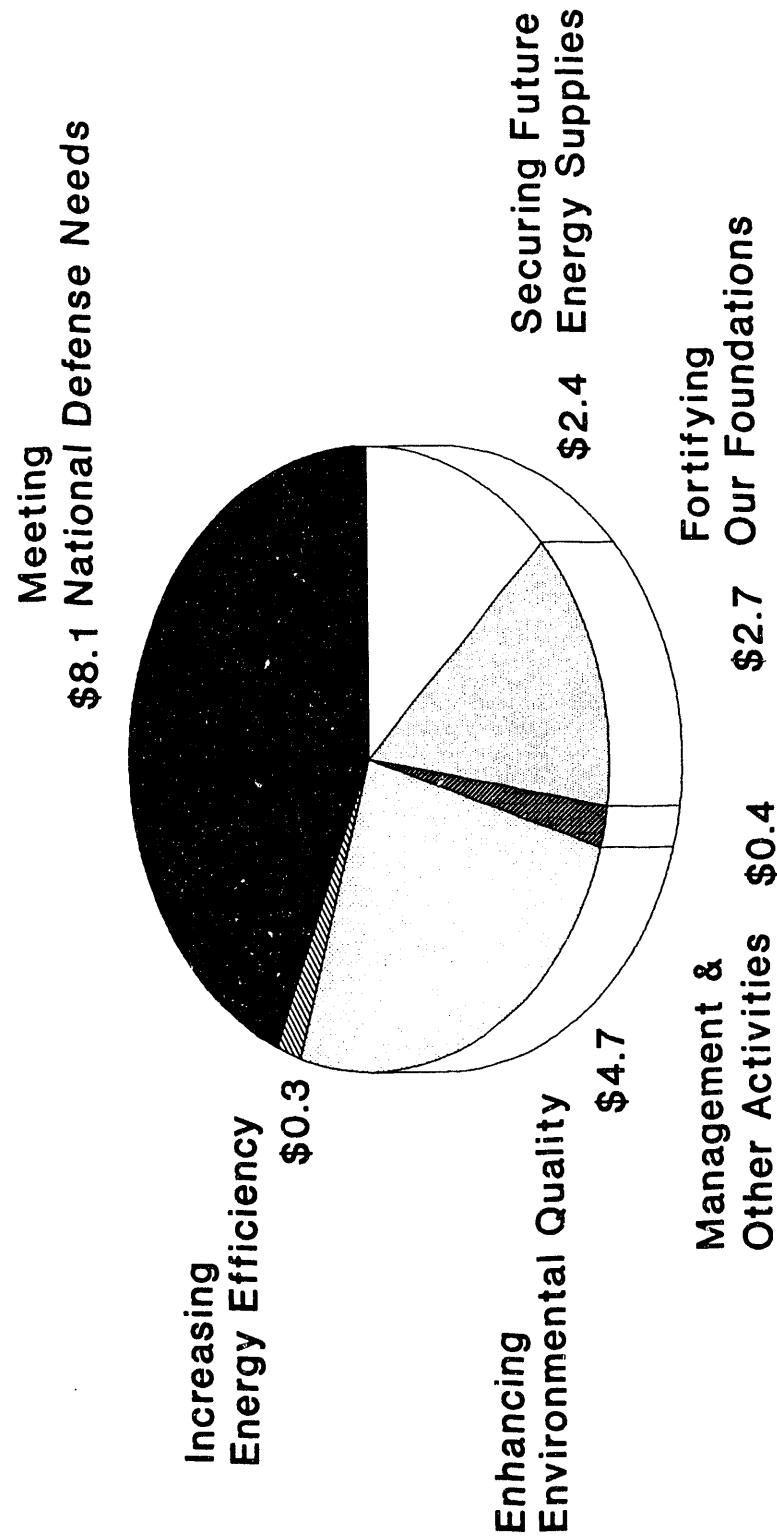
The following table compares the funding request for FY 1992 with the estimated FY 1991 funding levels by the major goals identified in the NES. The accompanying graph indicates the relative portions of the FY 1992 budget accounted for by each of the NES areas.

DOE BUDGET REQUEST  
BY MAJOR GOALS

Major Goals of the Department of Energy	Budget Authority (in Billions)	
	<u>FY 1991 Estimate</u>	<u>FY 1992 Request</u>
Enhancing Environmental Quality	\$ 4,258.2	\$ 4,689.2
Increasing Energy Efficiency	239.1	298.3
Securing Future Energy Supplies	2,646.5	2,391.0
Fortifying Our Foundations	2,323.0	2,687.8
Meeting National Defense Needs	8,134.5	8,063.0
Management and Other Activities	<u>693.5</u>	<u>438.2</u>
Subtotal	\$18,294.8	\$18,567.5
Proposed FY 1991 Supplemental	(623.0)	----
 Total, Department of Energy	 <u>\$17,671.8</u>	 <u>\$18,567.5</u>

# DOE BUDGET REQUEST BY MAJOR GOALS

(Dollars in Billions)



**FY 1992 BUDGET AUTHORITY - \$18.6 Billion**

## DEPARTMENT OF ENERGY FY 1992 BUDGET

The following table provides a more detailed look into the Department's FY 1992 budget request and compares this request to FY 1991.

<u>Activity</u>	<u>FY 1991 Comp (000)</u>	<u>FY 1992 Departmental Request (000)</u>	<u>Change</u>
<b><u>Atomic Energy Defense</u></b>			
Weapons Activities	\$ 4,621,099	\$ 4,476,500	- 3.1%
Environmental Restoration & Waste Management	3,455,737	3,705,000	+ 7.2%
Materials Production	1,951,333	1,876,900	- 3.8%
New Production Reactors	375,000	500,000	+ 33.3%
Verification and Control Technology	154,529	185,000	+ 19.7%
Naval Reactors	769,801	801,000	+ 4.1%
Other	<u>212,634</u>	<u>223,600</u>	+ 5.2%
Subtotal, Atomic Energy Defense Activities	<u>\$11,540,133</u>	<u>\$11,768,000</u>	
FY 1991 Supplemental	( 623,000)		
Prior Year Balance & Other Adjustments	<u>50,000</u>		
<b>Total, Atomic Energy Defense Activities</b>	<b><u>\$10,967,133</u></b>	<b><u>\$11,768,000</u></b>	+ 7.3%
<b><u>Energy Supply R&amp;D</u></b>			
Solar & Other Renewables	\$ 129,418	\$ 142,878	+ 10.4%
Nuclear R&D Activities	304,996	397,958	+ 30.5%
Biological and Environmental Research	368,629	312,560	- 15.2%
Fusion Energy	273,557	337,100	+ 23.2%
Basic Energy Sciences	711,760	714,700	+ 0.4%
Environment, Safety and Health	129,057	159,670	+ 23.7%
Environmental Restoration and Waste Management	431,356	523,495	+ 21.4%
Other	<u>228,339</u>	<u>233,067</u>	+ 2.1%
Prior Year Balance & Other Adjustments	<u>\$ ( 54,712)</u>		
<b>Total, Energy Supply R&amp;D</b>	<b><u>\$ 2,522,400</u></b>	<b><u>\$ 2,821,428</u></b>	+ 11.9%

General Science & Research

High Energy Physics	\$ 588,587	\$ 666,449	+ 13.2%
Superconducting Super Collider	242,866	533,700	+ 119.8%
Nuclear Physics Program Direction	313,329 3,950	342,390 6,400	+ 9.3% + 62.0%
<b>Total, General Science &amp; Research</b>	<b>\$ 1,148,732</b>	<b>\$ 1,548,939</b>	+ 16.5%

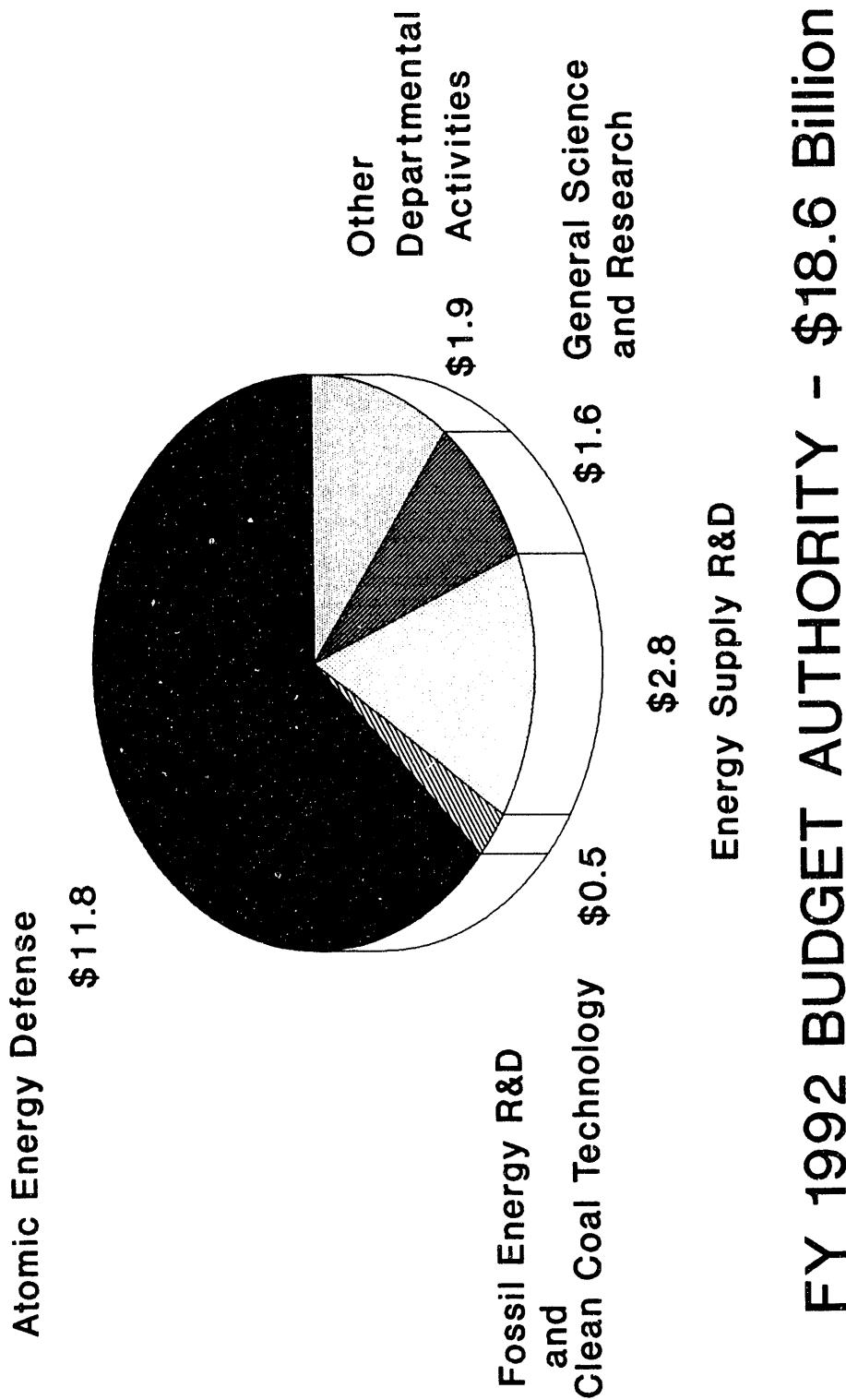
Fossil Energy Research & Development

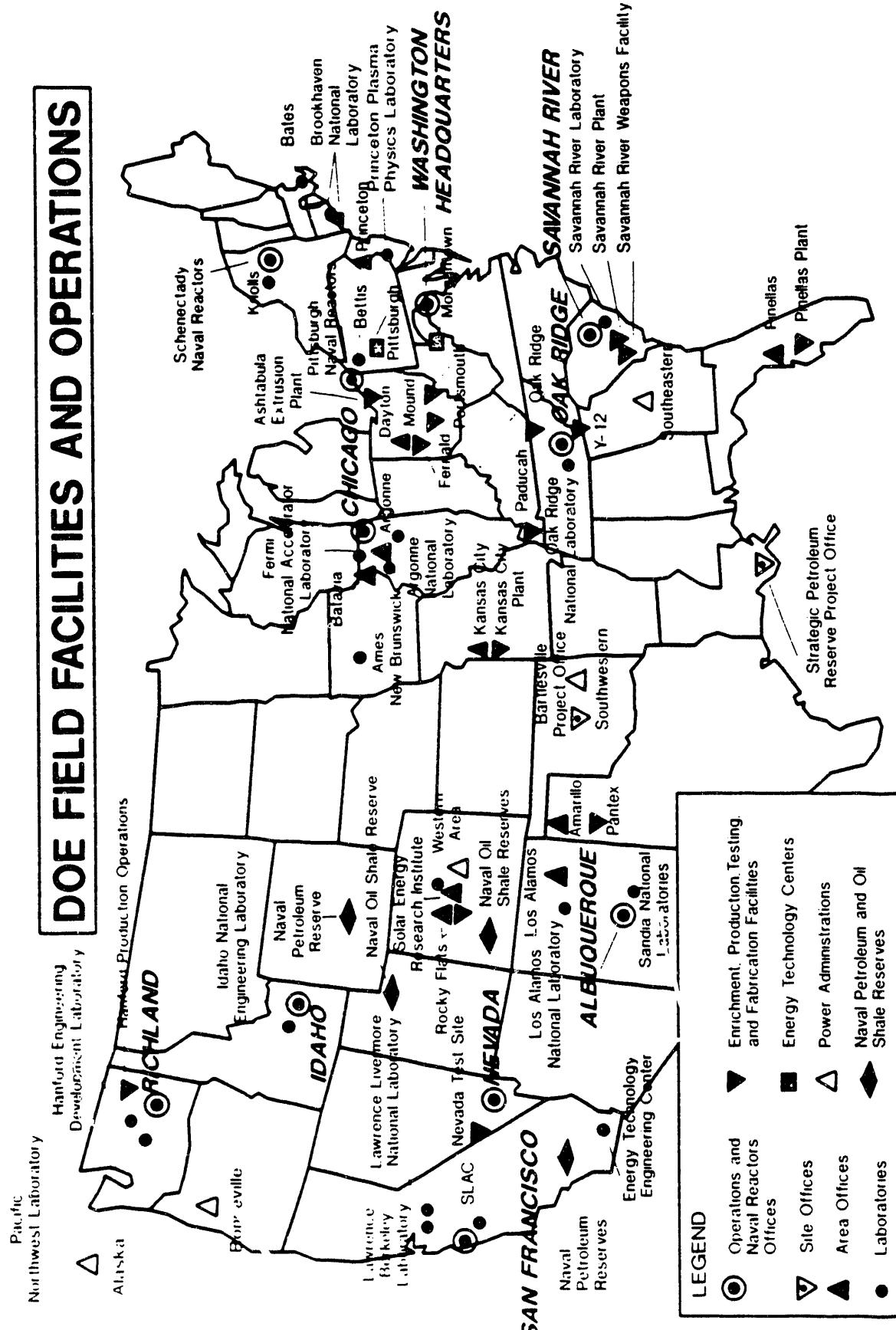
Coal	\$ 289,066	\$ 115,010	- 60.2%
Environmental Restoration	708	8,085	+1041.9%
Unconventional Gas Recovery	15,890	8,000	- 49.7%
Petroleum	59,033	52,175	- 11.6%
Other	98,727	43,735	- 55.7%
<b>Subtotal, Fossil Energy</b>	<b>\$ 463,424</b>	<b>\$ 227,005</b>	- 51.0%
Prior Year Balance & Other Adjustments	( 4,674)		
<b>Total, Fossil Energy R&amp;D</b>	<b>\$ 458,750</b>	<b>\$ 227,005</b>	- 50.5%
 <u>Power Marketing Administrations</u>	 \$ 488,189	 \$ 265,494	 - 45.6%
 <u>Nuclear Waste Fund</u>	 \$ 242,833	 \$ 305,071	 + 25.6%
 <u>Clean Coal Technology</u>	 \$ 391,000	 \$ 315,000	 - 19.4%
 <u>Other Departmental Activities</u>	 \$ 1,452,730	 \$ 1,316,609	 - 9.4%
 <b>Total Department of Energy</b>	 <b>\$17,671,767</b>	 <b>\$18,567,546</b>	 + 5.1%

Source: United States Department of Energy Posture Statement and  
Fiscal Year 1992 Budget Overview

# DEPARTMENT OF ENERGY FY 1992 BUDGET BY APPROPRIATION

(Dollars in Billions)





## PLANNING FACTORS

There are many distinct factors that effect the planning effort. They may be broken out by both external factors and internal resource factors. The following summarizes those factors that had a significant impact on the planning for FY 1992.

### EXTERNAL FACTORS

The audit planning process is primarily driven by budget and program policy issues. Each year a planning document is issued which provides guidance based on review and analysis of the budget request, financial trend data, and the current audit environment (including both OIG audit planning and significant audit or audit-like activities conducted by Department personnel and/or external entities). Additional guidance was obtained through the review of the United States Department Of Energy Posture Statement and Fiscal Year 1992 Budget Overview, issued in February 1991, and the National Energy Strategy final report.

In FY 1990 the Office of Audits identified 12 major issue areas and began developing a strategy to provide coverage of these areas over a 3 to 5 year period. These areas continue to be the principle focus of the FY 1992 Work Plan. They include:

- Environment, Safety and Health
- Weapons Programs
- Nuclear Waste Disposal
- Safeguards and Security
- Procurement and Grants Management
- Expansion of Laboratory Missions
- Deterrents
- Naval Reactors
- Strategic Petroleum Reserve
- Power Marketing Administrations
- Superconducting Super Collider
- Financial Management

In planning the use of our audit resources for FY 1992, we considered those activities which the Office of Audits must perform, such as audits required by the Federal Managers' Financial Integrity Act, audits of Year-end spending activities within the Department, and financial audits of the Department's integrated contractors. Remaining resources were then allocated to the 12 major issue areas. In January 1991, the Defense Contract Audit Agency (DCAA) assumed the responsibility for all but a limited number of contract preaward and cost incurred audits for the Department.

Some of the audit approaches to the issues are program oriented, while others require a functional or organizational approach. One of the areas that utilizes the organizational approach is the area of "Deterrents." This area concentrates on those issues crosscutting both programs and functions that are most vulnerable to fraud, waste, or mismanagement. Many of these audits involve integrity of employees and procurement related issues. It is also anticipated that leads for investigations will be generated from this issue area.

Another area of activity that lends itself to the functional/organizational approach is our audits of the integrated contractors. Beginning in FY 1988, the Office of Audits began cooperative audit efforts with the internal auditors at the Department's integrated contractors. An integrated contractor is defined as one whose costs under a cost-type contract are prefinanced by DOE and is required to maintain a separate and distinct system of accounts, records, documents, and other evidence supporting all allowable costs incurred, and revenues or other applicable credits. The system of accounts employed by the contractor must be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied unless DOE requires the use of an alternate accounting policy or procedure.

The Office of Audits has issued an Audit Manual that, in part, defines the Office's policies and procedures pertaining to audits of the Department's integrated contractors, and provides guidance for auditing them. Fundamentally, the policy is that every significant function of a contractor's operations will be audited at least once every five years.

The true level of effort we will expend in auditing integrated contractors is difficult to measure because many of these audits will cross over to the other major program areas previously identified and many of the major program area audits will involve the integrated contractors.

#### STAFFING FACTORS

##### Contracted Audit Support.

Fiscal Year 1992 will be the ninth full year that the OIG will be using contracted audit support to assist in accomplishing its audit mission. Although the use of contractors has enabled the Office of Audits to provide the DOE more extensive audit coverage, it does require a substantial commitment of in-house resources to prepare for and maintain effective use of these external resources.

Restructuring.

During FY 1991, the Office of Audits underwent a significant restructuring in terms of resource mix and location of audit staff. The amount of contracted audit resources declined, additional staff (primarily entry level recent college graduates) were hired and several new offices were opened. As a result of opening offices in Pittsburgh, PA, Cincinnati, OH, New Orleans, LA, Los Alamos, NM, and reactivating our office in Richland, WA, many staff reassessments were required. Additionally, new managers were hired who were unfamiliar with the Department's programs and activities.

The loss of services of experienced contracted auditors, the hiring of trainee level auditors and those unfamiliar with the Department, along with the reassignment of experienced personnel, has had a negative impact on audit productivity during FY 1991. Also, as noted above, preaward and cost incurred audits are now being performed primarily by the DCAA. These audits were usually of short duration, averaging about 36 days each, and totalled 160 reports in FY 1990, the last full year of IG activity in this area. These factors all contributed to a reduced number of reports being issued in FY 1991.

Although some restructuring will continue in FY 1992, productivity should rebound as a result of the new personnel gaining experience and familiarity with the Department. We plan to continue our move away from contracted audit support, hire additional staff, and open additional offices that will enable us to provide more responsive audit coverage of Departmental activities.

This work plan has attempted to anticipate the restructuring of operations during FY 1992, but at the time the plan was published, many budgetary unknowns exist for both FY 1992 and FY 1993 which could have a direct impact on staffing and restructuring in FY 1992. Our plans for this year will be adjusted as our budgetary picture becomes clearer.

## MAJOR PROGRAM AREA AUDITS

As noted above, 12 major program areas have been identified for intensive coverage over the 3 to 5 year period that began with FY 1990. Our long-range plan and the current year's distribution of flexible resources are shown in the following table. Note that "flexible" refers to the timing and selection of necessary audits during the period covered by this work plan. It does not mean that the work to be performed is optional in nature.

	<u>Percentage of Flexible Assets</u>	
	<u>Long-Range Plan</u>	<u>FY 1992</u>
Environment, Safety & Health		
Weapons Program	55%	33.6%
Nuclear Waste Disposal		
Safeguards & Security		
Procurement & Grants Management		
Expansion of Laboratory Missions	25%	23.5 %
Deterrents		
Naval Reactors		
Strategic Petroleum Reserve		
Power Marketing Administrations	20%	42.9%
Superconducting Super Collider		
Financial Management		

The heavy emphasis placed on the third group includes the new audit requirements created by the Chief Financial Officers Act of 1990 (P.L. 101-576). This accounts for over 12 staff years, or almost one-fourth of this group's time.

Although projects are only identified with one major program area for planning purposes, many overlap into one or more additional program areas. For example, an audit of the Strategic Petroleum Reserve (one of our major program areas) may overlap with

Safeguards & Security or Environment, Safety & Health. Thus coverage in some areas may be understated for purposes of this plan.

Beginning on page 17 is a summary of each major program area and the OIG level of audit effort. Details of the Office of Audits Fiscal Year 1992 work plan follow the summaries.

## ENVIRONMENT, SAFETY, AND HEALTH

### BACKGROUND

During the past several years, the issues of Environment, Safety, and Health (ES&H) have become major concerns in the Department because of their visibility outside the Department and because of their far reaching and expensive consequences. The Department has requested \$5.32 billion for FY 1992 to address the areas of Enhancing Environmental Quality, Biological and Environmental Research, and Clean Coal Technology.

While these are not new problem areas, they are receiving greater attention than in the past. Since the 1940's, nuclear production facilities and other activities of the Department have released hazardous and radioactive contaminants into the air, water, and soil. In the past, the Department and its predecessor agencies claimed exemption from most environmental laws. Today, much stricter compliance requirements have been placed on the Department due to more recent interpretations of older laws, the advent of new laws and regulations, and increased public concern.

Within the Department, responsibility for complying with environmental, safety, and health standards is shared among the Office of Environmental Restoration and Waste Management; the Office of Environment, Safety, and Health; Departmental Headquarters Program Offices; DOE Field Offices; Power Marketing Administrations; the National Renewable Energy Laboratory; and the contractors and subcontractors which operate the Department's facilities.

### Enhancing Environmental Quality

The Department plans to spend tens of billions of dollars over the next few decades to repair the well publicized environmental damage that has occurred at its facilities. Although the Department has taken the first steps toward bringing its facilities into compliance with environmental laws, the bulk of the work remains to be done.

Environmental Restoration and Waste Management is the fastest growing program area in the Department. Its Five-Year Plan is the cornerstone of the Department's long-term strategy to consolidate and coordinate the Department's cleanup activities. The Five-Year Plan combines cleanup activities in the areas of Defense Programs, Nuclear Energy, and Energy Research; treats them as a unified program; and establishes an agenda for compliance and cleanup against which progress will be measured. For FY 1992, 92 percent of the Environmental Restoration and Waste Management budget is related to compliance and cleanup

activities that are conducted pursuant to environmental laws and regulations. The remaining 8 percent of the Administrations' budget request would fund the Technology Development, Transportation Management, or Program Direct accounts.

ES&H Oversight activities include independent, internal, and routine monitoring and management oversight to ensure that facilities are operated consistent with applicable Departmental orders and external regulatory requirements. This category includes the oversight functions of the Office of Environment, Safety, and Health; and the Office of Nuclear Safety, which continuously assesses both Departmental and contractor nuclear safety performance.

Nuclear Waste Disposal includes all activities directed toward the ultimate disposal of spent nuclear fuel and high-level radioactive waste, including a small research and development program.

#### Biological and Environmental Research (BER)

The BER program provides the scientific foundation for (1) the understanding of the long-term health and environmental consequences of energy use and development, and (2) solutions of major biomedical and environmental problems. The program gives particular emphasis to the development and application of biotechnology to fulfill Departmental objectives and reflects the priorities developed in the National Energy Strategy process.

The program includes several areas of scientific research:

- o analytical technology involving development of advanced instrumentation and dosimetry capability (\$13.3 million);
- o environmental research, including atmospheric, marine and terrestrial research activities (\$36.9 million);
- o health effects research, investigating the health impact of radiation and energy related chemical exposure (\$36.6 million);
- o general life sciences research, involving fundamental cellular and molecular level studies, including human genome research (\$90.9 million); and
- o medical applications studies to develop advanced techniques for the application of radiation and radionuclides for diagnosis and therapy (\$33.9 million).

A major element of the program is directed toward gaining a better understanding of global change. BER's contribution to the Department's global climate change research program (\$77.0 million) is an integral part of the U.S. Global Change Research

Program (USGCRP) which is developed and coordinated by the Committee on Earth and Environmental Sciences. Nine agencies have joined forces to create the USGCRP which has become a paradigm of interagency cooperation and a model for the international collaboration to address this potentially serious environmental problem.

The \$312.6 million requested in FY 1992 for Biological and Environmental Research is a significant reduction from the programs \$368.6 million estimated budget in FY 1991.

#### Clean Coal Technology

Clean Coal Technology is a multi-phase demonstration program aimed at introducing innovative methods of burning coal more cleanly, efficiently, and economically. Technologies demonstrated under the program will substantially reduce emissions of sulfur-dioxide and nitrogen oxides (precursors to acid rain) and carbon dioxide (a greenhouse gas). This program requires industry to share at least 50 percent of the cost, and provides for recoupment of public investments from major commercial successes. So far, the industrial share has exceeded 60 percent for the 35 projects which are currently part of the program.

The Clean Coal Technology demonstration program will take the best, most promising, and efficient of the advanced coal-based processing and emissions control technologies, and over the next decade move them from the proof-of-concept stage into the commercial marketplace through demonstration. By building and operating these first-of-a-kind plants, industry will be in a position to obtain the necessary data on construction and operating costs, reliability, maintenance, and environmental performance to make the necessary deployment decisions for the 1990s and beyond. The success of this program will play an important role in meeting electric power demand under the new Clean Air Act amendments and in addressing concerns over potential global climate change.

The \$315.0 million requested in FY 1992 for Clean Coal Technology is a significant reduction from the programs \$391.0 million estimated budget in FY 1991.

#### LEVEL OF EFFORT

The FY 1991 work plan anticipated that about six staff years would be spent auditing ES&H activities, and through the first ten months of the year, over five and one-half staff years had been expended. Reports issued during FY 1991 include the following:

- o Environmental Compliance By Brookhaven National Laboratory

(ER-B-91-05, November 30, 1990) where we evaluated policies, procedures, and practices for complying with environmental laws and for identifying the need for and obtaining necessary permits. We found that the contractor did not adequately document the training of personnel needed for job performance and the actual training completed by employees handling hazardous waste. Also, policies, procedures, and controls were not adequate for obtaining and complying with permits as the contractor operated a landfill after its permit expired, and emitted pollutants without obtaining permits. Our recommendations to improve controls were concurred in by the officials to which the report was directed.

- o Environmental Training at the Department of Energy (DOE/IG-0294, December 1990) where we found that individuals involved in hazardous waste operations at DOE facilities were not receiving training required by Federal environmental laws and DOE Orders. This occurred because DOE Operations Offices had not provided their management and operating contractors with sufficient guidance and direction to ensure compliance with environmental training requirements. In addition, contractors did not have adequate systems to identify employees requiring training, to ensure that the training was received, and to effectively document compliance with Federal and DOE requirements. Noncompliance with applicable statutory requirements leaves the Department vulnerable to possible enforcement actions, loss of credibility, and increased risks to worker health and safety. Management concurred.
- o Audit of Testing Laboratory Support to the Environmental Survey Program (DOE/IG-0293, December 1990) in which we sought to determine whether laboratory support for the environmental survey program was performed in accordance with provided procedures. We found that 43 percent of the laboratory tests on organic samples exceeded standard maximum holding times, and 31 percent of the organic samples were tested when the laboratories had received failing test scores which, under Environmental Protection Agency (EPA) criteria, should have disqualified them for further testing. Also, deficiencies found by the EPA were not being corrected. These conditions apparently existed because adequate policies and oversight were not established to ensure adherence to DOE's quality assurance program. Management did not take corrective actions until January 1989, when the analysis program was essentially complete.

The primary concern of the report is securing credible results in future testing endeavors. Management believes actions being taken will mitigate the sampling and analysis problems noted in our report.

- o Management of Trichloroethane, Bonneville Power Administration (WR-B-91-3, January 9, 1991) in which we examined management of the solvent 1,1,1-trichloroethane (trichlor). We found that although acceptable substitutes existed, management continued to use trichlor, a hazardous substance regulated by the Resource Conservation and Recovery Act and the Safe Drinking Water Act, at Bonneville substations, and steps were not taken to minimize hazardous waste associated with trichlor. We recommended and management agreed to develop standards for the use of trichlor.
- o Department of Energy's Waste Minimization Program (DOE/IG-0298, September 1991) where we found that, while waste minimization progress is being made in the Department, significant opportunities to eliminate or minimize radioactive and hazardous wastes still exist. Opportunities for minimizing waste, which, if implemented, could have immediate and substantial effect in reducing waste, were not being implemented because of limited use of incentives, minimal program guidance, and funding uncertainties. Potential savings could reach approximately \$30 million.

For FY 1992, the Office of Audits plans to spend over 12 staff years on ES&H audits. Several audits currently in process, will be carried over to FY 1992 including:

- o an audit of "Bonneville Power Administration's (BPA's) Environmental Training" designed to determine whether BPA has designed and implemented environmental training programs that comply with the requirements of environmental regulations.
- o a Department-wide review of coordination and technology transfer between environmental cleanup projects at different sites that address the same basic waste problem, such as processing transuranic waste, vitrification, or monitoring ground water.
- o a review of occupational medical programs at Department of Energy sites to determine whether these sites comply with Federal and/or Departmental occupational medical program requirements.

Included in new reviews scheduled to start in FY 1992 are the following:

- o review of the Remedial Action/Feasibility Study at ORNL. The study to be reviewed identifies what is to be cleaned up and the approach to be employed.
- o a review of waste processing programs at selected Departmental Field Offices and operating contractors.
- o four follow-up audits will determine if recommended corrective actions to environmental findings made by Departmental review teams have been implemented. These audits will be performed at the Brookhaven National Laboratory, the Argonne National Laboratory, the Lawrence Berkeley Laboratory, and the Rocky Flats Plant.
- o a survey of environmental activities at the Hanford Site in Washington state.
- o a review of the management of the Hazardous Waste Remedial Action Program by Martin Marietta Energy Systems, Inc.
- o a review of the West Valley Demonstration Project to determine if West Valley Nuclear Services, Company, Inc. is achieving it's planned results.

## WEAPONS PROGRAM

### BACKGROUND

The weapons program is essential to the security of the United States, and accounts for almost one-fourth of the Department's total FY 1992 budget request. The budget for the weapons program is included in the Department's appropriation for Atomic Energy Defense Activities, which comprises over 63% of the FY 1992 budget request. Many of the other activities included in this appropriation relate either directly or indirectly to weapons activity, such as materials production, safeguards & security, new production reactors, and the Naval Reactors program. As a result, the true impact of weapons activities is more substantial than it may first appear.

The mission of the Department's weapons activities is to support the national security policy of nuclear deterrence. The defense program is complex, involves many offices and contractors within the Department, and must be closely coordinated with the Department of Defense.

Because many of the program's facilities are old, their operating availability and efficiency have declined. These problems are especially evident in the Department's nuclear production reactors, which are the nation's sole source of new nuclear material for defense. Associated with these conditions are several serious environmental, health, and safety concerns. Modernization of the aging weapons complex and restoration of sites to make them safe, viable facilities is one of the largest single tasks facing the Department.

Major components of the weapons program include:

- o Weapons Research, Development, and Testing activities to develop new nuclear weapons, advance the state-of-the-art of weapons technology, transfer nonsensitive defense technology to the private sector, monitor the nuclear weapons stockpile to assure continued reliability and effectiveness, support the Strategic Defense Initiative, and advance inertial fusion technology.
- o Weapons Production and Surveillance activities include procurement of materials, fabrication and assembly of new nuclear weapons and weapon components, life-time maintenance and reliability assessment of the existing stockpile, development and operation of safe-secure systems for transporting nuclear weapons and components, upgrading of safety and environmental activities in order to resume operations at the Rocky Flats plant,

and support of the programmatic environmental impact statement for the weapons complex reconfiguration.

- o Materials Production provides the nuclear materials to meet national defense requirements by operating production reactors, reactor feed materials production facilities, spent fuel chemical processing plants, and other facilities.

Production and environmental problems within the Weapons Complex are among the Department's top priorities. These problems have limited the Department's ability to effectively and efficiently design, test, produce and maintain nuclear weapons. Major problems facing the Department include:

- o resuming production operations at the Rocky Flats Plant;
- o restarting nuclear materials reactor operations;
- o restoring the environment at several sites; and
- o safely disposing of large accumulations of radioactive waste.

The Assistant Secretary for Defense Programs at Headquarters provides management direction, which is carried out primarily by the Office of Military Applications and the Office of Nuclear Materials.

The DOE Field Office, Albuquerque, plays a major role in coordinating weapons production activities. Other Field Offices with substantial participation in defense programs include Nevada, Savannah River, Richland, Idaho Falls, Oak Ridge, and San Francisco.

Weapons research is performed by the Los Alamos National Laboratory in New Mexico, Lawrence Livermore National Laboratory in California, and Sandia National Laboratories in New Mexico and California. Other national laboratories and research facilities also participate. Major facilities involved in nuclear materials production are located in South Carolina, Ohio, Washington, and Tennessee.

LEVEL OF EFFORT

Because of the large percentage of the Department's budget spent on the weapons program and the program's importance to national defense, the Office of Audits has historically allocated a substantial portion of its resources to auditing the Weapons Program. Through the first ten months of FY 1991, about seven staff years of time had been spent on audits of this area. Substantial amounts of time have also been spent on audits

related to the weapons program as discussed above and in other sections of the work plan.

Reports issued during FY 1991 included:

- o Travel and Per Diem Reimbursement on the Price Waterhouse Subcontract at the Savannah River Site (ER-B-91-12, February 1, 1991) where the objective was to determine the adequacy of Savannah River Operations Office and Westinghouse Savannah River Company's (WSRC) policies, practices, and procedures for controlling travel costs on Price Waterhouse and Company subcontracts. We found that WSRC reimbursed Price Waterhouse for \$23,200 of unallowable and \$225,000 of unreasonable travel and per diem costs. Management concurred with our recommendations for corrective action.
- o Construction Carrying Account at the Savannah River Site (ER-B-91-14, March 14, 1991) where the objective was to determine if the Construction Carrying Account was being used for the purpose intended and if the costs that flowed through the account were appropriate. We found that the account was being used improperly to accumulate and allocate costs of both operations and construction activities. Management generally concurred with our recommendations.
- o Departmentwide Audit of the Visibility Over the Status of Nuclear Materials (DOE/IG-0296, August 1991). The purpose of this audit was to determine the accuracy of assessment reports on the status of nuclear materials at selected DOE facilities. We found that assessment reports for nuclear materials inventories were not always accurate, valid, or complete, primarily due to a lack of Headquarters guidance and limited emphasis in inventory assessments of contractor materials management programs.

In FY 1992, the Office of Audits plans to spend over 14 staff years on Weapons Program audits. Audits currently in process that will carry over to FY 1992 include:

- o "Savannah River Site Central Shops" intended to determine whether central shop operations are consistent with mission needs, are managed economically, and are assigned proper overhead rates.
- o "Site Development Plan at the Y-12 Plant" designed to determine whether the Y-12 Plant has a site development plan prepared in accordance with DOE Order 4300.1B.

Some of the audits that are currently planned to start in FY 1992 include:

- o a survey of the component reliability testing program which will look at the practices and procedures related to laboratory and flight testing of weapons samples. We anticipate identifying specific audit requirements for this \$215 million plus program.
- o an audit of the capital equipment budget process at the Savannah River Site to determine if the budget process ensures that capital equipment is minimized and funds are spent in accordance with Departmental and Congressional guidelines.
- o an audit of the inventory management system at the Nevada Test Site to determine if inventories are being controlled and managed efficiently, economically, and in accordance with Federal and Departmental property management regulations.

## NUCLEAR WASTE DISPOSAL

### BACKGROUND

Nuclear Waste Disposal includes all activities directed toward the ultimate disposal of spent nuclear fuel and high-level radioactive waste, including a small research and development program. The FY 1992 Department budget request for Nuclear Waste Disposal is \$305.8 million to fund Civilian Radioactive Waste Research and Development and Nuclear Waste Fund programs. However, the Department's FY 1992 budget also includes funds in the appropriations for Energy Research R&D, Uranium Enrichment, and Atomic Energy Defense Activities, that impact on waste disposal.

The Civilian Radioactive Waste Research and Development program is comprised of generic research and cooperative agreement activities that are consistent with the Nuclear Waste Policy Act of 1982, as amended. Funding of \$0.7 million is requested for FY 1992 to provide for the continuation of the remaining cooperative agreement for reactor storage of spent nuclear fuel, the completion and phaseout of remaining generic research on spent fuel storage, and annual reporting requirements.

Established by the Nuclear Waste Policy Act of 1982, as amended, the Nuclear Waste Fund program's goal is to dispose of spent nuclear fuel and high-level radioactive waste from commercial and defense activities in a permanent geologic repository. The Nuclear Waste Policy Amendment Act of 1987 provided a major refocusing of the nuclear waste program, including the designation of Yucca Mountain, Nevada, for detailed characterization to evaluate site suitability for a geologic repository.

In a November 1989 report to Congress, the Department pledged its best efforts toward meeting both near-term and long-term milestones consistent with its goals of safety and technical excellence. To achieve such goals, the Secretary announced the initiation of a three-point plan. The plan centered on;

- o restructuring the Office of Civilian Radioactive Waste Management (OCRWM);
- o initiatives to gain access to the Yucca Mountain site to initiate new scientific investigations needed to evaluate the site's suitability for a repository; and
- o an initiative for establishing an integrated Monitored Retrievable Storage (MRS) facility with a target for spent fuel acceptance in 1998.

The FY 1992 Nuclear Waste Fund budget request of \$305.1 million provides for continuation of the redirected program. The repository request of \$172.2 million includes funds for site characterization at Yucca Mountain, including limited new surface-based testing activities. For the MRS program, \$32.2 million is requested to fund siting and preliminary design activities. The transportation/systems integration/engineering development request of \$38.9 million provides for the continued development of from-reactor casks which will be used in the waste management system and for the integration of the overall system. The \$61.8 million program management request funds personnel, contractual support services and technical support for the overall program.

#### LEVEL OF EFFORT

During FY 1991, several reports were issued in the Nuclear Waste Disposal area, including:

- o Audit of Property and Equipment at Battelle, Columbus, Ohio - A Contractor to the Office of Civilian Radioactive Waste Management (CR-B-91-01, February 13, 1991). The purpose of the audit was to determine if Battelle's property management procedures were in compliance with Department and Federal policies and regulations. Although contractors may purchase property and equipment with contract funds, the property belongs to the U. S. Government. The contractor is responsible for maintaining sufficient internal controls to safeguard and minimize loss of the Government-owned property in their custody. The review disclosed that internal control weaknesses in Battelle's property management system contributed to the loss of equipment in their custody. Battelle officials stated that they are in the planning phase of revising their property management system.
- o Audit of Transuranic Waste Processing Facilities Supporting the Waste Isolation Pilot Project (WR-L-91-19, June 13, 1991) where we assessed the Department's management approach to acquiring planned transuranic (TRU) waste processing facilities at several locations. Because the Department has taken or plans to take several initiatives to develop an integrated approach to the waste disposal problem, we made no recommendations in our report. However, we have reservations concerning the Department's ability to design and construct planned TRU waste processing facilities in an integrated manner, primarily because the facilities we examined had been designed on a site-by-site basis.

During FY 1992, the Office of Audits plans to spend almost nine staff years on audits of Nuclear Waste Disposal activities. Audits currently in process that will be carried over to FY 1992 include:

- o a multi-region audit, "OCRWM Plan for High-level Waste Repository" intended to determine if current expenditures from the Nuclear Waste Fund are meeting mission objectives.
- o a review to determine whether DOE operating contractors are packaging low-level waste for shipment to disposal sites in the most efficient and cost effective manner.
- o a review to determine if the use of commercial disposal sites for the burial of DOE's low-level waste would be feasible and cost effective.

Several new audits are currently planned to start in FY 1992, including:

- o an audit of property designed to determine if adequate controls have been established for the acquisition, use, and disposal of property acquired for the Yucca Mountain Project.
- o a review to determine if the West Valley Demonstration Project for nuclear waste management is prudently achieving the results intended by the authorizing legislation. Thru March 1991, about \$500 million had been expended on the project, with approximately \$110 million in expenditures anticipated in FY 1992.
- o a review to determine if the Department should continue the development of canisters for disposing of waste since the NRC has not established canister specifications. Canister development and production costs are estimated to exceed \$50 million.
- o a follow-up review of OCRWM transportation planning to determine if the OCRWM transportation program has progressed on schedule with cask development.
- o a financial review of the OCRWM maintenance and operations contractor to assess the reliability of accounting controls, transactions, account balances, and financial reports prepared by TRW Environmental Safety Systems, Inc.

## SAFEGUARDS AND SECURITY

### BACKGROUND

The Nuclear Safeguards and Security Program is responsible for the development of measures for the protection of nuclear weapons, nuclear materials, facilities, and classified information against theft, sabotage, espionage and terrorist activity. The emphasis of DOE's Safeguards and Security activities has shifted to protection against the insider threat.

This program is essential to national security and has attracted a considerable amount of Congressional and public attention. Substantial audit work has been done in this area, but because of its sensitivity and high visibility, the safeguards and security program warrants continued audit attention in the areas of physical and personnel security.

Major objectives for safeguards and security continue to include:

- o increase physical security measures designed to protect against internal threat;
- o improve classified document/material control;
- o continue emphasis on technology upgrades in the material control and accounting area;
- o increase emphasis on computer security enhancement activities; and
- o strengthen the personnel security/clearance program.

To establish more stringent physical security, DOE plans to design and build state-of-the-art safeguards and security technology systems into its facilities. These improvements will require \$1.1 billion in capital investment and \$8.6 billion in operating funds through FY 2010.

As a result of the costs to be incurred and the limited oversight provided by the current organizational structure, concern has risen over the justification for the large expenditures in this area. Also, during recent years, a perception has grown both in the Congress and the media that DOE was increasing security requirements and limiting access with the intent, or at least the result, of hiding environmental and safety problems.

Although the Department is spending billions on safeguards and security measures to protect against outsiders, funding and staffing limitations continue to constrain the implementation of

controls over clearances for insiders. DOE requires most of its Federal and contractor employees to undergo personnel security investigations and obtain security clearances. These clearances are designed to ensure that those individuals with access to sensitive information or materials are trustworthy.

A review at DOE headquarters found that the average time for processing a security clearance was about ten months, with many employees waiting over a year for their clearances. Further, only about a third of that time was used to conduct the investigation. The balance of the processing time was used in submitting the application for investigation and in making the access determination once the investigation was completed. Processing delays may make it difficult for the Department to gear up to meet urgent production requirements. Additionally, DOE contractors are reluctant to adjust their workforce when the workload decreases because of the time required to obtain clearances for replacement employees.

The clearance workload is larger than warranted for several reasons:

- o many employees have been granted clearances at higher levels than required for their jobs;
- o many employees work in jobs which do not require clearance;
- o procedures to document the need for clearances are not fully effective;
- o once the clearance is granted, there are no procedures to review an employee's clearance after transfers which involve a change of duties;
- o contractors have not been obtaining important pre-employment information on job applicants before they were hired and their names submitted for clearance. Such preliminary information helps to identify job applicants who may be ineligible for a clearance.

In addition to the "first time" investigation requirements, the Department has a large backlog of cases which require reinvestigation as part of the periodic updating of clearances.

Other key concerns that Congress and the Department have in the area of Safeguards and Security include:

- o Computer security controls -- DOE is one of the largest computer users in the Federal Government, with large volumes of unclassified research data being shared by DOE laboratories, via network connections. These systems may be vulnerable to computer viruses and hackers.

- Training — The Department is concerned about continuing management, procedural and operator training problems in the safety area.
- Security forces -- Some concerns have been raised about law enforcement jurisdiction and the authority of security forces at DOE facilities. Also, there is concern that some security guards may not have security clearances.

#### LEVEL OF EFFORT

Although two and a half staff years of effort were planned for the Safeguards & Security area in FY 1991, almost four staff years had been spent in the first 10 months of the fiscal year. Audit reports completed in this area during the fiscal year include:

- Overtime and Staff Management at Martin Marietta Energy Systems, Inc. Y-12 Plant - Security Patrol Department (ER-B-91-01, November 2, 1990) where we found that Energy Systems' management of overtime and staff at the Y-12 Plant was not adequate or in accordance with applicable guidance provided by the U.S. General Accounting Office, DOE, the DOE/Energy Systems contract, the Energy Systems/union labor agreement, and Energy Systems' policies and procedures. As a result, Energy Systems incurred \$624,000 in unallowable costs and could save another \$1.8 million annually in future years through improved efficiency.
- EG&G Mound Plant Protective Force Administrative and Operational Controls (ER-B-91-04, November 15, 1990) where our objective was to assure that operational and administrative security requirements designed to protect DOE's security interests at the Mound Plant had been implemented by the Mound Plant Protective Force. We determined that:
  - the Mound Plant did not have adequate policies and procedures to preclude material weaknesses in the management of hourly employees time and attendance records.
  - controls had not been properly implemented to ensure proper supervision of escorts, and accountability of weapons and keys.
  - required routine physical fitness training was not properly supervised or adequately documented, and first-line supervisors did not complete mandatory annual training required by DOE orders.

- o Richland Operations Office Oversight of Management & Operating Contractor Personnel Security Clearances, Richland, Washington (WR-B-91-1, November 30, 1990) where we evaluated Richland's security clearance policies and timeliness. We found that as of March 1989, Richland had almost 10,000 active "Q" clearances and over 2,800 active "L" clearances. This number of "high level" clearances seems excessive since Richland's primary Special Nuclear Material facility had closed and their mission had shifted toward waste management. Richland had not reviewed in-depth the contractor's implementation of DOE and Richland orders which might permit a reduction of some of the security clearance levels. Security reinvestigation costs for maintaining "Q" clearances over the next five years (projected at \$13 million) could be substantially reduced.

For FY 1992, the Office of Audits plans to spend about seven and one half staff years of effort in the area of Safeguards and Security. One on-going audit of clearance processing and timeliness in the Department will be carried over from FY 1991. Ten new audits are scheduled to start during the year, including:

- o reviewing the acquisition of physical security devices to determine if DOE's policies and procedures for justifying expenditures to improve safeguards and security are evenly applied at all locations and assure that security is adequately provided without wasting funds.
- o a review of firearms and munitions accountability and inventory control at Albuquerque to determine compliance with laws and regulations, and causes of uneconomical or inefficient practices.
- o determining whether controls over the access to classified computer information at the Y-12 Plant are adequate to provide the required protection.
- o a review to determine whether computer systems in Albuquerque that are linked to communication networks are secure and have controls to detect and report intrusions or breach of security.

## PROCUREMENT AND GRANTS MANAGEMENT

### BACKGROUND

Procurement and grant activities affect every program and activity in the Department of Energy. However, unlike most other Federal agencies, DOE does not spend the majority of its procurement dollars on goods and services for its own use. DOE spends its procurement dollars more as a catalyst for technology development, supporting basic and applied research in a wide range of energy related technology areas, including nuclear energy, nuclear waste management, fossil energy, conservation, renewable energy, and nuclear weapons development. DOE procurement activities also support national security in the production and testing of nuclear weapons and the management of the Strategic Petroleum Reserve and the Naval Petroleum and Oil Shale Reserves.

DOE is one of the most active procuring agents in the Federal Government. A substantial portion of this procurement activity is carried out at locations and facilities owned by the DOE, but operated for DOE by its management and operating (M&O) contractors.

DOE also makes financial assistance awards to State and local governments, colleges, universities, and private sector firms. These financial assistance awards are made for a variety of purposes, including:

- o weatherization of the residences of low income citizens;
- o promotion of energy conservation by State and local governments, schools, and hospitals; and
- o the encouragement of new and emerging energy techniques.

Funds used for these programs come from Congressional appropriations and payments collected from the petroleum industry in settlements for violations of DOE's oil price and allocation controls which were in effect from 1973 to 1981.

### LEVEL OF EFFORT

During the first 10 months of FY 1991, the Office of Audits spent slightly more than 10 staff years of effort auditing the Procurement and Grants Management area. Reports issued included the following:

- o Procurement Initiated by Transportation Safeguards Division (WR-L-91-14, December 17, 1990). The purpose of the audit was to determine whether Transportation Safeguards Division's procurement practices complied with applicable laws and regulations. Department regulations required the purchase of goods and services for Government employees use where the task is to do work for the Transportation Safeguards Division, but not primarily or solely to procure goods and services for use by Government employees. Contrary to these policies, Transportation Safeguards Division obtained items for Government employees use through two M&O contractors. In one instance, this practice led to an uneconomical procurement.
- o Followup Review of Major System Acquisitions and Major Projects (DOE/IG-0292, November 1990). In 1985, we conducted an audit of DOE's procedures and practices for managing and controlling its major acquisition program, and found deficiencies in documentation and reporting required by DOE's Project Management System (System).

The current audit disclosed that the Departmental elements responsible for operating and managing major acquisitions still were not in full compliance with documentation and reporting requirements. As a result, the Headquarters review, evaluation and oversight of over \$35 billion in major acquisitions lacked critically important documentation regarding projects in process. The absence of these documents and the data they are intended to provide increases the possibility of cost overruns and schedule delays. The reviewers were informed that the Departmental elements were not responsive to the requirements of the System because they were not convinced of the benefits of such an orderly process. Management is in the process of taking corrective actions based on our recommendations.

- o Review of Headquarters Use of Cost-Reimbursement Contracts (CR-BC-91-01, April 9, 1991). The purpose of this audit was to determine if cost-reimbursement contracts used to procure support services for DOE Headquarters were properly justified in the selection process and if, in fact, they were the appropriate contract type to use in acquiring the specific services required. When cost-reimbursement contracts are used, a Determination and Findings (D&F) must be prepared to clearly and convincingly justify the determination made. Our review of 23 contracts at DOE Headquarters indicated that none of the D&Fs contained sufficient information to support the decision to use cost-reimbursement contracts. At least 14

of the contracts had definitive or recurring requirements making them candidates for fixed-priced contracting. Management partially concurred in our recommendations.

- o Cost of Environmental Survey Testing (DOE/IG-0295, August 1991) where we found that DOE's costs for environmental tests performed by its own laboratories were significantly higher than if DOE had contracted for this work through commercial laboratories, in part, because it did not have an acquisition strategy and did not use competitive procurement for obtaining testing services. Also, at one of the four laboratories included in our review, sufficient detailed cost information could not be obtained to allow a valid comparison with the costs of testing performed by commercial laboratories. Potential savings could amount to at least \$13.6 million annually. Management generally agreed with our recommendations.
- o Audit of the Cost Effectiveness of Contracting for Headquarters Support Services (DOE/IG-0297, August 1991) where we found that costs to perform work in-house were 40 percent less than contractor costs, contracted activities were nevertheless continued because DOE policy did not require a cost comparison analysis as part of the program office request for support services. Potential savings could amount to about \$16.3 million.

We plan to devote over 16 staff years to Procurement and Grant Management activities during Fiscal Year 1992. Several audits will be carried-in from FY 1991 including:

- o a review of Argonne National Laboratory's use of Government supply sources.
- o use of the Federal Supply System for procurement of recurring items at the Savannah River Site.
- o a review of Uranium Mill Tailings Remedial Action (UMTRA) prime contractor procurement.
- o a review of the purchase and use of heavy equipment at the Hanford Site in Richland, Washington.

New audits scheduled to begin in FY 1992 include:

- o a review of the implementation and cost effectiveness of the Accountability and Award Fee Rule at three management and operating contractors at Rocky Flats. This rule transfers liability for certain "avoidable" costs from DOE to the contractor.
- o a review of procurement practices at EG&G Mound to determine if procurement practices comply with the Federal

Acquisition Regulations and contractual requirements resulting in the lowest possible prices. Most of EG&G's procurement dollars are awarded on a noncompetitive, fixed-price basis.

- o a review of procurement practices used by DOE Field Office, Nevada contractors.

## EXPANSION OF THE MISSION OF THE LABORATORIES

### BACKGROUND

DOE'S national laboratories are federally owned facilities operated for the Department by universities, university consortia, or industrial contractors. The contractor operators provide the scientific, technical, and support staff to conduct the work under the general guidance of the Department's program managers. Contract oversight and appraisal of laboratory performance are conducted by the Field offices of the Department. The detailed, day-to-day management of each laboratory is provided by the contractor commanding the best talent from the private sector and operating with considerable flexibility.

The Department owns eleven national laboratories located around the United States. The laboratories and their locations are:

<u>Facility</u>	<u>Location</u>
Argonne National Laboratory	Argonne, IL
Brookhaven National Laboratory	Upton, NY
Fermi National Accelerator Laboratory	Batavia, IL
Idaho National Engineering Laboratory	Idaho Falls, ID
Lawrence Berkeley Laboratory	Berkeley, CA
Lawrence Livermore National Laboratory	Livermore, CA
Los Alamos National Laboratory	Los Alamos, NM
National Renewable Energy Laboratory	Golden, CO
Oak Ridge National Laboratory	Oak Ridge, TN
Pacific Northwest Laboratory	Richland, WA
Sandia National Laboratory	Albuquerque, NM

The work of the Department's laboratories is focused on basic research and applied research and development problems that require capital-intensive facilities, long-term sustained efforts, or multi-disciplinary team efforts. Most of the large, unique facilities within the system are "designated user facilities" and are made available to researchers from universities and industry, for their own research or for collaborative efforts. Laboratories also further the education of scientists and engineers by offering special training and research opportunities in the many disciplines they represent.

General management oversight of each of the national laboratories is assigned to the secretarial officer with the major share of programmatic activities carried out at the laboratory. Four of the multi-program laboratories are assigned to the Assistant Secretary for Defense Programs, and seven are assigned to the Director of the Office of Energy Research. The Director of the Office of Energy Research is also responsible for a number of

Department-wide laboratory management activities, including the institutional planning process, the Laboratory Directed Research Program, the laboratory appraisal process, the Multi-program Energy Laboratory-Facilities Support Program, and the Research and Development Laboratory Technology Transfer Program.

The institutional planning process focuses on the mission, well-being, and future development of the laboratories, and provides a mechanism for dealing with problems and issues. A 15 year strategic view is a major part of the institutional planning process.

The Laboratory Directed Research and Development Program provides funds, to be used at the laboratory director's discretion, for early exploration of new scientific and technological concepts arising in the course of work. The Laboratory Directed Research and Development Program has yielded substantive benefits in establishing new directions in scientific programs, revitalizing the innovativeness of the laboratory personnel, and opening new areas of scientific investigation.

The laboratory appraisal process considers program performance and general management, as well as performance in functional areas of administration, such as health, safety, environmental protection, property management, industrial relations, legal services, and public relations. The appraisal process strengthens the position of the field office manager with respect to the operating contractor's activities and promotes greater flexibility in contractor operations.

The Multi-program Energy Laboratory-Facilities Support Program provides funds for rehabilitation, renovation, and replacement of general-purpose facilities at the five Office of Research multi-program laboratories. These "make whole" functions recognize that because of continuous use, aging, and obsolescence, the facilities tend to deteriorate to a point where they are no longer appropriate for their intended functions, economically justifiable to maintain, or adequate to meet security, environmental safety, and health requirements.

The Research and Development Laboratory Technology Transfer Program involves the transfer of technology developed at the Department's laboratories to the public and private sectors. Throughout the 1980's, the Department's technology transfer program was minimal. However, with the passage of the National Competitiveness Technology Transfer Act of 1989, the Department's technology transfer activities began to increase significantly. This Act gave the laboratories authority to enter into Cooperative Research and Development Agreements with private industry. These joint research agreements allow each party to contribute facilities, personnel and equipment. Private industry may also contribute cash, but the laboratories cannot.

Historically, technology transfer has been funded by the Department's laboratories solely through overhead charges to all programs conducting work at those sites. Beginning with the FY 1993 budget; however, it appears that all technology transfer activities will be included in the Department's budget request. This change will be more conducive to internal Departmental control and OMB and Congressional review.

#### LEVEL OF EFFORT

The Office has maintained a presence at many of the National Laboratories over the past several years. However, resources have not generally been available to perform the number of audits that funding levels of these facilities requires. However, we have conducted annual financial audits at the facilities to ensure the reasonableness of expenditures.

During FY 1991 we spent about two staff years auditing the activities of the laboratories. The following two audit reports were issued during the year:

- o Martin Marietta Energy Systems, Inc., Subcontracting in the Work-For-Others Program for Data Systems Research and Development Projects (ER-B-91-07, December 21, 1991) where our objective was to determine if work-for-others subcontracting was being done in accordance with DOE approved procurement practices, if these procurements were being properly administered, and whether other agencies were "dumping" year-end funds in the program. In general, we found little problem in this area. We did, however, find indications that Defense Department agencies were "dumping" year-end funds into the program, but because DOE does not control such inter-Departmental spending, no recommendations were made in this area. The Office of Audits and the Department of Defense Office of Inspector General are currently conducting a joint audit of reimbursable work being done by Martin Marietta Energy Systems and subcontractors.
- o Fabrication Department at Oak Ridge National Laboratory, Martin Marietta Systems (ER-BC-91-03, December 24, 1990) where we found that policies and procedures provided adequate controls over Government-owned assets. We did find, however, that the process used by Oak Ridge National Laboratory for deciding to perform fabrication work in-house compared to procurement from outside sources was not appropriate since an adequate make-or-buy program had not been developed for determining whether fabrication or procurement was in the Government's best interest.

We plan to expand our coverage of the National Laboratories in Fiscal Year 1992. At the present time, we plan to spend about

seven staff years auditing this area. Work planned includes the continuation of ongoing reviews of cooperative research and development agreements administered by the laboratories, and a review of the technology transfer program at the Los Alamos and Sandia National Laboratories.

New audits scheduled for FY 1992 include:

- o reviews of technology transfer programs at the Argonne National Laboratory and Martin Marietta Energy Systems to determine whether practices and procedures regarding technology transfer comply with DOE policies, and if the programs are accomplishing their objectives.
- o a follow-up to our FY 1990/1991 survey of the technology transfer program at Sandia National Laboratory to determine whether Technology Maturation Program expenditures comply with Departmental and Sandia policy and guidance.

## DETERRENTS

### BACKGROUND

We have characterized as "deterrents" those activities for which there is high inherent vulnerability to waste and abuse. The purpose of these audits is to avoid waste and abuse by identifying problems before they have a significant impact on operations. Examples of activities include:

- Imprest Funds
- Payroll Audits
- Travel claims
- Certification of time cards
- Overtime claims
- Telephone use

We plan to concentrate on activities most likely to be vulnerable to waste and abuse that can be audited in a short duration. Audits of these activities will, of necessity, cut across program lines. It is also anticipated that more leads and a better variety of leads to potential investigations will be developed.

Many of these areas have already received some coverage from the Office of Audits and problems have been identified. Further audits as a "deterrent" can help limit the losses that may already be occurring.

### LEVEL OF EFFORT

Through the first 10 months of FY 1991, we spent almost six staff years auditing activities in the area of "deterrents." We also considered "deterrents" while performing audits in other major program areas such as procurement and grants management and financial management.

Examples of "deterrent" audits completed in FY 1991 include audits of imprest funds, travel, telecommunications, and computer access controls. These audits identified problem areas such as weak internal controls over imprest funds. Implementing the recommendations made in these audits will prevent waste and abuse. In addition, "deterrent" audits provided audit leads and investigation referrals.

To illustrate, seven audit reports were issued which disclosed internal control weaknesses in imprest fund management at the following DOE sites: Western Area Power Administration, Oak

Ridge National Laboratory, Y-12 Plant at Oak Ridge, Brookhaven National Laboratory, Mound Plant in Ohio, Savannah River Site, and Fermi National Accelerator Laboratory.

The most significant internal control weaknesses found in these audits were inadequate segregation of cashier duties, inadequate transaction documentation and procedures, annual audits not being performed, and improper use of imprest funds. The audit reports recommended that some sites follow the internal control procedures which they already have in place, while other sites were advised to develop and implement stricter procedures to preclude opportunities for fraud, waste and abuse.

Another example of a "deterrent" audit completed in FY 1991 is the audit of Telephone Costs at Princeton Plasma Physics Laboratory (ER-B-91-17, August 21, 1992). This audit reported that personal telephone calls were being charged to the DOE contract because management was not enforcing policies and procedures.

In FY 1992, we plan to spend over six staff years on "deterrent" audits. This time includes a carry-in FY 1991 audit of policies, procedures, practices, and internal controls for reimbursing employees for travel at the Princeton Plasma Physics Laboratory. New audit starts will include reviews of imprest funds, travel advances, overhead costs, and computer access controls at various Department facilities. In addition, we will look for opportunities to deter waste and abuse while performing audits in the other major program areas.

## NAVAL REACTORS

### BACKGROUND

The naval nuclear propulsion program is carried out jointly by the Department of Energy and the U.S. Navy. Its purpose is to provide the Navy with effective nuclear propulsion plants and to ensure their safe and reliable operation. The program is responsible for all aspects of nuclear propulsion from plant design through operation and eventual disposal. Priority is given to ensuring the viability of the existing nuclear powered fleet by applying new technology and improved features to these vessels.

Major components of the program are:

- o reactor development work to achieve higher power density reactors with greater endurance and to improve capability and reliability of current reactors;
- o plant development aimed at improving performance and longevity of the entire reactor plant operations including development of components, plant arrangement studies, and generic chemistry and materials technology to support existing and advanced plant concepts;
- o reactor operation and evaluation activities involving the operation and maintenance of seven land-based prototype nuclear propulsion plants used for testing;
- o program direction covering personnel and other costs at the Naval Reactors Office in Washington, D.C., at field offices in Pittsburgh, PA and Schenectady, NY; and at the DOE Field Office, Idaho.
- o capital equipment and construction; and
- o enriched material to meet naval fuel requirements.

During FY 1992, work will continue to improve existing submarine and surface ship reactors and plant components, and to develop advanced reactor concepts and propulsion plants. Major efforts include the Advanced Fleet Reactor, which is bringing together advances in reactor technologies, components, and materials to power the SEAWOLF class attack submarine. The FY 1992 budget request of \$678 million maintains the Advanced Fleet Reactor effort on schedule, and also continues the 10-year extensive servicing and refueling effort of the seven land-based prototype

naval reactor plants. In addition, the FY 1992 budget request of \$123 million for the enriched materials program is required to meet construction and replacement core needs of the U.S. Navy.

The Naval Reactors Program is an integral part of the Department's strategy for meeting national defense needs through and the program's objectives of developing, and providing nuclear propulsion for Navy vessels. The bulk of the program's funding passes through two prime M&O contractors:

- o Westinghouse Electric operates the Bettis Atomic Power Laboratory near Pittsburgh, PA and the Idaho Naval Reactor Facility. Westinghouse reports to the Pittsburgh Naval Reactor Office of DOE.
- o General Electric operates the Knolls Atomic Power Laboratory in Schenectady, NY and reports to DOE's Schenectady Naval Reactors Office.

Since the majority of the program funding passes through these M&O's, our program audit efforts will focus on the activities of these integrated contractors.

#### LEVEL OF EFFORT

Through the first 10 months of FY 1991, the Office of Audits has spent over three staff years auditing the Naval Reactor program. These audits have focused on financial and compliance activities of the two M&O contractors noted above. A total of nine reports were issued during the first ten months. Reports issued include:

- o Procurement Operations at Bettis Atomic Power Laboratory and Idaho Naval reactor Facilities (CR-91-L-30, March 7, 1991) and Procurement Operations at Knolls Atomic Power Laboratory (CR-L-91-34, March 15, 1991).
- o Financial Management at Knolls Atomic Power Laboratory (CR-L-9131, March 15, 1991) and Financial Management Functions at Bettis Atomic Power Laboratory (CR-L-91-33, March 15, 1991).
- o Transportation and Travel Activity at Pittsburgh Naval Reactors (CR-L-91-32, March 15, 1991).
- o Automated Data Processing and Telecommunications Management at Knolls Atomic Power Laboratory (CR-L-91-35, May 7, 1991).

The results of these audits indicate that, in the above areas, the Naval Reactors program had established effective internal control structures.

In addition, survey efforts were initiated in the enriched materials and materials development areas, an area the naval Reactors program recently gained responsibility for.

For FY 1992 the Office of Audits plans to spend about two staff years of effort in the Naval Reactors area. Planned audits will be financial and compliance in nature and concentrate on the areas of Budgeting, Compensation and Benefits. Based on survey results, additional efforts may be pursued in the enriched materials and materials development areas.

## STRATEGIC PETROLEUM RESERVE

### BACKGROUND

The Strategic Petroleum Reserve (SPR) was created in 1975, and is authorized to store up to 1 billion barrels of crude oil. The SPR's purpose is to diminish U.S. vulnerability to the effects of interruptions in foreign crude oil and petroleum product supplies. The crude oil is stored at six underground oil storage sites located in southern Louisiana and eastern Texas. These facilities are connected to major private sector distribution systems. At present, the SPR can withdraw at a maximum sustained rate of 3.5 million barrels per day for a 90-day period. Boeing Petroleum Services, Inc., a contractor, operates the Reserve for the Department.

Typically, one or more large scale drawdowns of individual sites are made annually, with numerous other oil movements carried out at all sites as part of routine operations. Prior to January 1991, two actual test sales involving purchases of crude oil (1.1 million and 3.9 million barrels) by the private sector had occurred.

In January 1991, following the start of Operation Desert Storm, the Department sold 17.3 million barrels of crude oil from the Strategic Petroleum Reserve. The sale was a precautionary move to counter any possible disturbance in oil supplies caused by the outbreak of Middle East hostilities. This "drawdown" was made from four storage facilities along the Gulf coast.

At that time, there was a total of 585 million barrels in the Reserve, representing an investment of nearly \$20 billion in facilities and oil purchases.

The FY 1992 budget request for the Strategic Petroleum Reserve is \$382 million, down from the FY 1991 estimate of \$431.7 million. The budget decrease is primarily in three areas, operations and maintenance, capital improvements, and distribution enhancements. The budget proposes to resume filling the SPR in the last half of FY 1992 at a rate of up to 50 thousand barrels per day. Oil would be acquired by long term lease or other suitable alternative rather than direct purchase. The FY 1992 budget approach to fill with leased, instead of purchased, oil reflects the strategy of assuring a large inventory for use during an energy emergency without large upfront outlays of money.

Options are also being studied for expanding the Reserve from 750 million to 1 billion barrels.

### Level of Effort

During Fy 1991, we spent slightly over one staff year auditing activities of the Strategic Petroleum Reserve. For the first three-quarters of the year, audits were done by staff drawn from various OIG offices. However, in June 1991, an Office was established in New Orleans, LA, that will have primary responsibility for audits of the SPR. The office is currently staffed by four auditors and has one vacant auditor position.

During FY 1991, two reports on the Strategic Petroleum Reserve were issued:

- o Quality Assurance Program at the Strategic Petroleum Reserve (ER-BC-91-01, December 18, 1990) where we found that SPR's correction of quality assurance program deficiencies found by an external organization was not timely. We found that the number of change orders being experienced by the SPR Project Management Office was excessive; that improvements were needed in the inspection process for critical system components; and that construction claims were not reported as contingent liabilities in annual financial statements, leading to incomplete and misleading year-end financial statements. Management concurred with most of our recommendations.
- o Long-range Planning for Physical Security requirements at the Strategic Petroleum Reserve (ER-LC-91-01, January 2, 1991) where our objective was to determine whether the SPR Project Management Office, through its operating contractor, Boeing Petroleum Services, Inc., had developed and implemented a physical security program that requires long-range planning to meet security needs. We found that a DOE approved Master Security Agreement plan was in place. Our analysis of selected aspects of this plan raised questions as to whether the DOE guidance under which the plan was developed provided reasonable assurance that security objectives would be obtained in a cost effective manner. No recommendations related to the SPR plan were made in the report.

During FY 1992, we plan to spend about four staff years auditing the Strategic Petroleum Reserve. Three audits will be carried in from FY 1991. They are audits of:

- o Crude Oil Accountability at the Strategic Petroleum Reserve where we will determine if SPR policies, procedures, and practices provide reasonable assurance as to the adequacy and correctness of data and documentation relating to SPR's crude oil receipts, transfers, and sales.

- o Internal Controls over Computer-processed Financial Data at Boeing Petroleum Services to determine if controls are adequate to ensure the reliability, relevance, and completeness of the data.
- o The Payroll System at the Strategic Petroleum Reserve to determine the adequacy of Boeing Petroleum Services, Inc. policies, procedures, and controls over the payroll systems. An earlier audit disclosed a problem with the use of passwords in the payroll system that could permit illegal payroll transactions.

We also plan to start three new audits during FY 1992. One audit will focus on determining whether Boeing Petroleum Services, Inc. procurement activities are performed in accordance with the Federal Acquisition and Department of Energy Acquisition Regulations. The other two audits will look at the oil sale process and the drawdown process from the Strategic Petroleum Reserve that occurred in conjunction with Operation Desert Storm in January 1991.

## POWER MARKETING ADMINISTRATIONS

### BACKGROUND

The Department of Energy Organization Act of 1977 transferred the five Power Marketing Administrations (PMAs) - Alaska, Bonneville, Southeastern, Southwestern, and Western Area - to DOE while preserving them as separate and distinct entities. Each PMA markets low cost, subsidized hydroelectric power within its own geographic boundaries. Revenues from selling power and transmission services are used to repay annual operations and maintenance costs, repay the capital investment with interest, and assist capital repayment on irrigation features of certain projects. Revenues are also used to pay for certain conservation and wildlife programs.

The five Power Marketing Administrations market the power generated at all federal multiple-purpose water projects except those under the jurisdiction of the Tennessee Valley Authority. To carry out their responsibilities, the PMAs contract for the purchase and sale of power; develop rates; construct and maintain transmission lines, substations, switchyards, and attendant facilities; and conduct appropriate energy conservation programs.

The energy output of these hydroelectric projects accounts for about 45 percent of the Nation's hydroelectric power production, or 6 percent of the Nation's total electric power.

Alaska Power Administration (APA) is responsible for power operation, maintenance, and marketing for two hydroelectric projects in Alaska - the Eklutna Project near Anchorage and the Snettisham Project near Juneau. Purchase agreements have been successfully negotiated by the Department to sell these two hydroelectric facilities. The FY 1992 budget assumes the divestiture will be authorized and implemented by the end of FY 1992.

Bonneville Power Administration (BPA) provides wholesale electric power service to the Pacific Northwest, a 300,000 square-mile service area that encompasses Oregon, Washington, Idaho, western Montana, and portions of several other states in the Columbia River Drainage basin. BPA markets hydroelectric power from 30 U.S. Army Corps of Engineers and Bureau of Reclamation projects and from certain non-federal hydro, thermal, and nuclear generating plants in the region. BPA provides about 80 percent of the region's electric power transmission capacity.

BPA is self-financed through a revolving fund, operating under the provisions of the Government Corporations Control Act, and has authority to borrow funds from the U.S. Treasury to finance capital additions. In FY 1992 these include increased conser-

vation investments; higher spending to improve transmission system reliability; an increased emphasis on replacing obsolete and maintenance-intensive transmission and PCB-contaminated equipment; and construction of fish protection and enhancement facilities.

Southeastern Power Administration (Southeastern or SEPA) handles the sale and transmission of Federal hydroelectric power generated at 22 hydroelectric projects in a 10 state area of the southeast. Southeastern sells power at wholesale primarily to publicly and cooperatively-owned electric distribution utilities using wheeling agreements with the region's large private utilities. Southeastern does not own or operate any transmission facilities.

Southwestern Power Administration (Southwestern or SWPA) operates in a six-state area of the Southwest, serving as marketing agent for hydroelectric power produced at 24 Corps of Engineer projects. Power is sold at wholesale primarily to publicly and cooperatively-owned electric distribution utilities. Southwestern also operates and maintains transmission lines, substations and switching stations.

Western Area Power Administration (WAPA) handles transmission and marketing of Federal hydroelectric power in 15 central and western states. Power is generated from federally-owned power plants operated primarily by the Bureau of Reclamation, Corps of Engineers, and the International Boundary and Water Commission. The Colorado River Basins Power Marketing Fund is WAPA's business-type revolving fund, which is used for routine operation and maintenance and power marketing expenses of three power projects.

In theory, the five PMAs are almost self-supporting. The initial investment by the taxpayers, to build the generating and transmission facilities, is repaid with interest by the PMAs to the Treasury. The PMAs are not fully self-supporting because the repayment terms are often less stringent than market conditions would require. Also, certain payroll related overhead expenses are borne by the Federal Government and are not reimbursed from ratepayer revenues. Repayments to the Treasury are made in different ways, but they all derive from the fact that the revenues of the five PMAs exceed their operating expenses by a wide margin. The following table demonstrates the magnitude of the estimated maximum amounts that the five PMAs could repay to the taxpayers in FY 1991 and FY 1992.

**Estimated Maximum Repayments from PMAs to the Treasury  
(in Million \$s)**

PMAs	FY 1991			FY 1992		
	Revenues	Expenses	Difference	Revenues	Expenses	Difference
APA	9.5	(3.8)	5.7	10.3	(3.3)	7.0
BPA	2,937.7	(2,388.9)	548.8	3,173.1	(2,836.6)	336.5
SEPA	151.0	(20.3)	130.7	154.0	(24.9)	129.1
SWPA	92.5	(35.4)	57.1	100.1	(33.7)	66.4
WAPA	721.6	(326.0)	395.6	801.3	(339.9)	461.4
<b>TOTALS</b>	<b>3,912.3</b>	<b>(2,774.4)</b>	<b>1,137.9</b>	<b>4,238.8</b>	<b>(3,238.4)</b>	<b>1,000.4</b>

FY 1992 DEPARTMENTAL INITIATIVES

Proposed Changes in Repayment Terms

The President's budget proposes to make the PMAs cover the government's true costs of providing power by eliminating Treasury financing subsidies and requiring the PMAs to operate in a more business-like manner. Legislation will be introduced to require the PMAs to make scheduled annual payments of unpaid principal on their Federal investment, excluding irrigation investment, by adopting a mortgage-type amortization approach. The Federal investment would be repaid with interest rates on unpaid appropriated debt balances accruing at the historic long-term Treasury interest rates in effect at the time each investment was placed in service. Treasury interest rates in effect when investments are placed in service will be applied to all future investments with the exception of construction loans, which would be granted appropriate shorter-term interest rates and subsequently capitalized. In FY 1992, an estimated \$393 million in additional receipts is expected to be generated by this reform. Over the next five years these proposed reforms are expected to produce over \$2.0 billion in additional receipts to the Treasury.

Regulatory Issues

The Department's Hydroelectric Systems Program (\$1.0 million) is aimed at resolving technical and institutional regulatory impediments to developing additional hydroelectric capacity and relicensing of existing capacity without undesirable environmen-

tal impacts. Studies and coordinating activities involving interested parties will be conducted in order to define environmental evaluation criteria and methodologies and to determine the effectiveness of environmental mitigation related to such vital concerns as dissolved oxygen, in-stream flow, and fish passage.

#### Research and Development

The expansion of the electric power network over the upcoming decade, coupled with the introduction of intermittent and dispersed generation sources, will present a variety of new challenges to maintaining an adequate and reliable supply of electricity. Many of these will be resolved through development of more efficient ways to transmit electric power and deployment of advanced load-leveling battery technology vital to the control and efficiency of the grid as major capacity additions begin to occur in the mid-term. The Department supports research (\$8.1 million) to improve the capacity, reliability, efficiency and control of these systems. The Department also investigates the potential health effects from exposure to electric and magnetic fields associated with electric transmission and distribution systems.

#### Sale of the PMAs

As noted above, purchase agreements have been successfully negotiated for the Department to sell the two hydroelectric projects whose power is marketed by APA. To the extent feasible, this divestiture will be accomplished with no significant power rate increases for ratepayers. Administration activities will be coordinated with Congress and existing power customers, and implementation will not proceed until necessary legislative approvals have been received.

#### LEVEL OF EFFORT

During FY 1991, 16 reports dealing with the PMAs were issued. These reports included ten mandatory audits and six performance audits.

Mandatory audits included:

- o audits of the FY 1990 Year-End Financial Statements of each of the five PMAs. Two of these audits were performed by CPA firms contracted for by the PMAs with prior approval of the OIG.
- o reviews of the FY 1990 FMFIA reports produced by each of the five PMAs.

The most significant findings resulting from the mandatory audits were disclosed in the Federal Managers' Financial Integrity Act, FY 1990 -- Assurance Memorandum filed by the Bonneville Power Administration (WR-L-91-3, November 17, 1990). Our review of this Assurance Memorandum disclosed that BPA did not report three significant uncorrected internal control deficiencies relating to environmental violations and potential violations of the Federal Acquisition Regulations.

Performance audits included the following:

- o Review of Security Clearances at Bonneville Power Administration, Portland, Oregon (WR-B-91-5, January 9, 1991) where we determined that Bonneville had requested security clearances for 242 positions when clearances were not needed, and had designated nine positions at a higher clearance level than needed. The excessive number and level of clearances strains the already overloaded personnel clearance activities of the Department, and will lead to unnecessary cost of about \$163,000 over the next five years. Bonneville concurred in our findings and recommendations, and has initiated corrective actions.
- o Puget Sound Area Imprest Funds, Bonneville Power Administration, Portland, Oregon (WR-B-91-7, August 15, 1991). This audit found that Bonneville was not reporting discrepancies in fund balances as required; that employees were being reimbursed for small purchases that should have been ordered from warehouse stock; and that Bonneville did not follow regulations for documenting small purchases, disbursing cash advances, or segregating and securing imprest funds. Of the 1,454 cash disbursements we sampled, 828 or 57% did not meet requirements for disbursement from imprest funds. Bonneville agreed with our findings and is in the process of correcting the problems.

Other reports issued during FY 1991 relating to the Power Marketing Administrations dealt with:

- o Non-Competitive Procurements at Bonneville;
- o Quality Assurance Review of the Audits of the FY 1986 and FY 1988 Financial Statements of Bonneville; and
- o Western Area Power Administration Imprest Funds.

Two audits were still in process at the end of FY 1991. About one staff-year is scheduled in FY 1992 to complete:

- o An audit of Bonneville's Environmental Budgeting, Reporting and Training designed to determine if Bonneville

had properly budgeted for and reported on its environmental protection programs and to determine if they had provided the required environmental training to employees.

- o An audit of Debt Management at the Bonneville Power Administration to determine if Bonneville's financial reports contained misleading information on debts and expenses, whether payments being made to the Treasury were from approved sources, and if Bonneville properly issued new debt instruments.

About three and a half staff-years of time are scheduled for 17 new audits planned for FY 1992 dealing with the PMAs. Some of the audits scheduled are:

- o audits of the FY 1991 Year-End Financial Statements of each of the five PMAs;
- o audits of the FY 1991 FMFIA reports produced by each of the five PMAs;
- o a review of the work-for others program at the Western Area Power Administration where we will determine if the financial administration of reimbursable work at Western is in compliance with DOE and Western Orders;
- o a survey of the proposed sale of the Alaska Power Administration where we will determine whether the terms of the proposed sale protect the financial interests of the U.S. taxpayers and the long-term power needs of the Alaska ratepayers;
- o a review of travel payments at the Bonneville Power Administration;
- o a review of substation inventory management by the Bonneville Power Administration;
- o a follow-up to an Investigative Report on Bonneville Procurements; and
- o a review of Accounts Receivable at the Western Area Power Administration.

## SUPERCONDUCTING SUPER COLLIDER

### BACKGROUND

Research in high energy physics is directed at understanding the nature of matter and energy, and the basic forces which govern all processes in nature at the most fundamental level. Experimental research in high energy physics most often requires the use of large particle accelerators, colliding beam devices, and large particle detectors.

DOE has determined that a new, more powerful particle accelerator capable of exploring the trillion electron volt mass region is essential to advance understanding of the fundamental nature of matter and energy and to enable the U.S. High Energy Physics program to remain at the research frontier in the mid-1990's and beyond. The Superconducting Super Collider (SSC) is the proposed new particle accelerator which is capable of meeting these needs.

The SSC is a proton-proton collider having the energy of 20 trillion electron volts per beam. It is intended to be the world's most powerful particle accelerator and a major resource for science education. Using approximately 12,000 superconducting magnets, the SSC is designed to focus and guide protons in counter rotating beams around a 54 mile racetrack-shaped tunnel. The magnets will guide the acceleration of the protons to nearly the speed of light so that they can smash together at a force far greater than any collision on earth. The force of impact will be over 20 times as strong as the Department's most advanced existing accelerator at the Fermi National Accelerator Laboratory.

The SSC is a critical part of the Administration's initiative to strengthen the scientific and technological position of the nation. It will be both a symbol of the nation's commitment to scientific leadership in this century and the next, and an instrument by which U.S. leadership can be maintained.

Construction and operation of the SSC represents one of the most ambitious basic research projects ever undertaken by the Federal Government. The SSC will permit physics research which currently cannot be accomplished by any facility either in existence or planned.

Ellis County, Texas has been selected as the site for construction of the SSC. DOE has selected and signed a contract with Universities Research Association, Inc., a consortium of 66 universities and two private companies, to be the management and operating contractor of the facility.

As recently as December 1989, total cost of the project was estimated to be \$5.9 billion with the Federal share amounting to \$4.1 billion. Currently, the Department has established a cost base line for the project of \$8.2 billion, with one-third of the overall funding of the project coming from non-Federal sources, including the State of Texas. Completion is targeted for the end of FY 1999.

#### Program Funding

The following table indicates the level of Federal funding for Fiscal Years 1988 through 1992. The large increase in funds requested for FY 1992 are concentrated in capital equipment and particularly construction. Future funding levels are estimated to be about \$750 million per year.

<u>Authority</u>	<u>Budget</u> (in millions)
Fiscal Year 1988	\$ 33.0
Fiscal Year 1989	97.6
Fiscal Year 1990	192.7
Fiscal Year 1991	267.1
Fiscal Year 1992 (requested)	533.7

#### LEVEL OF EFFORT

Due to the large Federal expenditures involved and the Departments' past history of cost overruns associated with projects of this type and size, an early audit presence was considered necessary. A program of this magnitude warrants a resident audit staff, but there are insufficient resources to assign a permanent staff at this time.

During the first 10 months of FY 1991, about two staff years of audit effort was directed at the Superconducting Super Collider Program. In November 1990 a Special Report on the Department of Energy's Superconducting Super Collider Program (DOE/IG-0291) was issued. The report identified six specific issues involving either the need for key decisions concerning the program or for crucial internal controls that were lacking. These areas are:

- o project funding,
- o the Magnet Development Program,
- o DOE management structure and staffing,
- o land acquisition requirements,
- o financial internal controls, and
- o management and operating contract provisions.

A total of 24 suggested actions relating to the six areas were presented in the report for consideration by the Secretary and program officials.

For FY 1992, we plan to spend a just under three staff years on audits of the Superconducting Super Collider Program. A followup audit to the special report discussed above to assess management's progress in correcting financial control weaknesses identified in the earlier report is being carried over from FY 1991.. The audit will also determine whether DOE's management structure and command and control mechanisms assure effective oversight and an adequate DOE role in the SSC's decision making process.

Two new audits are scheduled for FY 1992. One audit will cover the area of financial accounting and certification of costs associated with the program, and the second will review the management of conventional construction activities associated with the program. This audit is designed as a review of all phases of SSC construction, including quality, useability and cost effectiveness of completed work. ES&H issues concerning the construction, costs currently being incurred, and completion timetables for various construction activities will also be reviewed.

## FINANCIAL MANAGEMENT

### BACKGROUND

The issue of financial management cuts across all program areas in the Department of Energy. The primary focus in the financial management area is on proper accountability. A number of processes have been developed in the Department to help ensure that proper accountability is achieved. These processes include:

- o annual reviews of the Department's internal control system under the Federal Managers' Financial Integrity Act;
- o certification of selected Departmental financial statements as required by the Chief Financial Officers Act; and
- o other reviews of the Department's financial management systems.

Much of the audit work done in the area of financial management is required by law. One of the largest audit undertakings in this area is the annual review required by the Federal Managers' Financial Integrity Act. Under this Act, the Office of Inspector General examines the assurance letters prepared by all Departmental elements, as well as the letter prepared by the Secretary, and expresses its views on the status of internal controls and material weaknesses in the Department. During FY 1992, we will spend over three staff years in this area.

Certification of selected Departmental financial statements is required by the Chief Financial Officers Act of 1990. At the current time, this Act requires the OIG to conduct or oversee financial statement audits of DOE trust and commercial operations. For FY 1991, audits were underway at 10 entities. These audits are being conducted in two phases. Phase I focuses on an auditability survey and obtaining an understanding of the entities internal control structure. Phase II will test the transactions based on results of phase I work and result in an audit opinion and reports on internal controls and compliance with laws. This work must be completed by June 1992. Statements to be audited include those of the five Power Marketing Administrations, the two Naval Petroleum Reserves, the Uranium Enrichment Program, the Federal Energy Regulatory Commission, and the Low-Level Radioactive Waste Fund. These audits will be performed by certified public accounting firms for the Office of Inspector General.

We are also required by law to annually audit and report to Congress on DOE's use of "Superfund" monies. These are funds

collected from utilities generating nuclear waste. The audit is designed to determine if obligations, disbursements, and reimbursements are reasonable, allowable, and adequately supported.

In addition to these mandates, the Office of Inspector General is required by DOE Order to periodically examine the reliability of the internal controls used by the Department's integrated contractors and affected field elements to assure that only reasonable and allowable costs are claimed and reimbursed.

#### LEVEL OF EFFORT

The area of financial management has received intensive coverage in recent years, and mandated requirements, along with good auditing practices, necessitate that a strong audit presence continue.

Through the first 10 month of FY 1991, we spent almost 20 staff years reviewing the Department's financial management functions. Over 120 reports were issued during that time relating to the financial status of various DOE operations or to the required reporting under the FFMIA. Other than audits required by the FFMIA, we reviewed vouchers submitted by the Department's integrated contractors, conducted an audit of DOE's use of Superfund monies, performed reviews of selected reimbursable work programs and conducted an examination of the accounting for construction projects at one of the Department's larger sites.

In addition to the above, some more narrowly scoped audits were conducted during the year. One audit report issued during the year was on Department Management of the Ross Aviation, Inc. Contract Aircraft Major Spare Parts Inventory, Albuquerque, New Mexico (WR-B-91-6, July 26, 1991) where we found internal control deficiencies that led to excessive spare parts valued at approximately \$447,000, including interest carrying costs associated with the parts. The DOE Field Office, Albuquerque agreed to take the corrective actions recommended in our report.

For FY 1992, approximately 43 staff years of audit effort are scheduled for reviews in the financial management area. A number of audits will be carried over from FY 1991. Some of these include:

- o an audit of overhead rates at the Oak Ridge National Laboratory where we will determine the propriety of the composition and distribution of the ORNL General and Administrative / General Plant Services rate.
- o a review of the debt collection process at the Western Area Power Administration.

- o a review of overtime charges at the Naval Petroleum Reserve No. 1 to determine if the contractor's internal controls assure that only overtime needed to meet operational requirements is approved. We are also evaluating the Department's administration of the contractors overtime management.
- o a review of internal controls over computer processed financial data at the Nevada Test Site. The primary contractor at the test site has an annual budget of about \$200 million and produces large amounts of computer processed information, including budgets, work orders, payroll, inventory, and general ledger accounting. DOE and contractor managers rely heavily on this computer generated information. Our objective is to determine if the contractors internal controls over the computer processed financial data are adequate to ensure reliability of the data.
- o a review of the composition and reasonableness of costs included in the indirect cost structure at the Los Alamos National Laboratory.

In FY 1992, we will continue to review the year-end assurance memoranda prepared by Department managers on the adequacy of internal control systems within their programs. We will continue to review vouchers submitted by the integrated contractors and examining the controls over reimbursable work and construction projects. The Office of Inspector General will also issue certified opinions on 10 Departmental financial statements in FY 1992, and begin preparations for the addition of an eleventh statement to be audited in FY 1993. Other new audits to begin in FY 1992 include:

- o two audits at DOE integrated contractors to evaluate indirect cost structures and determine if their systems of accounting for indirect costs precludes the allocation of unallowable costs to government contracts.
- o an audit at the DOE Field Office, Albuquerque to determine whether there are reasonable assurances that depreciation and added factor costs are waived only when work done in DOE facilities for non-Federal "sponsors" benefits the Department.
- o an audit of cost allocations between Stanford University and the Stanford Linear Accelerator to determine if cost sharing arrangements between them result in reasonable allocations of costs. Based on recently publicized evidence of overcharges made by the university to the government, internal controls appear to be weak.

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
FISCAL YEAR 1992 ANNUAL WORK PLAN  
HEADQUARTERS

<u>TITLE</u>	<u>STAFF DAYS</u> <u>FY 1992</u>
AUDIT OVERSIGHT	1500
PLANNING & POLICY	600
BUDGET ACTIVITIES	290
TRAINING & PERSONNEL COORDINATION	275
MISC. ASSIST & SUPPORT ACTIVITIES	1100
MANAGEMENT & ADMINISTRATION	1175
INDIRECT TIME	2600
TOTAL PLANNED DAYS	7540

INDIRECT TIME INCLUDES:

LEAVE AND HOLIDAYS  
TRAINING  
SECRETARIAL SUPPORT  
OTHER AUDIT SUPPORT ACTIVITIES

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 CAPITAL REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	TOTAL	FY 1992	STAFF DAYS	AUDIT TYPE	MAJOR	SITE	PLANNED STARTING QUARTER
						ISSUE AREA	CODE	
<b>CARRY-IN AUDITS</b>								
A90CR045	ESCROW PYMNTS. OFFSET AGAINST DEBTS	300		100	EAE	011	MSA	
A90CR047	OCRWM PLAN FOR H-L WASTE REPOSITORY	439		125	PRR	003	MRA	
A91CF038	LOBBYING RESTRICTIONS IMPLEMENTATION	110		100	EAE	009	SSA	
A91CF039	FY92 CONSULTING SERVICES REPORTING	110		100	OTH	009	MSA	
A91CF040	ENERGY RESEARCH SURVEY/R&D ACTIVITY	302		295	PRR	010	MSA	
A91CG031	MGMT OF ISOTOPE SEPARATION - SURVEY	300		170	EAE	002	MSA	
A91CG032	ENVIRON CLEANUP TECH TRANSFER&COORD	240		140	PRR	001	MSA	
A91CG033	OCCUPATIONAL MEDICAL PROGRAMS @ DOE	300		257	EAE	001	MSA	
A91CG036	M&O INTERNAL AUDIT FUNCTION	310		225	FIN	002	MRA	
A91CG037	ENERGY CONSERVATION PROGRAMS AT DOE	300		285	PRR	001	MRA	
A91CR008	SUPERFUND INTERAGENCY AGREEMENT	175		75	OTH	012	MRA	
A91CR009	PERSONNEL SECURITY	300		300	PRR	005	MRA	
A91CR013	FMFIA - FY 1991	370		250	FIA	011	MRA	
A91CR018	SSC FOLLOW-UP REVIEW	230		100	EAE	007	MSA	
A91CR027	FERC FY 1991 FIN STATEMENT AUDIT	664		544	FSA	011	SSA	
A91CR028	LLRW FY 1991 FIN STATEMENT AUDIT	183		84	FSA	011	MSA	
A91PP034	VANEA REVIEW AT KNOLLS	150		140	FAC	004	SSA	
A91PP035	VANEA REVIEW AT BETTIS	150		140	FAC	004	SSA	

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 CAPITAL REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	STAFF TOTAL	STAFF DAYS FY 1992	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED STARTING QUARTER
<b>NEW FY 1992 AUDITS</b>							
A92CF001	VANEA REVIEW OF OCRWM	170	170	FAC	003	MSA	1
A92CF002	MGMT OF SSC CONVENTIONAL CONSTRUCTION	300	200	EAE	007	MSA	1
A92CF003	VANEA SURVEY AT SSC	285	285	FAC	007	SSA	1
A92CF004	FERC ADP PLANNING	180	180	EAE	012	SSA	1
A92CF005	RELIABILITY OF FERC TIME DIST. SYSTEM	200	200	PRR	012	SSA	1
A92CF006	NEW PRODUCTION REACTORS PROGRAM	375	275	PRR	001	MSA	2
A92CF007	OCRWM TRANSPORTATION PLAN FOLLOW-UP	450	350	EAE	003	MSA	3
A92CF008	SUPERFUND INTERAGENCY AGREEMENTS	55	55	FAC	012	MSA	3
A92CF009	LOBBYING RESTRICTION IMPLEMENTATION	110	50	FAC	009	SSA	4
A92CF010	CONSULTING SERVICE REPORTING FY 1992	110	50	FAC	009	MSA	4
A92CG011	ISSUING 1099'S FOR OIL OVCHRG. REFUNDS	179	179	FAC	012	SSA	1
A92CG012	HQs DISBURSING PRACTICES	150	100	FAC	012	MSA	2
A92CG013	NEED FOR DOE OWNED RAILCARS	210	170	EAE	002	MSA	2
A92CG014	ADVANCED NUCLEAR REACTORS CONTRACTS	300	200	PRR	009	MSA	2
A92CG015	PLAN & CONTROL ACTIVITY DATA SHEETS	300	100	EAE	002	MSA	2
A92CG016	OVERHEAD CHARGES FOR OFFICE SPACE	200	105	PRR	002	MSA	3
A92CG017	UNIVERSAL DOE BADGES	200	100	EAE	005	MSA	3
A92CG018	FIN AUDIT-LOW LEVEL RADIOACTIVE WASTE	183	99	FAC	011	MSA	3
A92CG019	PURCHASE OF PHYSICAL SECURITY DEVICES	350	100	EAE	005	MRA	4
A92CG020	FMFIA - FY 1992	300	50	FIA	011	MRA	4
A92PP021	COST ALLOWABILITY ON FE CONTRACTS	300	300	FAC	009	MSA	1
A92PP022	VANEA REVIEW AT KNOLLS	150	35	FAC	004	SSA	4
A92PP023	VANEA REVIEW AT RETTIS	180	60	FAC	004	SSA	4

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 CAPITAL REGIONAL OFFICE

ACTIVITY TITLE	STAFF TOTAL	DAYS FY 1992
<u>OTHER DIRECT AUDIT ACTIVITIES</u>		
EXTERNAL AUDIT REQUESTS	350	350
PLANNING / SURVEYS	295	295
INVESTIGATIVE SUPPORT	100	100
OTHER	200	200
<u>INDIRECT ACTIVITIES</u>		
SECRETARIAL SUPPORT	780	780
MANAGEMENT & ADMINISTRATION	1034	1034
LEAVE & HOLIDAYS	1296	1296
TRAINING	495	495
TRAINING ADMINISTRATION	25	25
SPONSORSHIP ACTIVITIES	280	280
TOTAL PLANNED FY 1992 DAYS		<u><u>11698</u></u>

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 EASTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	TOTAL	FY 1992	STAFF DAYS	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED STARTING QUARTER
<b>CARRY-IN AUDITS</b>								
A91CH050	ANL USE OF GOVERNMENT SUPPLY SOURCE	180		60	EAE	009	SSA	
A91ER657	UEA FY91 AUDIT	50		35	FAC	011	MSA	
A91ER675	AUDIT OF PVE FUNDS, S. CAROLINA	150		48	GOO	009	SSA	
A91N0007	SPR CRUDE OIL ACCOUNTABILITY	170		100	YEA	006	SSA	
A91N0048	BPS, INTERNAL CONTROLS OVER FIN DATA	180		38	YEA	011	SSA	
A91N0054	SPRO PAYROLL SYSTEMS REVIEW	300		100	OTH	006	SSA	
A91OR010	ORAU FY 89 & 90 F&C AUDIT	125		10	FAC	011	SSA	
A91OR014	WVNS FYs 89, 90 & 91 F&C AUDIT	240		235	FAC	011	SSA	
A91OR015	EG&G PAYROLL SYSTEM AUDIT	150		43	OTH	011	SSA	
A91OR016	Y-12 PLANT SITE DEVELOPMENT PLAN	150		144	EAE	002	SSA	
A91OR041	FMPC DEPLETED URAN. PROD. FOLLOW-UP	90		65	EAE	002	MSA	
A91OR042	ORO REFUND OF FEDERAL EXCISE TAX	100		52	FAC	011	MSA	
A91OR043	8A WORK FOR OTHERS PROCUREMENT	272		48	EAE	009	SSA	
A91OR046	ORNL OVERHEAD RATES	200		151	FAC	011	MSA	
A91OR055	USE OF COMMERCIAL LLW DISPOSE SITES	180		96	EAE	003	MSA	
A91OR056	PACKAGING LOW-LEVEL WASTE SHIPMENTS	150		78	EAE	003	MSA	
A91OR057	RAIL SHIPMENT OF LOW-LEVEL WASTE	150		145	EAE	003	MSA	
A91PR047	PRINCETON PLASMA PHYSICS LAB TRAVEL	206		106	OTH	012	SSA	
A91SR031	SAVANNAH RIVER SITE CENTRAL SHOPS	250		140	EAE	002	SSA	
A91SR032	DUPONT CONTRACT CLOSEOUT PROBLEMS	75		50	EAE	002	SSA	
A91SR038	SRS USE OF GOVT. SUPPLY SOURCES	250		170	EAE	009	SSA	
A91SR044	SRS CREDITS FROM SUBCONTRACTORS	114		5	OTH	002	SSA	
	FY 1991 FMFIA (5)	145		70	FIA	011	SSA	
	FY 1991 YEAR END AUDITS (10)	420		211	YEA	011	SSA	

DOE INSPECTOR GENERAL, OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 EASTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	STAFF TOTAL	STAFF DAYS FY 1992	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED STARTING QUARTER
<u>NEW FY 1992 AUDITS</u>							
A92CH001	CHICAGO'S IMPLEMENTATION OF IG RECOM.	150	150	EAE	012	MSA	1
A92CH002	FERMI ENVIRONMENTAL COMPLIANCE	175	175	EAE	001	SSA	1
A92CH003	ANL TECHNOLOGY TRANSFER PROGRAM	180	180	PRR	010	SSA	2
A92CH004	ANL TELECOMMUNICATIONS SERVICES	150	150	EAE	012	SSA	2
A92CH005	SMALL TOOL MGMT & CONTROL @ M&O'S	30	15	EAE	012	MSA	3
A92CH006	ANL SECURITY GUARD CONTRACT	140	40	EAE	005	SSA	4
A92CH007	ANL ENVIRONMENTAL COMPLIANCE	150	30	EAE	001	SSA	4
A92CN008	W'HOUSE MATERIAL CO. INDIRECT COSTS	200	175	OTH	011	SSA	1
A92CN009	EG&G MOUND INDIRECT COSTS	200	200	OTH	011	SSA	1
A92CN010	W'HOUSE COMPUTERIZED FIN DATA I/C'S	180	180	FAC	011	SSA	1
A92CN011	WMCO COMPETITIVE PROCUREMENTS	250	200	EAE	009	SSA	3
A92CN012	W'HOUSE MATL. CO. HEALTH INS RESERVES	50	50	OTH	011	SSA	3
A92CN013	WORKMEN'S COMPENSATION	150	110	EAE	011	MSA	3
A92CN014	EG&G MOUND NONCOMPETITIVE PROCUREMENT	250	150	EAE	009	SSA	4
A92CN015	WMCO NONCOMPETITIVE PROCUREMENTS	250	250	EAE	009	SSA	3
A92N0016	SPR PROCUREMENT ACTIVITIES	230	230	EAE	006	SSA	1
A92N0017	SPR OIL SALE PROCESS	200	200	OTH	006	SSA	2
A92N0018	SPR DRAWDOWN PROCESS	200	180	EAE	006	SSA	3
A92OR019	ACCOUNTABILITY & AWARD FEE RULE @MMES	200	200	FAC	009	MSA	1
A92OR020	FY 1989-1991 F&C AUDIT @ MK-FERGUSON	200	200	FAC	011	SSA	1
A92OR021	FY 1989-1991 INCURRED COSTS @ CEBAF	200	200	OTH	011	SSA	2
A92OR022	MMES TECHNOLOGY TRANSFER PROGRAM	240	240	EAE	010	SSA	2
A92OR023	ORNL REMEDIAL ENVIRONMENTAL STUDY	400	290	EAE	001	SSA	2
A92OR024	ORO SECURITY CLEARANCE PROCEDURES	175	170	PRR	005	MSA	2
A92OR025	Y-12 CLASSIFIED COMPUTER SECURITY	270	240	EAE	005	SSA	3
A92OR026	MMES TRAVEL	150	40	EAE	012	MSA	4
A92OR027	FUNDING ORO CONTRACTOR SERVICES	150	63	OTH	011	SSA	4
A92OR028	STATUS OF WEST VALLEY DEMO PROJECT	200	120	PRR	003	MSA	4
A92OR029	ORNL LAB DIRECTED R&D ACTIVITIES	150	68	EAE	010	SSA	4

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 EASTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	STAFF DAYS		AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED STARTING QUARTER
		TOTAL	FY 1992				
A92OR030	AWARD FEE PROCESS @ ORO & MMES	250	129	OTH	009	MSA	4
A92OR031	MGT. OF HAZWRAP - WFO FED. AGENCIES	175	117	PRR	003	SSA	4
A92PR032	BNL ALLOWABLE COSTS	300	300	FAC	011	SSA	1
A92PR033	BNL ENVIRONMENTAL FOLLOW-UP	77	77	EAE	001	SSA	2
A92PR034	ENVIRON MEASUREMENTS LAB IMPREST FUND	40	40	FAC	012	SSA	2
A92PR035	BNL TRAVEL	152	54	EAE	011	SSA	3
A92PR036	PPPL GENERAL & ADMIN. EXPENSES	102	25	FAC	011	SSA	3
A92PR037	BNL PERSONNEL SECURITY	71	12	EAE	005	SSA	4
A92SR038	W'HOUSE SAV RIVER CO IMPREST FUNDS	60	60	OTH	002	SSA	1
A92SR039	K REACTOR COOLING TOWER PROJECT MGMT	250	250	PRR	002	SSA	1
A92SR040	DWPF CANISTER SPECIFICATIONS	200	200	EAE	003	SSA	1
A92SR041	SAVANNAH RIVER SITE TRAVEL SERVICES	180	180	EAE	002	SSA	1
A92SR042	DUPONT CONTRACT CLOSEOUT	50	50	EAE	002	SSA	1
A92SR043	SAVANNAH RIVER SITE SERVICE CONTRACTS	250	250	PRR	002	SSA	2
A92SR044	DU PONT HOME PURCHASE AGREEMENTS	75	75	EAE	002	SSA	2
A92SR045	SAVANNAH RIVER SITE G&A OVERHEAD	250	220	OTH	011	SSA	3
A92SR046	TRANSFER OF SUBCONTRACTOR EMPLOYEES	250	50	EAE	002	SSA	4
A92SR047	LEASE VS PURCHASE OF CAP EQUIP @ SRS	200	80	EAE	002	SSA	4
	LEASE VS PURCHASE OF CAP EQUIP @ SRS	140	70	FIA	011	SSA	4
	FY 1992 FMFIA AUDITS (5)	422	192	YEA	011	SSA	4
	FY 1992 YEAR END AUDITS (10)						

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 EASTERN REGIONAL OFFICE

ACTIVITY TITLE	STAFF TOTAL	STAFF DAYS FY 1992
<u>OTHER DIRECT AUDIT ACTIVITIES</u>		
SUPERFUND AUDITS	20	20
A-128 OVERSIGHT AUDITS	265	265
DEFECTIVE PRICING OVERSIGHT	5	5
EXTERNAL AUDIT REQUESTS	110	110
PLANNING / SURVEYS	720	720
INVESTIGATIVE SUPPORT	120	120
MULTI-REGION AUDITS	233	233
CONTRACTOR ADMINISTRATIVE SUPPORT	1189	1189
CONTRACT / GRANT AUDITS	585	585
<u>INDIRECT ACTIVITIES</u>		
SECRETARIAL SUPPORT	1505	1505
MANAGEMENT & ADMINISTRATION	1128	1128
LEAVE & HOLIDAYS	1729	1729
TRAINING	1528	1528
TRAINING ADMINISTRATION	25	25
SPONSORSHIP ACTIVITIES	220	220
AIG COTR & CONTRACT MANAGEMENT	65	65
AIGA ANNUAL PLAN	7	7
M&O INTERNAL OVERSIGHT	120	120
TOTAL PLANNED FY 1992 DAYS		<u><u>18701</u></u>

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 WESTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	TOTAL	FY 1992	STAFF DAYS	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED STARTING QUARTER
							9	003
<b>CARRY-IN AUDITS</b>								
A90LV106	OCRWM - YUCCA MOUNTAIN	587		9	PRR			
A90WR562	EWA, INC.	100		11	CRT			
A91AL060	UMTRA SITE START-UP DETERMINATIONS	240		159	EAE			
A91AL061	UMTRA PRIME CONTRACTOR PROCUREMENT	160		94	EAE			
A91AL063	WACKENHUT FINAL INCURRED COSTS	120		30	CIC			
A91DN056	WAPA FY 91 FIN STATEMENT AUDIT	1503		1120	FSA			
A91DN059	WAPA ACCOUNTS RECEIVABLE PROCESS	210		100	OTH			
A91LA055	TECH TRANSFER/CONFLICT OF INTEREST	324		235	PRR			
A91LA065	LANL INDIRECT COST STRUCTURE	300		210	EAE			
A91LA067	LANL COOPERATIVE R&D AGREEMENTS	300		260	EAE			
A91LL058	NPR FY 1991 FIN STATEMENT AUDIT	694		525	FSA			
A91LL062	BECHTEL'S NPR-1 OVERTIME	200		163	EAE			
A91LL068	STANFORD PREAWARD - ASSIST TO DCAA	30		15	CPA			
A91LL069	PENSION COSTS AT LBL, LANL, & LLBL	150		100	OTH			
A91LV064	I/C'S OVER COMPUTERIZED FIN DATA	125		51	OTH			
A91PO007	BPA'S ENVIRONMENTAL ACTIVITY	320		50	EAE			
A91PO008	BPA'S DEBT MANAGEMENT	250		200	OTH			
A91RL066	HANFORD HEAVY EQUIPMENT PURCHASES	250		119	EAE			
	INTERNAL CONTROL AUDITS (24)	1235		145	YEA			

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 WESTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	TOTAL	FY 1992	STAFF DAYS	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED
								STARTING QUARTER
<u>NEW FY 1992 PLANNED AUDITS</u>								
A92AL001	SANDIA TECHNOLOGY MATURATION PROGRAM	250		250	EAE	010	MSA	1
A92AL002	ALLIED OVERHEAD AFTER CONSOLIDATION	400		400	EAE	002	MSA	1
A92AL003	CONTROLS OVER FIREARMS AND MUNITIONS	300		225	EAE	005	MSA	1
A92AL004	COMPUTER NETWORK SECURITY	250		162	EAE	005	MSA	2
A92AL005	NEW EMPLOYEES W/O SECURITY CLEARANCE	250		250	EAE	005	MSA	2
A92AL006	WIPP LABOR USE	280		280	EAE	003	MSA	2
A92AL007	DEPRECIATION & ADDED FACTOR WAIVERS	240		147	EAE	011	MSA	3
A92AL008	PERSONAL COMPUTER UPGRADES	250		61	EAE	009	MSA	3
A92AL009	COMPONENT RELIABILITY SURVEY	200		88	EAE	002	MSA	3
A92DN010	ACCOUNTABILITY RULE @ EG&G-RF	350		350	EAE	009	MSA	1
A92DN011	WAPA EMPLOYEE TRAVEL ADVANCES	100		100	FAC	012	SSA	2
A92DN012	EG&G IMPLEMENT. OF TIGER TEAM REQ.	220		219	EAE	001	MSA	2
A92DN013	WAPA REIMBURSABLE WORK	150		60	FAC	008	MSA	3
A92DN014	SUBCONTRACT ADMIN @EG&G-ROCKY FLATS	200		90	EAE	009	MSA	3
A92DN015	COST INCURRED - EPA SUPERFUND	44		44	CIC	011	MSA	3
A92DN016	FY 92 FINANCIAL AUDIT @WAPA	1502		382	FSA	011	MSA	3
A92IF017	IMPREST FUND CONTROLS @IDAHO	150		150	FAC	011	MSA	1
A92IF018	COMPUTER COST RECOVERY	175		142	EAE	011	MSA	2
A92IF019	EG&G IDAHO SUBCONTRACTOR AUDITS	200		22	OTH	009	MSA	4
A92LA020	LANL EXCESSIVE PREAWARD REQUESTS	200		200	EAE	009	MSA	1
A92LA021	LANL ENVIRONMENTAL ACTIVITY-SURVEY	200		153	EAE	001	MSA	2
A92LL022	LLNL I/CS - COMPUTERIZED FIN DATA	300		300	FAC	001	SSA	1
A92LL023	ES&H CORRECTIVE ACTIONS @LLNL & LBL	200		200	EAE	001	MSA	1
A92LL024	LLNL INDIRECT COST REASONABLENESS	40		40	EAE	002	SSA	1
A92LL025	SLAC/STANFORD UNIV. COST ALLOCATION	200		145	FAC	011	SSA	2

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 WESTERN REGIONAL OFFICE

AUDIT NUMBER	AUDIT TITLE	TOTAL	STAFF DAYS FY 1992	AUDIT TYPE	MAJOR ISSUE AREA	SITE CODE	PLANNED
							STARTING QUARTER
A92LL026	LLNL SUBCONTRACTING	300	124	EAE	009	SSA	4
A92LL027	FY 92 NPR FINANCIAL STATEMENT AUDIT	670	165	FSA	011	SSA	3
A92LV028	M&O PERSONNEL CLASSIFICATION	85	85	EAE	002	SSA	1
A92LV029	PROPERTY MANAGEMENT @YUCCA MOUNTAIN	230	230	EAE	003	MSA	1
A92LV030	PROCUREMENT BY EG&G, REECO, SAIC	190	190	EAE	009	MSA	2
A92LV031	CONTRACTOR TRANSITION - RAYTHEON	200	200	PRR	002	SSA	2
A92LV032	NUCLEAR TEST SITE INVENTORY MGMT.	245	88	PRR	002	MSA	4
A92PL033	BPA TRAVEL PROCEDURES	200	200	EAE	008	MSA	1
A92PL034	FY 91 ALASKA POWER FINANCIAL AUDIT	74	74	FIN	011	SSA	1
A92PL035	PROPOSED SALE OF APA - SURVEY	150	150	PRR	008	MSA	2
A92PL036	BPA FURNITURE PROCUREMENT FOLLOW-UP	100	100	EAE	009	SSA	2
A92PL037	BPA SUBSTATION INVENTORY	200	148	EAE	008	MSA	3
A92RL038	HANFORD E&H ACTIVITIES - SURVEY	200	200	EAE	001	MSA	1
A92RL039	W'HOUSE COMPUTER CHARGES TO BATTELLE	225	225	EAE	011	MSA	1
A92RL040	RICHLAND IMPREST FUNDS CONTROL	150	119	FAC	011	MSA	3
	INTERNAL CONTROL AUDITS (24)	1128	1022	YEA	011	SSA	3
	FMFIA AUDITS (13)	284	284	FIA	011	SSA	1

DOE INSPECTOR GENERAL OFFICE OF AUDITS  
 FISCAL YEAR 1992 ANNUAL WORK PLAN  
 WESTERN REGIONAL OFFICE

ACTIVITY TITLE	STAFF TOTAL	DAYS FY 1992
<u>OTHER DIRECT AUDIT ACTIVITIES</u>		
SUPERFUND AUDITS	100	100
PLANNING/SURVEYS	900	900
INVESTIGATIVE SUPPORT	360	360
MULTI-REGION SUPPORT	423	423
CONTRACTOR ADMINISTRATIVE SUPPORT	380	380
<u>INDIRECT ACTIVITIES</u>		
SECRETARIAL SUPPORT	2220	2220
MANAGEMENT & ADMINISTRATION	1443	1443
LEAVE & HOLIDAYS	1980	1980
TRAINING	816	816
TRAINING ADMINISTRATION	55	55
SPONSORSHIP ACTIVITIES	1632	1632
AIG COTR & CONTRACT MANAGEMENT	56	56
AIG ANNUAL PLAN	240	240
REGIONAL COMPUTER SUPPORT	36	36
M&O INTERNAL AUDIT OVERSIGHT	80	80
TOTAL PLANNED FY 1992 DAYS	22381	<u><u>=====</u></u>

**DOE INSPECTOR GENERAL OFFICE OF AUDITS  
FISCAL YEAR 1992 ANNUAL WORK PLAN  
LIST OF ABBREVIATIONS**

<b>ABBREVIATION</b>	<b>DEFINITION</b>
ADP	Automatic Data Processing
AIG	Assistant Inspector General
ANL	Argonne National Laboratory
APA	Alaska Power Administration
BNL	Brookhaven National Laboratory
BPA	Bonneville Power Administration
BPS	Boeing Petroleum Services
CEBAF	Continuous Electron Beam Accelerator Facility
CIC	Cost Incurred Audit
CPA	Contract Preaward Audit
DCAA	Defense Contract Audit Agency
DOE	Department of Energy
DWPF	Defense Waste Processing Facility
EAE	Economy and Efficiency Audit
EG&G	EG&G Energy Measurement Systems
EPA	Environmental Protection Agency
ES&H	Environment, Safety and Health
FAC	Financial and Compliance Audit
FERC	Federal Energy Regulatory Commission
FERMI	FERMI National Accelerator Laboratory
FIA	FMFIA Audit
FIN	Financial Audit
FMFIA	Federal Managers' Financial Integrity Act
FSA	Financial Statement Audit
FY	Fiscal Year
G&A	General and Administrative
GAO	General Accounting Office
GEND	General Electric Nuclear Division
GOO	Grant Audit
HAZWRAP	Hazardous Waste Remedial Action Program
I/C	Internal Control
IG	Inspector General
LANL	Los Alamos National Laboratory
LBL	Lawrence Berkeley Laboratory
LLNL	Lawrence Livermore National Laboratory
LLW	Low-Level (radioactive) Waste
M&O	Management and Operating (contractor)
MMES	Martin Marietta Energy Systems
MRA	Multi-Region Audit
MRS	Monitored Retrievable Storage

ABBREVIATION	DEFINITION
M&O	Management and Operating (contractor)
MMES	Martin Marietta Energy Systems
MRA	Multi-Region Audit
MRS	Monitored Retrievable Storage
MSA	Multi-Site Audit
NES	National Energy Strategy
NPR	Naval Petroleum Reserve
OCRWM	Office of Civilian Radioactive Waste Management
OIG	Office of Inspector General
ORAU	Oak Ridge Associated Universities
ORNL	Oak Ridge National Laboratory
ORO	Oak Ridge Office
OTH	Other
PMA	Power Marketing Administration
PPPL	Princeton Plasma Physics Laboratory
PRR	Program Results Audit
R&D	Research and Development
REECO	Reynolds Electrical and Engineering Co., Inc.
RF	Rocky Flats (facility)
SAIC	Science Applications International Corporation
SEPA	Southeastern Power Administration
SLAC	Stanford Linear Accelerator
SPR	Strategic Petroleum Reserve
SPRO	Strategic Petroleum Reserve Office
SRS	Savannah River Site
SSA	Single-Site Audit
SSC	Superconducting Super Collider
SWPA	Southwestern Power Administration
UEA	Uranium Enrichment Activities
UMTRA	Uranium Mill Tailings Remedial Action Project
VANEA	Voucher Accounting for Net Expenditures Accrued
WAPA	Western Area Power Administration
WFO	Work-For-Others
W'HOUSE	Westinghouse
WIPP	Waste Isolation Pilot Plant
WMCO	Westinghouse Materials Company
WVNS	West Valley Nuclear Site
YEA	Year-End Audit

**DOE INSPECTOR GENERAL OFFICE OF AUDIT  
FISCAL YEAR 1992 ANNUAL WORK PLAN  
MAJOR PROGRAM AREA CODES**

- 1 ENVIRONMENT, SAFETY & HEALTH
- 2 WEAPONS PROGRAM
- 3 NUCLEAR WASTE DISPOSAL
- 4 NAVAL REACTORS
- 5 SAFEGUARDS & SECURITY
- 6 STRATEGIC PETROLEUM RESERVE
- 7 SUPERCONDUCTING SUPER COLLIDER
- 8 POWER MARKETING ADMINISTRATIONS
- 9 PROCUREMENT & GRANTS MANAGEMENT
- 10 EXPANSION OF LABORATORY MISSIONS
- 11 FINANCIAL MANAGEMENT
- 12 DETERRENTS

END

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FILMED

12/16/91