5100.3 FIELD BUDGET PROCESS

DOE-5100.3 FIELD BUDGET PROCESS

U.S. Department of Energy
Washington, D.C.

ORDER
DOE 5100.3
8-23-84

SUBJECT: FIELD BUDGET PROCESS

1. PURPOSE. To provide requirements and procedures for the preparation and submission of field budget material required for preparation of the Department of Energy (DOE) budget.

2. REFERENCES.

a. DOE 2200.1, ACCOUNTING POLICY AND PRACTICES, of 11-9-79, which establishes the accounting policy, principles, objectives, and responsibilities for DOE.

b. DOE 3220.2, EQUAL OPPORTUNITY IN OPERATING AND ONSITE SERVICE CONTRACTOR FACILITIES, of 4-1-81, which provides revised policies and procedures, and assigns responsibilities and authorities for the management of equal opportunity and affirmative action at DOE operating and onsite service contractor facilities.

c. DOE 4300.1A, REAL ESTATE (REAL PROPERTY) MANAGEMENT, of 7-7-83, which establishes Departmental policies and procedures for the acquisition, use, and disposal of real estate (real property) or interests therein.

d. DOE 5100 series which establishes the policy, procedures, and responsibilities of DOE for budget formulation, execution, review, and analysis in accordance with executive, legislative, and internal management requirements.

e. DOE 5100.1, PROGRAMMING, BUDGETING AND ACCOUNTING FOR THE ACQUISITION OF LOW VALUE CAPITAL EQUIPMENT, of 1-18-80, which defines capital equipment, low value capital equipment, and object class 3 equipment, and sets forth the policy of DOE for programming, budgeting, accounting for, and funding low value capital equipment acquisition.

f. DOE 5100.5, OFFICE OF MANAGEMENT AND BUDGET - BUDGET PROCESS, of 7-21-83, which outlines requirements and procedures for the

preparation and submission of DOE budget for the Office of Management and Budget.

g. DOE 5440.1B, IMPLEMENTATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT, of 5-14-82, which revises previous procedures implementing the National Environmental Policy Act of 1969.

h. DOE 5700.3B, MAJOR SYSTEM ACQUISITION PROCEDURES, 9-8-83, which establishes procedures for implementing provisions of OMB Circular A-109, and establishes a single project management system for major acquisitions and projects.

i. DOE 5700.7A, FIELD WORK PACKAGE PROPOSAL AND AUTHORIZATION SYSTEMS, of 6-9-83, which establishes a formal process for budget development, authorization, and monitoring of DOE funded work performed at specified contractor facilities.

j. DOE 5700.8, PRICE CHANGE FORECASTING, of 5-27-81, which establishes DOE policy, procedures, and responsibilities for constructing and using price change forecasts in developing estimates and budget.

3. BACKGROUND. To facilitate the publication and use of budget policies and procedures, budget instructions are being separated into individual Orders covering the various phases of the budget cycle. The Orders are to be published in the DOE 5100 series and numbered sequentially beginning with the planning, programming, and budgeting system. The subject directive covers one phase of the budget cycle.

BY ORDER OF THE SECRETARY OF ENERGY:

WILLIAM S. HEFFELFINGER
Director of Administration

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FIELD BUDGET PROCESS

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DOE-5100.3 FIELD BUDGET PROCESS

CHAPTER I

INTRODUCTION AND OVERVIEW

1. INTRODUCTION.

a. The Field Budget Process represents the formal mechanism through which the Departmental Headquarters offices obtain uniform field office input to the budget formulation process. The various laboratories and other facilities, as required by the field operations offices, are to prepare their proposed budgets according to the following guidelines and submit them to the appropriate operations office. Field operations offices shall prepare budget request packages for other contractors as deemed necessary. Consolidated field budget requests shall then be forwarded directly to the appropriate Departmental Headquarters organizations with summary schedules submitted concurrently to the Director of Budget. Proposed projects contained in the field budget request will be reviewed and validated as required by DOE Order 5700.3B.

b. The budget requests submitted by the operations offices must be consistent with the programmatic structure used in preparation of the FY 19CY Congressional Budget. The annual call letter specifies the latest budget requirements and policy to be followed in preparing annual field budget submissions. Fiscal guidance shall be issued immediately following the annual FY 19CY submission to Congress. The due date for submission of field budget materials shall be stated in the call letter.

2. OVERVIEW OF THE PRIMARY BUDGET REQUEST DOCUMENTATION. Each laboratory or other field facility shall prepare separate packages of material for each organizational component of the Department from which they request funding. Each primary budget request package shall consist of a summary of estimates table, narrative justification, and four back-up or support documents -- work package authorization documents, a summary of obligations and costs for construction projects, construction project

data sheets, and an impact summary of activities funded in prior years. The data in the backup documents must support the data contained in the summary of estimates table. These various requirements are discussed below.

a. Summary of Estimates Table. The summary of estimates tables represent a laboratory or field facility's funding requirement stated as total obligations and costs associated with current DOE requests, as well as with previous DOE funding received. A separate summary table is prepared for each organizational component from which a field facility is requesting funding and includes funding requirements for programs under the respective Assistant Secretary's cognizance. Each table shall include only funding requested from a specific organizational component and shall not reflect the total request of the field facility. Separate tables are necessary to facilitate distribution of materials at Headquarters. The DOE funding totals on the tables prepared for each organizational component must reflect the combined data detailed on the four back-up documents supporting each table.

   In addition, a consolidated summary of estimates table is to be prepared for each field facility. This table shall include the total funding request for the field facility displayed, by organizational component. Funding shall be further split to reflect operating expenses (OE), capital equipment (CE), and plant. This table is to be placed at the beginning of the facility's budget submission.

b. Narrative Overview. An overview narrative statement by organizational component should summarize the total FY 19BY request (as shown on the summary of estimates) and explain the assumptions upon which it is based. This narrative should also describe the overall general direction of the laboratory or facility and justify these plans in terms of the program guidance received.

c. Backup Documents. The four documents described below provide additional supporting detail to the data in the summary of estimates table.

   (1) Field Work Package Proposal and Authorization System and Alternative Format Requirements.

      (a) Field Work Package Proposal/Agreements (WPAS). WPAS documents are required to be submitted by those facilities specified in DOE 5700.7A. WPAS supply information

regarding work funded from the operating and capital equipment (not related to construction) activities.

(b) Alternative Detailed Request Format. Those laboratories, facilities, or activities exempted from DOE 5700.7A must supply information which satisfies equivalent data requirements. The alternative detailed request format is to be used to provide this information for activities financed by operating or capital equipment (not related to construction) funds.

(c) Questions regarding the preparation of Field Work Package Proposal/Agreements should be directed to the Office of Project and Facilities Management (MA-22).

(2) Summary of Obligations and Costs for Construction Projects. The summary of obligations and costs for construction projects provides a distribution of obligations and costs to be incurred for each construction project for each of the fiscal years involved. Data are presented for all new construction projects requiring FY 19BY funding as well as all construction projects which have incurred obligations or costs in FY 19PY (prior year), FY 19CY (current year), and FY 19BY (budget year). There should be no overlap between the data presented on this document and the data depicted on the WPAS or the alternative detailed request format.

(3) Construction Project Data Sheets. Construction project data sheets are required to explain and justify the need for construction project funding. There should be no overlap between the funding requested by these documents and the funding requests depicted on the WPAS documents. However, the summary of obligations and costs for construction projects incorporates the data presented on the construction project data sheets and, as such, only the summary document should be utilized when preparing the summary of estimates tables.

(4) Impact Summary of Activities Funded in Prior Years. The impact summary documents the obligation and cost impacts upon FY 19PY, FY 19CY, and FY 19BY that result from prior year DOE financing from operating or capital equipment (not related to construction) funds for those projects for which no DOE funding is being requested in FY 19BY. These effects are therefore not accounted for on the WPAS or alternative format documents.

3. TELECOMMUNICATIONS BUDGET REQUIREMENTS. Beginning with the FY 1986 budget cycle, field telecommunications budget data shall be separately requested and provided to the Director of Computer Services and Telecommunications Management (MA-25).

4. ADP BUDGET REQUIREMENTS. Beginning with the FY 1986 budget cycle, field ADP budget data will be separately requested and provided to the Office of ADP Management (MA-24).

5. OVERVIEW OF SPECIAL PURPOSE AND CROSSCUT DOCUMENTS. Field budget requests from each laboratory or other field facility must also include various special purpose and crosscut documents to facilitate the preparation of special analyses by Headquarters organizations.

a. Escalation.

(1) The annual field call letter shall indicate the current OMB escalation rates. Every submission which utilizes escalation factors other than the rates contained in the field call letter must explicitly state the rate of escalation included in the estimates and the assumptions upon which the escalation is based and supporting rationale.

(2) Generic price change indices for construction projects will be published in accordance with DOE 5700.8. Organizations which use escalation factors differing from these rates must explicitly state the amount and rate of escalation included in the estimates, the assumptions upon which the escalation is based, and have had the methodology validated by the Director of Project and Facilities Management (MA-22).

b. Costs and Outlays. Previously, the distinction between costs and outlays has been unclear. Prior instructions indicated that they should be considered to be synonymous. This has created serious difficulties since the concepts are different and both are used in the budget formulation process. Costs are based on an accrual concept which recognizes the actual or constructive receipt of goods or services at the time they are received, regardless of whether payment has been made. Outlays represent the actual disbursement of funds. For the field budget submission, most data requests are in terms of costs. However, when there are data requirements for outlays, field organizations should adhere to the above definition in arriving at their best estimates.

c. General Plant Projects, General Purpose Equipment, and General

Purpose Facilities.

(1) General Plant Projects (GPP). General plant projects are miscellaneous construction items at DOE-operated laboratories and facilities which cannot be specifically identified before-hand and whose total estimated costs do not exceed $1 million per project. GPP funds are intended to be used only for work undertaken in the year for which the funds are provided. For GPP which involve the construction of a building, the cost shall include all direct and indirect (e.g., extension of utility services) costs chargeable to the account 5011, "Buildings". Engineering, design, inspection, and contingencies shall be included within the $1 million limit for each GPP item.

(2) General Purpose Equipment (GPE). General purpose equipment is equipment required to support general site needs or multiprogram capabilities of DOE laboratories and facilities. Examples of GPE are buses, mobile cranes, and typewriters, which are not program specific.

(3) General Purpose Facilities (GPF). General purpose facilities are line item construction projects estimated to cost greater than $1 million and which are required to support the long-term administrative and technical needs of DOE-operated laboratories and facilities. Examples of GPF projects are light or heavy laboratories, administrative offices, machine shops, steam plants, electrical utilities, roads, railroads, and warehouses. Multiprogram general purpose facilities are restricted to GPF projects at the twelve multiprogram laboratories where no one program will use more than approximately 60 percent of the planned facility and, in addition, at the defense laboratories, where the requirement results from non-defense program work.

(4) Program Budget Responsibility. The table presented as Figure I-1 reflects current program funding responsibilities for GPP, GPE, and GPF for DOE operated research, development, production, and test facilities. GPP support for program specific work at the weapons activities multiprogram laboratories will be funded by the program originating the request.

d. Common Use Stores Inventories and Other Special Materials. Common use stores inventories consist of all supplies necessary to support large facilities and labor forces such as office, custodial, medical

and electrical materials and supplies; motor vehicle accessories and repair parts; and heating fuels. Other special materials inventories consist of nonweapon gold, silver, and platiunum; radium, palladium, gallium, osmium, and rhodium. These precious metals are used in laboratory research and development work. The table presented as Figure I-2 reflects current program funding responsibilities for common use stores inventories and other special materials.

The table presented as Figure I-3 reflects common use stores and selected other special materials inventories specifically excluded from landlord programs. An illustration of the stores inventory schedule with explanatory notes is in Chapter III, Special Purpose and Crosscut Figures.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
PROGRAM FUNDING RESPONSIBILITIES FOR GPP, GPE AND GPF

RESEARCH AND DEVELOPMENT FACILITIES

Program Landlord	Facility	Operator
Multi program Laboratories		
Basic Energy Sciences	Ames Laboratory	Iowa State University
Breeder Reactor Systems	Argonne National Laboratory	University of Chicago Argonne Universities Association
	Hanford Engineering Development Laboratory	Westinghouse Hanford Company
Commercial Nuclear Waste	Pacific Northwest Laboratory	Battelle Memorial Institute
Defense Waste Management	Idaho National Engineering Laboratory	Exxon Nuclear Idaho, Inc. and EG&G Idaho, Incorporation
High Energy Physics	Brookhaven National Laboratory	Associated Universities, Incorporation
Magnetic Fusion Energy	Oak Ridge National Laboratory	Nuclear Division of Union Carbide Corp.
Materials Production	Savannah River Laboratory	E.I. du Pont de Nemours & Company
Nuclear Physics	Lawrence Berkeley Laboratory	University of California
Weapons Activities	Lawrence Livermore National Laboratory	University of California
	Los Alamos National Scientific Laboratory	University of California
	Sandia National	Western Electric

	Laboratories	Company
Biological and Environmental Research		
Health and Environmental Research	Center for Energy and Environment Research	University of Puerto Rico
	Environmental Measurements Laboratory	Federal
	Inhalation Toxicology Research Institute	Lovelace Biomedical and Environmental Research Institute
	Laboratory for Energy-Related Health Research	University of California at Davis
	Laboratory for Nuclear Medicine and Radiation Biology	University of California
	Laboratory of Radiobiology	University of California at San Francisco
	Oak Ridge Associated Universities	Oak Ridge Associated Universities
	Radiobiology Laboratory	University of Utah
	Savannah River Ecology Laboratory	University of Georgia
	University of Rochester Biomedical Laboratory	University of Rochester

Figure I-1
(1 of 3)

Program Funding Responsibilities for GPP, GPE, and GPF

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
PROGRAM FUNDING RESPONSIBILITIES FOR GPP, GPE AND GPF (CONTINUED)

RESEARCH AND DEVELOPMENT FACILITIES

Program Landlord	Facility	Operator
Program Dedicated Facilities		
Basic Energy Sciences	Courant Mathematics and Computer Laboratory	New York University
	MSU-DOE Plant Research Laboratory	Michigan State University
	Notre Dame Radiation Laboratory	University of Notre Dame
Breeder Reactor Systems	Energy Technology Engineering Center	Rockwell International Corp.
Fossil Energy	Bartlesville Project Office	Federal
	Grand Forks Project	Federal

	Office	
	Laramie Project Office	Federal
	Morgantown Energy Technology Center	Federal
	Pittsburgh Energy Technology Center	Federal
High Energy Physics	Fermi National Accelerator Laboratory	University Research Association, Inc.
	Stanford Linear Accelerator Center	Stanford University
Magnetic Fusion Energy	Fusion Plasma Research Facility	University of Texas
	General Atomic	General Atomic Company
	Princeton Plasma Physics Laboratory	Princeton University
Naval Reactors Development	Bettis Atomic Power Laboratory	Westinghouse Electric Corporation
	Knolls Atomic Power Laboratory	General Electric Corporation
Nuclear Physics	Bates Linear Accelerator Facility	Massachusetts Institute of Technology
	Los Alamos Meson Physics Facility	University of California
	Nuclear Physics Laboratory	University of Washington
	Wright Nuclear Structures Laboratory	Yale University
Safeguards and Security	New Brunswick Laboratory	Federal
Solar Energy	Solar Energy Research Institute	Midwest Research Institute
Uranium Resource Assessment	Grand Junction	Bendix Field Engineering Corporation

Figure I-1
(2 of 3)

Program Funding Responsibilities for GPP, GPE, and GPF

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
PROGRAM FUNDING RESPONSIBILITIES FOR GPP, GPE AND GPF (CONTINUED)

PRODUCTION AND TEST FACILITIES

Program Landlord	Facility	Operator
Uranium Enrichment Facilities		
Uranium Enrichment	Oak Ridge Gaseous Diffusion Plant	Union Carbide Corporation
	Paducah Gaseous	Union Carbide

	Diffusion Plant	Corporation
	Portsmouth Gaseous Diffusion Plant	Goodyear Atomic Corporation
Defense Materials Production Facilities		
Materials Production	Ashtabula Feed Materials Plant Inc.	Reactive Metals, Inc.
	Feed Materials Production Center	National Lead Co. of Ohio
	Hanford Production Operations	United Nuclear Industries
	Idaho Chemical Processing Plant	Exxon Nuclear Idaho, Inc.
	Savannah River Plant	E.I. duPont Nemours and Co.
Defense Nuclear Waste	Hanford Reservation 1/	Rockwell Hanford Operations
	New Waste Calcining Facility	Exxon Nuclear Idaho, Inc.
	Radioactive Waste Management Complex	EG&G Idaho, Inc.
Weapons Testing and Fabrication Complexes		
Weapons Activities	Kansas City Plant	Bendix Corporation
	Mound Facility	Monsanto Research Corporation
	Nevada Test Site	Reynolds Electrical and Engineering Co., Inc.
	Pantex Plant	Mason and Hanger--Silas Mason Co., Inc.
	Pinellas Plant	General Electric Company
	Rocky Flats	Rockwell International
	Y-12 Plant	Nuclear Division of Union Carbide Corporation

1/ Hanford Reservation excluding HEDL, PNL, and Hanford Production Operations

Figure I-1
(3 of 3)

Program Funding Responsibilities for GPP, GPE, and GPF

STORES AND SELECTED OTHER SPECIAL MATERIALS INVENTORIES

PROGRAM LANDLORD	SITE/CONTRACTOR	OPERATOR/CONTRACTOR
Defense Programs		
Weapons Activities Research, Development and Testing	Los Alamos National Lab.	University of California
	Lawrence Livermore National Laboratory	University of California
	Nevada Test Site	Reynolds Electrical and Engineering Co. Inc.
	Sandia National Lab.	Western Electric Co.
	Zia Company	Zia Company
	Pacific Area Support	Holmes and Narver, Inc. (Pacific)
	Nevada Operations	Federal
Production & Surveillance	Kansas City Plant	Bendix Corporation
	Pinellas Plant	General Electric Company
	Amarillo (Pantex) Plant	Mason and Hanger-Silas Mason Co. Inc.
	Mound Facility	Monsanto Research Corp.
	Rocky Flats Weapons Plant	Rockwell International Corp.
	Y-12 Plant	Union Carbide Corporation
	Albuquerque Operations	Federal
Materials Production	Fernald Feed Materials Production Center	National Lead Company of Ohio
	Hanford Production Operations	United Nuclear Industries, Inc.
	Savannah River Plant and Laboratory	E.I. dupont de Nemours and Company
	Idaho Fuels Processing Facility	Exxon Nuclear Idaho, Inc.
	Oak Ridge Operations	Federal
	Savannah River Operations	Federal and Company
Defense Waste By-Products Management	Idaho National Engineering Laboratory	EG&G, Inc., Idaho
	Hanford Production Operations	Rockwell-Hanford Operations
	Hanford Environmental Health Foundation	Hanford Environmental Health Foundation, Inc.
	Richland Operations	Federal

Figure I-2
(1 of 2)
Program Funding Responsibilities for Common Use
Stores and Selected Other Special Materials Inventories

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
PROGRAM FUNDING RESPONSIBILITIES FOR COMMON USE

STORES AND SELECTED OTHER SPECIAL MATERIALS INVENTORIES (CONTINUED)

PROGRAM LANDLORD	SITE/CONTRACTOR	OPERATOR/CONTRACTOR
Nuclear Energy		
Breeder Reactor Systems	Argonne National Laboratory	University of Chicago
	Fast Flux Test Facility	Westinghouse Hanford Co.
	Energy Technology Engineering Center	Rockwell International Corp.
	Shippingport Atomic Power Laboratory	Duquesne Light Company
Uranium Enrichment	Paducah Gaseous Diffusion Plant	Union Carbide Corporation
	Oak Ridge Gaseous Diffusion Plant	Union Carbide Corporation
	Portsmouth Gaseous Diffusion Plant	Goodyear Atomic Corp. Stone and Webster Engineering Corp.
	Grand Junction	Bendix Field Engineering Corporation
	Oak Ridge Operations	Rust Engineering Corp.
Naval Reactors Development	Knolls Atomic Power Lab.	General Electric Corp.
	Bettis Atomic Power Lab.	Westinghouse Electric Corporation
Commercial Nuclear Waste	Pacific Northwest Lab.	Battelle Memorial Inst.
Fossil Energy		
Coal	Pittsburgh Energy Technology Center	Federal
Energy Research		
High Energy Physics	Brookhaven National Lab.	Associated Universities, Inc.
	Fermi National Accelerator Laboratory	University Research Assoc. Inc.
	Stanford Linear	Stanford University

	Accelerator Facility	
Basic Energy Sciences	Ames Laboratory	Iowa State University
Magnetic Fusion	Oak Ridge National Lab.	Union Carbide Corp.
	Chicago Operations	Federal
	San Francisco Operations	Federal
Environmental R&D	Laboratory for Nuclear Medicine	University of California
	Oak Ridge Associated Universities	Oak Ridge Associated Universities, Inc.
	Comparative Animal Research Laboratory	University of Tennessee
	Washington Office	Federal
	Lawrence Berkeley Lab.	University of California

Figure I-2
(2 of 2)

Program Funding Responsibilities for Common Use
Stores and Selected Other Special Materials Inventories

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST

SPECIALLY ASSIGNED INVENTORIES EXCLUDED FROM LANDLORD PROGRAMS

BALANCE SHEET CODE	ASSET	DESCRIPTION	FINANCIAL PLAN	ASSIGNED B&R	ASSIGNED APPROPRIATION
1661		Radioisotopes	all	HB0281011	89K0222
1662		Stable Isotope	all	HB0281012	89K0222
1671	031	Beryllium	all	GB0381041	89K0220
1671	032	Boron-10	all	GB0381042	89K0220
1671	033	Zirconium	PM or ST	AJ0581030	89K0220
1671	033	Zirconium	Not PN or ST	GE0381045	89K0220
1671	034	Hafnium	all	AJ0581030	89K0220
1671	035	Heavy Water	all	G10381044	89K0220
1681	047	Iridium	all	AE2081050	89K0224
1681	050	Americium-241	all	BE0381054	89K0220

1681	051	Protactinium-231	all	KC0281030	89K0244
1681	052	Neptunium-237	all	GE0381054	89K0220
1681	053	Barrier Tubes	all	CD1081052	89K0226
1681	054	Nickel Powder	all	CD1081052	89K0226
1681	055	Throium-230	all	KC0281030	89K0224
1681	056	Uranium-234	all	GE0381054	89K0220
1681	057	Thorium-231	all	KC0281030	89K0224
1682	all	Fuel Fabrication	all	(various)	(various)
1691	017	Special Process Spares	all	(various)	(various)
1711	017	Allowance for Loss -- Special Process Spares	all	(various)	(various)

Figure I-3
Specially Assigned Inventories Excluded From Landlord Programs

DOE-5100.3 FIELD BUDGET PROCESS

CHAPTER II

DETAILED INSTRUCTIONS FOR PREPARING BUDGET ESTIMATES

1. SUMMARY OF ESTIMATES TABLES.

a. General. Every laboratory or other field facility must prepare a consolidated summary of estimates table (Figure II-1) covering the facility's entire FY 19BY budget request. This table should be arrayed at the organizational component level of detail broken down by operating expenses, capital equipment, and plant. In addition, separate, more detailed summary of estimates tables must be prepared for each organizational component from which FY 19BY funding is requested. These tables present data by decision unit and major activities below the decision unit level of detail (Figure II-2). The summary of estimates tables (Figures II-1 and II-2) represent a laboratory or field facility's total budget request for DOE funding stated as total obligations and costs associated with current requests, as well as with previous funding received. Obligations and costs should tie to the amounts in the field organizations' approved funding programs as of the 12-31 cut-off. A footnote should be utilized to indicate year end estimates. Thus, the funding totals on the summary of estimates tables must equate with the combined totals of the updated field work package proposal (WPAS) or equivalent documents, the summary of obligations and costs for construction projects and the impact summary tables. The summary of estimates tables should appear in the order described below. The consolidated summary of estimates table for a laboratory or other field facility in its entirety should be the first document presented in the budget submission. The summary of estimates table for each organizational component should appear at the beginning of the budget request package for that particular component, followed by the narrative justification, WPAS, summary of obligations and costs for construction projects, construction project data sheets, and impact summary documents.

b. Financial Data. The summary of estimates tables include DOE funding

information for FY 19PY, FY 19CY, and FY 19BY as described below:

(1) FY 19PY.

(a) Obligations (Obs). Reflects the current estimate of obligations, regardless of when the funds were appropriated.

(b) Costs. Reflects current cost estimates.

(2) FY 19CY.

(a) Obligations. Reflects the current estimate of obligations, regardless of when the funds were appropriated.

(b) Costs. Reflects current cost estimates.

(3) FY 19BY.

(a) Obligations. Reflects the total amount of DOE funding requested.

(b) Costs. Reflects current cost estimates.

c. Structural Detail (Figure II-2). For each major activity below the decision unit level of detail, operating expense (OE), capital equipment (CE), and plant data are to be identified separately. Decision unit data are to be summarized by OE, CE, plant, and total obligations and costs for each generic appropriation (e.g., energy supply, general science). Final DOE obligation and cost funding totals are to be shown by OE, CE, and plant for each organizational element.

2. NARRATIVE OVERVIEW. The narrative overview is a summary statement of a field organization's budget request to an organizational element of the Department. The focus should be upon how the request relates to the overall direction of the installation and how the request achieves DOE program goals and objectives. The narrative is not intended to be a detailed justification. Its purpose is to tie the various detailed documents into a meaningful whole. The narrative should correspond with and complement the preceding summary of estimates table. Tabular data may be used as appropriate.

FY 19BY FIELD BUDGET REQUEST
CONSOLIDATED SUMMARY OF ESTIMATES
(In thousands of dollars)

LABORATORY

	FY 19PY		FY 19CY		FY 19BY	
	Obs	Costs	Obs	Costs	Obs	Costs
Assistant Secretary for Defense Programs						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL, Assistant Secretary for Defense Programs	1,100	1,100	1,400	1,400	1,900	1,900
Director of Energy Research						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL, Director of Energy Research	1,100	1,100	1,400	1,400	1,900	1,900
Assistant Secretary for Nuclear Energy						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL, Assistant Secretary for Nuclear Energy	1,100	1,100	1,400	1,400	1,900	1,900
Department of Energy						
OE	1,500	1,500	1,800	1,800	2,400	2,400
CE	1,500	1,500	1,800	1,800	2,400	2,400
Plant	300	300	600	600	900	900
TOTAL, Department of Energy	3,300	3,300	4,200	4,200	5,700	5,700

Figure II-1
Consolidated Summary of Estimates

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
SUMMARY OF ESTIMATES
(In thousands of dollars)

LABORATORY/ORGANIZATIONAL ELEMENT
ASSISTANT SECRETARY 1/

FY 19PY	FY 19CY	FY 19BY

	Obs	Costs	Obs	Costs	Obs	Costs
Appropriation Decision Unit						
Major Activity						
Atomic Energy Defense Activities						
I. Weapons activities						
A. Research & Development, and Testing						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
B. Inertial Confinement Fusion						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
C. Production & Surveillance						
II. Verification and Control Technology						
TOTAL, Assistant Secretary for Defense Programs						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL	1,100	1,100	1,400	1,400	1,900	1,900

1/ As illustrated here and on page 2 of Figure II-2, each field location should prepare a separate detailed summary schedule showing OE, CE, and Plant funding at the major activity level for each Headquarters organization providing funding.

Figure II-2
Summary of Estimates
(Page 1 of 2)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
SUMMARY OF ESTIMATES
(In thousands of dollars)

LABORATORY/ORGANIZATIONAL ELEMENT

	ASSISTANT SECRETARY 1/					
	FY 19PY		FY 19CY		FY 19BY	
	Obs	Costs	Obs	Costs	Obs	Costs
Energy Supply Research and Development						
I. Magnetic Fusion						
A. Confinement Systems						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
B. Development and Technology						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
Subtotal, Magnetic Fusion						
OE	150	150	180	180	240	240
CE	150	150	180	180	240	240
Plant	30	30	60	60	90	90
TOTAL, Magnetic Fusion	330	330	420	420	570	570
II. Biological and Environmental Research						
A. Biological and Environmental Research						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
B. Program Direction						
OE	50	50	60	60	80	80
TOTAL	50	50	60	60	80	80
Subtotal, Biological and Environmental Research						
OE	100	100	120	120	160	160
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL, Biological and	160	160	200	200	270	270

Environmental Research						
Subtotal, Energy Supply Research and Development						
OE	300	300	380	380	500	500
CE	250	250	320	320	430	430
Plant	50	50	100	100	170	170
TOTAL, Energy Supply Research and Development	600	600	800	800	1,100	1,100
Subtotal, Office of Energy Research						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL, Office of Research	1,100	1,100	1,400	1,400	1,900	1,900

Figure II-2
Summary of Estimates
(Page 2 of 2)

3. FIELD WORK PACKAGE PROPOSAL AND AUTHORIZATION SYSTEM AND ALTERNATIVE FORMAT REQUIREMENTS.

a. Field Work Package Proposal/Agreements. DOE 5700.7A establishes a formal process for budget development, authorization, and monitoring of DOE funded work at specified contractor facilities. The WPAS process applies to research development and demonstration (RD&D) work financed from either operating or capital equipment funds (not related to construction activities) which is performed by the contractors at the specified facilities. These laboratories and other field installations are required to submit updated WPAS annually at the time of the field budget submission for all activities requesting DOE funding in FY 19BY. DOE 5700.7A should be referred to for guidance in compiling these documents.

b. Alternative Detailed Request Format.

(1) General. Those functions exempted from DOE 5700.7A must supply information which satisfies equivalent data requirements. Figure II-3, Alternative Detailed Request Format, is to be utilized for those exempted activities to document operating and capital equipment (not related to construction) fund requests. Narrative justifications for these requests are to be provided as part of this document.

(2) Structural Detail. For each major activity within a decision

unit, operating expense (OE) and capital equipment (CE) data are to be identified separately. The total associated obligations and costs are also to be shown for each major activity. Cumulative totals are to be developed as appropriate.

4. SUMMARY OF OBLIGATIONS AND COSTS FOR CONSTRUCTION PROJECTS. This document, as shown in Figure II-4, provides a distribution of obligations and costs incurred for each construction project for each of the fiscal years involved. The submission will include data for new projects for which appropriations or authorizations are requested in the budget year as well as all other active construction projects. Data are presented for any project which has incurred obligations or costs in FY 19PY, FY 19CY, or FY 19BY. Each laboratory or other field facility shall prepare a separate summary schedule for each program element in the submission.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
ALTERNATIVE DETAILED REQUEST FORMAT
(In thousands of dollars)

LABORATORY/ORGANIZATIONAL ELEMENT

	Beginning Uncosted	FY 19PY		FY 19CY		FY 19BY		Ending Uncosted
	Obs	Obs	Costs	Obs	Costs	Obs	Costs	Obs
Energy Supply Research and Development								
I. Magnetic Fusion								
A. Confinement Systems								
OE	50	50	50	50	50	50	50	50
CE	50	50	50	50	50	50	50	50
TOTAL	100	100	100	100	100	100	100	100
Subtotal, Magnetic Fusion								
OE	200	200	200	200	200	200	200	200
CE	200	200	200	200	200	200	200	200
TOTAL, Magnetic Fusion	400	400	400	400	400	400	400	400
Subtotal, Energy Supply Research and Development								

OE	500	500	500	500	500	500	500	500
CE	500	500	500	500	500	500	500	500
TOTAL, Energy Supply Research and Development	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Subtotal, Director of Energy Research								
OE	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
CE	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Total, Director of Energy Research	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000

NARRATIVE JUSTIFICATION

Figure II-3
Alternative Detailed Request Format

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
SUMMARY OF OBLIGATIONS AND COSTS FOR
CONSTRUCTION PROJECTS
(In thousands of dollars)

PROJECT TITLE AND NUMBER	TEC	LABORATORY/ORGANIZATIONAL ELEMENT							
		Total Prior Years		FY 19PY		FY 19CY		FY 19BY	
		OBS	COSTS	OBS	COSTS	OBS	COSTS	OBS	COSTS
80-AA-100	25,000	18,000	7,000	4,000	6,000	3,000	6,000	---	4,000
81-AB-101	20,000	---	---	8,000	6,000	8,000	6,000	2,000	6,000
82-AC-102	15,000	3,000	1,000	3,000	2,000	3,000	2,000	3,000	2,000
86-AM-112	20,000	---	---	---	---	---	---	10,000	5,000
Totals	150,000	30,000	25,000	30,000	25,000	30,000	20,000	30,000	15,000

PROJECT TITLE AND NUMBER	Total Outyears	
	OBS	COSTS

80-AA-100	---	3,000	
81-AB-101	2,000	2,000	
82-AC-102	3,000	8,000	
86-AM-112	10,000	15,000	
Totals	30,000	65,000	

Figure II-4
Summary of Obligations and Costs for
Construction Projects

5. CONSTRUCTION PROJECT DATA SHEETS.

a. Key Concepts: Budgeting for Plant Acquisition and Construction and Capital Equipment Not Related to Construction Versus Operating Expenses. The budgets for operating expenses (GE), plant acquisition and construction (PL), and capital equipment not related to construction (CE) should be prepared so as to be consistent with the accounting treatment as prescribed in DOE 2200.1, ACCOUNTING POLICY AND PRACTICES, paragraph 4b, Chapter VI. Below are guidelines to be used in simplifying the determination as to where the acquisition of land, facilities or equipment should be budgeted:

(1) Items of capital equipment for which the Department will retain title, which cost in excess of $3,000, have an expected service life of more than 1 year, and are not required to complete a construction project, shall be budgeted for as capital equipment not related to construction. Low value capital equipment, $3,000 or less, may be budgeted from plant and capital equipment (P&CE) or operating expenses in accordance with the policy stated in DOE 5100.1.

(2) Items of capital equipment not related to construction required for experimental projects shall be budgeted from operating expenses if it is expected that the equipment will be destroyed during the experiment or will have no further value other than scrap upon completion of the experiment.

(3) Budget plant and capital equipment funds for the following:

(a) All land acquisition (fee or easement).

(b) All constructed facilities and capital equipment necessary

to provide a complete and operable facility.

(c) Exception. Facilities or equipment which meet the definition of research and development, and which normally have an estimated life of less than 3 years may be budgeted for as operating expenses. 1/

(4) The leasing of facilities and equipment is permissible when it is in the best interest of the Government to do so. Lease payments are budgeted for as operating expenses:

(a) Lease With Option to Purchase. When a lease contains an option to purchase, the lease payments are budgeted as operating expenses. However, if the option is exercised by the Government, the purchase price under the option will be budgeted for as plant and capital equipment not related to construction.

1/ Regardless of the budget source or classification of funds R&D facilities and equipment that meet the capitalization criteria contained in chapter VI of the Accounting Practices and Procedures Handbook shall be capitalized.

(b) Lease Purchase Agreements. Agreements which provide for transfer of title at the end of the lease term or for the transfer of title by exercise of an option at a nominal sum unrelated to the value of the property at the time the option is exercised, are considered installment purchases. Funds for the annual payments shall be budgeted under operating expenses. However, because the Department assumes all risks of ownership, the total amount of the annual payments shall be recorded as an item of DOE-owned property and capitalized. In the event the purchase is accelerated prior to the last year of the lease-to-ownership arrangement whereby the full amount of the remaining installments are paid at one time, then funds required to complete the purchase shall be budgeted for as plant and capital equipment not related to construction. Note that real property may not be acquired in this manner as the Department has no lease-purchase authority for real estate.

(5) For additional clarification, refer to the definitions for Budget and Reporting classifications 35, Capital Equipment Not Related to Constructions, and 39, Plant Acquisition and

Construction.

b. General.

(1) Construction project data sheets are used to explain and justify the need for construction projects. These documents are to be updated and submitted annually as part of the field budget submissions for all projects requesting DOE funding in FY 19BY. The data sheets shall be prepared as illustrated in Figure II-7, "Plant and Capital Equipment," and Figure II-8, "Operating Expenses Funded," using the amount of space required for the presentation under each section. Continuation pages shall be used as necessary. The sample data sheets may not contain all of the elements described in the instructions.

(2) Construction project data sheets present the description, justification, and cost data for all construction projects budgeted and accounted for under plant and capital equipment and operating expenses appropriations. Include in the cost of a construction project, all costs in connection with the addition and or retirement of plant and equipment (including transferred equipment and materials), land, improvements to land, buildings (including permanently attached equipment), utilities, and initial movable equipment such as machine tools, laboratory and office furniture, and equipment necessary to outfit a building or group of buildings for operation. Exclude initial stocks of spare parts or other materials and supplies which are initially chargeable to inventories. Estimates for general plant projects shall provide only for work to be authorized during the fiscal year, since funds for this purpose are both authorized and appropriated annually.

(3) Each construction project shall be assigned to the appropriate organizational component.

(4) All general plant projects shall be assigned to the appropriate organizational components. The predominant program at any given site normally assumes budget responsibility for those general plant projects which provide basic support for all functions at the site. GPP support for program specific work at a weapons activities multiprogram laboratory will be funded by the program originating the request.

c. Preparation of Construction Project Data Sheets.

(1) DOE is required by law to obtain congressional authorization for the appropriation of funds. Insofar as practical, the development and review of the program to be submitted to the Congress for authorization will be undertaken as an integral part of the regular budget process, both internally and through OMB. Construction project data sheets shall be prepared and submitted for all projects requiring authorization or appropriation in the budget year.

(2) Construction project data sheets shall be prepared as follows:

(a) A separate data sheet shall be submitted for each new plant or facility and for each alteration or addition involving the construction of a building, modification, alteration or improvement which is estimated to cost more than $1,000,000. The construction of a number of similar or related units, under a specific program, may be submitted as a single project, i.e., the construction of a group of facilities for a specific reactor.

(b) A single data sheet shall be submitted to include other projects on a consolidated basis, covering alterations, improvements, additional, or new construction as well as provision, where necessary, for construction items of an unpredictable or unforeseeable nature which are estimated to cost less than $1 million. These projects shall be titled "General Plant Projects." The data sheet shall be prepared to indicate the funds requested in the program planning estimate, and include a note to indicate which projects would be deleted to attain the target estimate and the decremental estimate.

(c) Data sheets for the multiprogram general purpose facilities program will be submitted for those projects selected by the multiprogram general purpose facilities review committee.

(d) A data sheet should be an objective document written from the standpoint of the Department as a whole rather than as one segment of the Department. Personal pronouns, building and area numbers, identification of staff personnel, and unsubstantiated value judgements should not be used. A data sheet should be self-sufficient. It should avoid the use of technical terms that have a special connotation in industry or science, and should not

depend on the reader having access to other documents.

(e) The scope of the project shall be set forth in the data sheets in detail sufficient to permit a careful review and evaluation of the project. The data sheet items should not, however, be stated so precisely as to preclude the exercise of appropriate latitude by the manager in the actual design and construction of the project, as described in the data sheet, after authorization and appropriation of the funds.

(f) Information required by subparagraphs c.(3)(n) through (r) and c.(4)(o) through (s) should be presented on separate sheets as these data are removed, from the figures for the submission to Congress.

(3) The following detailed instructions govern the preparation of construction project data sheets, Figure II-7:

(a) Item 1, Title and Location of Project.

1 Each project title must be unclassified.

2 Project titles shall be sufficiently short and descriptive to permit ready reference.

3 Project title should not include specific building or area numbers.

4 In typing project titles, an initial capital shall be used for the first word in the project title and for proper names.

5 The location of the project shall be given.

(b) Item 2, Project Number. New project numbers shall be issued by the Budget Formulation Branch within each budget year, showing the year, the organizational code, the appropriation, and the sequential number of the project.

(c) Items 3 and 3a, Date A-E Work Initiated and Date Physical Construction Starts. Insert the quarter and year in which A-E work began or is to be initiated and physical construction started or is to be started, respectively. Do not assume "start" of a budget year project prior to

the start of FY 19BY. The most realistic dates possible should be shown based on the status of conceptual work, assuming availability funds at the beginning of the budget year.

(d) Item 4, Date Construction Ends. Insert the quarter and year in which construction is expected to be completed.

(e) Item 5, Previous Cost Estimate.

1 Insert the last total estimated cost of project which has previously been submitted to the Congress. The date on which that estimate was determined shall also be shown.

2 If the project has not previously been submitted to Congress then the word "none" should be shown.

(f) Item 6, Current Cost Estimate. Insert the current total estimated cost of the project and the date on which the estimate was prepared or reviewed and confirmed. If plant engineering and design funds are included in the current cost estimate, indicate as follows:

1 Current Cost Estimate: $27,350

2 Less amount for PE&D 350

3 Net Cost Estimate $27,000

(g) Item 7, Financial Schedules. For all construction projects, indicate, by fiscal year, the amounts required for authorization appropriation, obligations and costs. The total of these columns shall agree with item 6, "Current Cost Estimate" or "Net Cost Estimate", if PE&D is included. The tabulation should be consistent with the project schedule dates as shown in items 3, 3a, and 4. Where the totals of these columns are at variance with item 6, an explanation footnote should be provided. Financial schedules should reflect all funding for the project from its beginning. Where an authorization bill was not enacted, authorization data should reflect the amounts appropriated to the extent necessary to bring authorizations to date in line with appropriations to date. Programs should seek sufficient authorization to

cover budget year appropriations only. The Department will no longer request authorization of the total estimated project cost in advance of the appropriation requirements.

1 The following is a financial schedule as required for all construction projects:

Fiscal Year	Authorizations	Appropriations	Obligations	Costs
Prior Years	$50,000	$30,000	$30,000	$ 5,000
19CY	---	$20,000	$20,000	$ 7,000
19BY	$15,000	$15,000	$15,000	$13,000
19BY+1	$15,000	$15,000	$15,000	$20,000
19BY+2				$20,000
after 19BY+3				$14,400

Figure II-5
Financial Schedule - Construction Projects

2 In addition, General Plant Projects shall show, for purposes of comparison, the obligations and costs incurred for similar work in the two preceding years. This data shall be reported as in the following example:

		Costs			
Fiscal Year	Obligations	FY 19PY	FY 19CY	FY 19BY	After
FY 19PY-1 Projects	$ 0 1/	$1,000	$ 500	$ 0	$ 0
FY 19PY Projects	5,000	3,000	1,000	1,000	0
FY 19CY Projects	6,000	0	4,000	1,000	1,000
FY 19BY Projects	7,000	0	0	4,000	3,000
		$4,000	$5,500	$6,000	$4,000

1/ FY 19PY-1 or prior projects shall be shown only if costs are incurred in FY 19PY, 19CY, or 19BY: Costs prior to FY 19PY shall not be shown for such projects.

Figure II-6
Financial Schedule - General Plant Project

(h) Item 8, Brief Physical Description of Project. This item should state clearly, but concisely, the essential features of the project, indicating whether it is a new facility, alteration of existing facilities, or addition

to existing facility. In describing facilities, code words, if used, should be identified as such. Any unusual technical terms should be explained when used in project descriptions. Describe the following physical aspects as applicable. The description should read such that easy correlation can be made with the cost estimate given in item 10.

1 Describe improvements to land and, where this constitutes a major portion of the project, include information such as the approximate length, width, and type of roadways, approximate capacities of parking areas, and any proposed drainage structures and fencing.

2 Describe each building or building addition, including approximate floor plan dimensions, gross area, number of stories, story heights, basement, if provided; types of construction and reason for using such if not obvious; types of heating and air-conditioning; capacities of cranes and any design, fabrication, or construction features which are unusual or specialized and have a significant impact on the cost estimate, such as shielding, protective construction, hot cells, or special ventilation systems, environmental protection systems, and fire protection systems.

3 Describe other structures, such as pits, tunnels, towers, bunkers, stacks, and other enclosures not included in subparagraph 2 above.

4 Describe any special facilities, such as accelerator components, movable shielding, vacuum systems, processing piping, power or controls, reactor vessels, inert gas, hydrogen or purging systems, or cryogenic systems.

5 Describe types of utilities to be provided, such as water, and power, and where this item constitutes a major portion of the project, include information such as the length and size of the utility lines.

6 Describe any standard equipment included in this project such as office and laboratory furniture and equipment, hoists, and machine tools.

7 Describe any computer system or component of a computer system having a total estimated purchase cost of $400,000 or more including related capitalizable costs. The types of related capitalizable costs and an estimate of each cost shall be provided. A brief justification and explanation of the rationale for utilizing construction funds shall be provided.

8 For those projects not receiving full appropriation in this year's budget, provide a brief description of that portion of the scope to be accomplished with this year's appropriation.

9 Projects for GPP may be described in more general terms by identifying the contractor and other installations covered by the project and stating the nature of the various types of alterations, modifications, improvements, or new construction to be undertaken.

(i) Item 9, Purpose, Justification of Need, and Scope of Project. This item should lead off with a sentence stating clearly and concisely the primary reason for proposing the project. The narrative justification shall also include the following elements as applicable:

1 Describe the research, development, or production program which is underway or planned, including the relationship of the proposed facility (both as to need and timing) to the program objectives and schedules.

2 State the criteria which determined the size or scope of the project, such as volume of production, storage capacity, number of persons to be housed, and space requirements for research.

3 To the maximum extent feasible within security limitations, data sheets for projects involving production increases should indicate the present production rate or capacity and the change proposed. If the project is deemed to be an intermediate phase of a long-range program, indicate its relationship to the foreseeable planned capacity. If a production facility, state annual capacity and basis therefore, i.e., 1-shift, 2-shift operation, 5-day week, 6-day week. When inclusion of capacity involves "Top Secret"

data, indices shall be used therefore to the maximum extent practicable, or, if not practicable, the information shall be submitted separately to the program division concerned.

4 If the purpose of the project is to replace existing facilities, explain fully the circumstances which make replacement necessary and the disposition to be made of the replaced facilities.

5 Indicate that existing facilities have been reviewed to determine that the need cannot be met by modification of existing facilities. This is of particular importance in the case of radioactively contaminated facilities where decontamination and decommissioning costs are factors.

6 State the reasons for the proposed timing of the completion of the project and the effect on the program if the project is deferred or not authorized.

7 To the maximum extent practicable, justifications should contain data on the economics of the project including the basis for calculating savings and payout. In computing savings, comparative cost estimates shall include the cost of depreciation of the facility. Justifications can often be strengthened by reference to alternatives and to the consequences of disapproval.

8 If the data sheet shows both a previous cost estimate and a current cost estimate in lines 5 and 6 of Figure II-7, explain the factors involved in determining the revised estimate.

9 If construction costs include overhead of an offsite contract laboratory operated by a university or other institution, the reasons for including such overhead and the method by which the amount of such overhead was determined shall be stated.

10 The construction project data sheet shall state the estimated gross annual cost (excluding depreciation) for operating the facilities upon completion, less any offsetting reductions which are applicable. In the case of replacement facilities, include comparative

data for the facilities being replaced.

a For production type facilities and power producing facilities, the first full-year's operating costs, maintenance costs, and the annual costs at equilibrium should be set forth. Gross annual costs, revenues, or other offsetting reductions, and new annual costs should be shown.

b For research or development facilities, including new research machines, show separately the operating costs, maintenance costs, the total cost of the research or development program to be carried out, and the incremental program cost related to occupation of the new building.

c In all cases, the basis for these estimates of annual cost for operations and maintenance should be included.

11 For any construction project which requires the conduct of a research and development program directly prerequisite to its specific design and construction features and for which R&D funds are included in the operating expenses appropriation request, the total estimated costs for the budget year and for each future year of such R&D will be included for such project. (See Chapter II, page 34, Figure II-7, subparagraph 12.)

12 The justification for GPP shall set forth major known subprojects and examples of cost, a brief physical description, and a concise narrative justification.

(j) Item 10, Detail of Cost Estimate.

1 This section of the data sheet consists of an estimate for each of the account classifications listed in subparagraph 3 below. Under each of the classifications give a breakdown of the costs, indicating significant units and costs wherever possible. Include only those classifications that are applicable to the project. All costs should be presented in current year dollars.

2 General administrative and other indirect costs, properly charged to the project, shall not be shown as a line item but shall be prorated among the various elements of construction costs. Also the estimated costs of construction management services by private firms shall be similarly prorated among the various elements of construction costs. Only the account classifications applicable to the project need be listed. However, if it has been determined that the project will be administered under an "offsite" contract with a university or other institution, and that the institution will be reimbursed for overhead in connection with such administration, a memorandum entry shall be included indicating the estimated amount of such overhead. The costs for preparing system design descriptions or any comparable documentation are to be budgeted for and costed to the operating or plant and capital equipment appropriations consistent with the treatment of related expenditures, e.g., documents which are accomplished for conceptual design are charged to operating cost while those performed for Title I and II are charged to plant and capital equipment. The costs for preparing environmental documentation shall be budgeted for and costed to operating expenses.

3 The account classifications to be used, together with explanatory notes, are provided below:

a Engineering Design and Inspection Costs as the Approximate Percent of Construction Costs. Compute costs and indicate as approximate percentage of total construction costs rounding off to the nearest percent. Include costs for safety analysis reviews made after selection of the site.

b Land and Land Rights. Provide a breakdown identifying each site to be acquired, the acreage or square miles involved, unit cost, and total cost or the cost of each land right acquired. See DOE 4300.1A, REAL ESTATE MANAGEMENT, for regulations concerning the acquisition of real property.

c Construction Costs.

i Improvements to Land. Indicate the types of improvements to be made and total cost. Where this subitem constitutes a major portion of the project, it should be expressed in terms of units, unit costs, and total cost, such as ____ miles of road at $____ per mile.

ii Buildings. List and identify each building or building addition to be constructed or existing building to be modified, showing gross square feet, unit cost, and total cost. If the unit cost is unusually high, provide a footnote explanation.

iii Other structures. List and provide costs for each major other structure described on page II-15, subparagraph 3.

iv Special Facilities. Identify major engineered equipment, and special systems, as described on page II-15, subparagraph 4. Where major equipment components identified under "special facilities" appear to be standard in nature but are listed as special because, for example, they actually require special engineering and/or fabrication to meet requirements, an explanation of the special nature of the equipment should be included.

v Utilities. List the types of utilities described on page II-15, subparagraphs and the total cost. Where this subitem constitutes a major portion of the project, units, unit costs, and total costs should be shown.

d Standard Equipment. List and provide costs for the major items of "off-the-shelf" equipment and furnishings, requiring a nominal engineering effort, as described on page II-15, subparagraph 6. Costs shall include any engineering effort required.

e Major Computer Items. List and provide costs for each major computer item as described on page II-15, subparagraph 7.

f Removal Cost Less Salvage. Include removal costs less salvage incident to the replacement of plant and equipment applicable to the project. Separate projects shall be established to budget and account for removal costs and salvage incident to the retirement of plant and equipment which is not to be replaced.

g Contingency at Approximate Percentage of Above Costs. Compute and indicate a contingency amount as a percentage of all above costs, rounding to the nearest percent. This contingency is provided to cover unforeseen and unpredictable situations and shall not provide for increasing the scope of the project. The amount of contingency will depend on the status of design and complexity of the project.

h Unit cost per square foot or cubic foot for buildings or other construction shall be computed on the basis of gross areas and shall exclude the amount included in the estimate for contingencies. Unit costs should not be more precise than warranted by the status of design.

i The items to be shown in this section of the data sheet should include all pertinent data on quantities and unit costs, even if this repeats some data reported in item 8 or 9. Unusual unit cost, engineering design, and inspection or contingency rates should be explained in footnotes. The total estimated cost shall agree with item 6.

j A statement should be included as a footnote at the end of the estimate to show the basis for the estimate, e.g., "conceptual design is complete, Title 1 design is 25 percent complete."

k The items to be shown in this section of the data sheet shall be listed in tabular form, wherever practicable, so that the cost data may stand out in the presentation. If explanatory notes for any of the items listed are necessary, they will be provided as a footnote to the section. Explanatory notes shall be provided to indicate reasons why certain unit costs may be out of the normal range;

cost allowances made for isolation; costs related to speedup of construction showing hours per week on which estimate is based; factors affecting the contingent amount. The method to be used in showing these footnotes is noted in Figure II-7.

l Normally costs should be rounded off to the nearest $10,000 for item costs and to the nearest $100,000 for total costs.

m Escalation rates should be explicitly stated and when the rates are significantly different from the guidance provided in the budget call, a thorough explanation should be provided.

(k) Item 11, Method of Performance. Indicate the type of contracting arrangements contemplated, using the following paragraphs or combinations of parts of these paragraphs as a guide:

1 Design and inspection shall be performed under a negotiated architect or engineer contract. Construction and procurement shall be accomplished by fixed price contracts awarded on the basis of competitive bidding.

2 Design and inspection shall be performed by the operating contractor. To the extent feasible, construction and procurement shall be accomplished by fixed price contracts and subcontracts awarded on the basis of competitive bidding.

(l) Items 12 and 13. All projects which have a total estimated cost (TEC) of $5 million or more and projects with a TEC of less than $5 million which have significant "other direct project costs" or which have exceptionally large "other related costs," shall contain an item 12 and an item 13. Item 12 shall contain the financial schedule and item 13 shall contain the narrative material associated with the financial schedule. These items are used to explain and justify construction projects on a total cost basis. Items 12 and 13 shall be prepared as illustrated in the sample Figure II-7, using the amount of space required for presentation under each section. If items 12 and 13 are not required, write on the data sheet

"items 12 and 13 are not required."

(m) Detailed Instructions In Completing Items 12 and 13. The cost estimates in item 12 are to be developed using the general guidance-provided below. Item 13 shall parallel the costs detailed in item 12 with a narrative justification and explanation. The narrative shall include a brief description of each item in 12, its cost, the basis for operating expense funding and a schedule for accomplishment of the item. It should include the estimated start and completion dates and relevant project interface dates.

1 Total Project Cost.

a Total Facility Cost. This section shall contain all those costs which are directly related to construction of the facility.

i The construction line item costs must agree with those costs contained in prior sections of the data sheet.

ii Plant Engineering and Design (PE&D) costs shall be shown in the proper year to agree with data sheet.

iii Operating Expense Funded Equipment. Any equipment, system, component, or other item which is funded from the operating expenses appropriation for the direct use of the construction project or is required to make the facility or experiment complete and operable should be included. A narrative justification should be included to explain the reasons for such items and examples of items to be funded in this manner.

iv Inventories. Any inventories which are necessary to put the facility into use should be included.

b Other Project Costs.

i R&D Necessary to Complete Construction. Any

construction project which requires the conduct of a research and development program directly prerequisite to its specific design and construction features and for which R&D funds are included in the operating expenses appropriation for such R&D will be included. Funds used for conceptual design should be included.

ii Conceptual Design. Indicate the cost of conceptual design, escalated to the year of expenditure.

iii Other Project Related Costs. Any other costs directly related to the project that occur on a one time basis, such as startup costs, training, and decommissioning cost, should be listed along with a narrative explaining and justifying each cost.

iv All costs under (i) and (iii) shall be escalated to the year of expenditure.

2 Other Related Funding Requirements. This section should include the ongoing costs directly associated with the operation of the facility and the programmatic effort to be conducted using the facility which is not appropriate for inclusion in total project cost. An estimate of the annual costs and a narrative explanation should be included. In this portion of the data sheet, the narrative explanation shall take precedence over the cost estimates. Any significant variances in the annual cost estimates should be explained in the narrative. For example, there may be the planned purchases of a major item of equipment which shall substantially change the annual costing rate or make a significant change in the mode of operation. Indicate the estimated useful life of the project (years).

a A facility operating cost estimate should include the annual costs to operate and maintain the facility including cost of utilities, labor, and materials. Indicate the man-years of effort required to operate the facility.

b Include programmatic effort which relies upon the direct and primary use of the facility. Provide a yearly estimate and narrative justification.

c An estimate of annual capital equipment needs not related to construction but related to the programmatic effort included in subparagraph ii, above, should be included. The accompanying narrative should explain any expected installations of new programmatic related capital equipment.

d Include a yearly cost estimate and narrative justification of GPP or other expected construction related to programmatic effort included in subparagraph ii, above. Include the man years of effort required to maintain and repair the facility.

e Any other expected annual costs should be listed with an accompanying narrative.

1 Any significant variations in the annual costing rates or the preceding items should be footnoted. For example, the procurement of a new nuclear reactor core on a very infrequent basis would greatly increase the annual capital equipment cost rate for a facility. These deviations in costs should be segregated from the annual cost rates.

(n) Item 14, Incorporation of Fallout Shelters in Future Federal Buildings. For all suitable buildings, the total estimated cost shall include fallout shelter space conforming to the design requirements. The existence of adequate fallout shelter space in the vicinity or the location of this facility in a security area should not necessarily prevent the consideration of providing shelter space in new facilities. For purposes of this item, one of the following statements should normally be used:

1 Efforts will be made through the use of slanting techniques in design of this building to provide additional shelter space at little or no additional costs.

2 If fallout shelters are not provided, indicate the reason, i.e., sufficient space available or deficiency

programmed in another project.

3 The building to be constructed as a part of this project is not suitable for use as a fallout shelter because ... (the reason may be type of construction, such as prefabricated metal buildings, or type of work to be performed in the facility, such as the handling of explosives or radioactive material).

4 This project does not include the construction of new buildings or building additions. Therefore, the provision for fallout shelters is not applicable.

(o) Item 15, Federal Compliance with Pollution Control Standards. This section of the data sheet should contain a statement indicating that the total estimated cost of the project includes the cost of those measures which may be necessary to assure that the facility or building will meet the requirements of Executive Order 12088, "Federal Compliance with Pollution Control Standards." A brief statement of those controls provided which assure compliance with the foregoing should also be provided for each type of pollutant. This section should normally contain one of the following paragraphs:

1 The total cost of this project includes the costs of those measures necessary to assure compliance with Executive Order 12088. Sanitary waste will be discharged into existing sewers connected to adequate sewage treatment facilities. Airborne contaminants will be collected and filtered before being released to the atmosphere. (This paragraph should be modified to reflect the type of pollutants produced by each particular project.)

2 The performance of this project will inherently assure compliance with the requirements of Executive Order 12088. (To be used for projects specifically for pollution control.)

3 As presently conceived, operation of this project will not generate any environmental pollutants; therefore, the requirements of Executive Order 12088 are not applicable.

(p) Item 16, Evaluation of Flood Hazards. This section of the data sheet should contain a statement with regard to the evaluation and consideration of flood hazards in accordance with the requirements of Executive Order 11988, "Evaluation of Flood Hazard in Locating Federally Owned or Financed Buildings, Roads, and Other Facilities, and in Disposing of Federal Lands and Properties." Section 4 of the Executive order requires that, "Any requests for appropriations for Federal construction of new buildings, structures, roads or other facilities...shall be accompanied by a statement by the head of the agency on the findings of his agency's evaluation and consideration of flood hazards in the development of such requests." Reference is made to the "Flood Hazard Evaluation Guidelines for Federal Executive Agencies", published by the Water Resources Council, of 5-72. If it is determined that the project site is not subject to the defined hazards, it is recommended that the following statement be used:

> "This project will be located in an area not subject to flooding determined in accordance with Executive Order 11988."

(q) Item 17, Compliance with the National Environmental Policy Act, Floodplains/Wetlands Environmental Review Requirements, and Other Related Environmental Statutes. This section of the data sheet should present information on planning for compliance with the National Environmental Policy Act (NEPA), Public Law 91-190 of 1969, DOE 5440.1B -- Implementations of the National Environmental Policy Act, the Council on Environmental Quality Regulation (40 CFR 1500-1508), DOE's NEPA guide-lines (45 FR 20694, as amended), DOE's regulation 10 CFR 1022, and other related statutes including but not limited to the Clean Air Act, the Clean Water Act, the National Historic Preservation Act, and the Endangered Species Act. Examples of such information include, if a NEPA document has been completed for the proposed project, reference to that document should be made; if a NEPA document is currently under preparation for a proposed project, reference should be to that document, its status, and its schedule completion date; and, if a determination on the level of NEPA documentation has not been made for a proposed project, indicate when information will be provided for

Headquarters use in determining the need for further documentation for those actions still requiring Headquarters determinations. In all cases, state whether or not the proposed project is located in a floodplain/ wetland.

(r) Item 18, Accessibility for the Handicapped. Provide a Statement indicating that the project will be accessible to the handicapped in accordance with the Architectural Barriers Act, Public Law 90-480, and implementing instructions in the Federal Property Management Regulations (41 CFR 101-91.6).

Note: Section 501 of the Rehabilitation Act of 1973 (Public Law 93-112), as amended, requires the development of an affirmative action plan for employment of the handicapped by Federal agencies. Affirmative action plans are also required by 41 CFR 60-250, Affirmative Action Obligations of Contractors and Subcontractors for Disabled Veterans and Veterans of the Vietnam Era, 41 CFR 60-741, Affirmative Action Obligations of Contractors and Subcontractors for Handicapped Workers and DOE 3220.2, EQUAL OPPORTUNITY IN OPERATING AND ONSITE SERVICE CONTRACTOR FACILITIES, as amended 7/12/83.

(4) The following instructions govern the preparation of Operating Expenses Funded Project Data Sheets, Figure II-8. This figure should be prepared only if the project is in procurement, fabrication or construction phases in the FY 19BY and the total cost is estimated to be $5 million or more. This includes projects to be jointly funded by the end of the FY 19BY. The schedule is not required if the project is still in the conceptual design stage in the FY 19BY. The Figure II-8 contains the following information:

(a) Project Title. The title should be short and descriptive.

(b) Total Estimated Cost (TEC). The TEC should be only the total cost of construction as if the project were a line item construction project, i.e., the cost to build an operable facility or experiment.

(c) Operating Expenses (OE). For the items listed below on

page 38, provide the cumulative obligations for prior (before FY 19PY) year, the B/A, Obligations and B/O for the FY 19PY, the B/A and B/O for the FY 19CY and FY 19BY, and an estimate of future year requirements (BA/BO) through completion of the project.

1 Design and Construction. This is the cost of constructing the facility. These costs should include engineering, design, inspection, physical construction costs, standard equipment, and contingency.

2 R&D Related to Construction. Includes conceptual design and any other R&D related to the construction of the facility.

3 Facility Operations. Includes all costs associated with the programmatic use and operation and maintenance of the facility and the number of years estimated for operation.

4 Direct Project Related Support Cost. Includes all other operating expense funds such as inventories, and training.

5 Capital Equipment. Includes equipment to be used in the construction of the facility or for facility operations.

6 Total Operating Expenses. Summation of subparagraphs 1 through 5 above.

(d) Other DOE Funding and Cost. Includes all other DOE funding related to the program/project activity (i.e., PE&D, and line-item, etc.).

(e) Total DOE Funding and Cost. Total of subparagraph (c) and (d).

(f) Non-DOE Funding and Cost. Includes identification of all non-DOE funding. The basis for the non-DOE funding should be identified (i.e., signed contract, or contractor proposal).

1 Design and Construction;

2 Facility Operations and Maintenance;

3 Other;

4 Total Non-DOE Funding.

(g) Total Project Funding and Cost. Summation of subparagraphs (e) through (f) above.

(h) Description, Objective, and Justification. Provide a clear and concise description of the project indicating in general terms the technical features of the project. State the objectives of the project and how they related to the overall mission of the program and the Department. Also state why this project will meet the objective stated above.

(i) Schedule of Planned Activities. Provide a schedule indicating quarter and fiscal year of the start and completion of major activities. At a minimum, include schedule for conceptual design, detailed design, long lead procurement, construction and startup/operations. Include explanatory notes to highlight and clarify the schedule (i.e., the reason that long lead procurement must be initiated).

(j) Management and Contracting Plan. This plan is required to identify overall program or project strategy regarding the procurement approach, anticipated participation by industry or other government agencies, program or project management location, and general approach to management organization contemplated.

(k) Prior Year Achievements. Provide a narrative description of achievement relating to the development of the project in prior years.

(l) Current Year Achievements. Refer to subparagraph (k) above.

(m) Reasons for Increases or Decreases. Indicate the reason for an increase or decrease in funding requirements as related to the last budget request approved by Congress. Also indicate the fiscal year of the last approved budget request.

(n) Construction Cost Estimate. Refer to page II-18, subparagraph (j).

(o) Incorporation of Fallout Shelters in Future Federal Buildings. Refer to page II-24, subparagraph (n). Judgement should be exercised in locating fallout protection in operating expenses funding facilities which have a useful life of 3 years or less.

(p) Federal Compliance with Pollution Control Standards. Refer to page II-25, subparagraph (o).

(q) Evaluation of Flood Hazards. Refer to page II-26, subparagraph (p).

(r) Compliance with the National Environmental Policy Act and Related Statutes. Refer to page II-26, subparagraph (q).

(s) Accessibility for the Handicapped. Refer to page II-27, subparagraph (r).

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET PROCESS
CONSTRUCTION PROJECT DATA SHEETS
ATOMIC ENERGY DEFENSE ACTIVITIES - PLANT AND CAPITAL EQUIPMENT
ATOMIC ENERGY DEFENSE ACTIVITIES
DECISION UNIT

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

1. Title and location of project: Steam generation facilities, Idaho fuels Processing Facility, Idaho	2. Project No. 80-AE-3
3. Date A-E work initiated: 4th Qtr. FY 1979 (PE&D) Funds)	5. Previous cost estimate: $24,000 Less amount for PE&D: 500 Net cost estimate: $23,500 Date: 1/80
3a. Date physical construction starts: 2nd Qtr. FY 1982	
4. Date construction ends: 3rd Qtr. FY 1984 a/	6. Current cost estimate: $29,000 Less amount for PE&D (FY 79): 500 Net cost estimate: $28,500 a/ Date: 12/80

7. Financial Schedule:

Fiscal Year	Authorization	Appropriations	Obligations	Costs
1980	$23,500	$10,000	$ 7,000 b/	$ 0
1981	--	8,500	11,500 c/	10,000
1982	5,000	10,000	10,000	9,500
1983	--	--	--	8,000
1984	--	--	--	1,000

a/ The increased TEC reflects the addition of a cogenerator capability, delays caused by studies on alternative energy sources such as geothermal and natural gas, and revisions in the funding schedule in FY 1980 and FY 1981.

b/ Reflects Congressional deferrals of $3,000,000 to FY 1981.

c/ Reflects Congressional reduction of $5,000,000.

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 1 of 7)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

8. Brief Physical Description of Project

This project provides for the design, procurement, and construction of a coal-fired steam generator facility to meet present and projected steam requirements for projects planned at IFPF through FY 1985. The facility will be designed for a 25-year life, will be steel frame construction with insulated metal panels and be approximately 125' x 132'. The project will include: (a) facilities for coal receiving, handling, and storage; (b) two 67,500 lb/hr coal-fired boilers; (c) a 16,500 s.f. building to house the necessary equipment; (d) water treatment equipment; (e) air pollution control equipment; (f) solid waste disposal equipment; (g) liquid waste treatment equipment; (h) utility tunnel; (i) connections to existing utility systems; (j) railroad spur; (k) connecting roads; (l) parking facilities; (m) all ancillary features required for peak operating efficiency and safety; (n) capability to convert to cogeneration; and (o) a boiler stack. Funds requested will allow for the construction of the boiler house and stack, and will support installation of long lead procurement items such as the boilers and associated auxiliary equipment.

9. Purpose, Justification of Need for, and Scope of Project

The purpose of this project is to provide a coal-fired steam

generation facility which will replace, in part, the existing oil-fired equipment and will provide expansion capacity for planned plant requirements and normal reserve capacity, plus capability to convert to cogeneration at some future date.

The budget authority level requested in FY 1982 is for the continuance of facility design, equipment procurement and the initiation of construction.

The Idaho Fuels Processing Facility (IFPF) was built in 1951 and has undergone a series of expansions and modifications which have increased steam requirements beyond the steam generation capabilities of the original installation. The present steam system will not provide for essential loads should one boiler go off-line. New production facilities are being designed and built which will further exceed the existing available steam generation capabilities. Without additional steam capacity, required production rates would not be achieved.

Specific programs and projects are the driving force behind the need for increased steam generation capacity at IFPF. These projects and projected peak steam requirements are: (a) the New Waste Calcining Facility (NWCF), 19,440 lb/hr; (b) Fluorinel and Storage (FAST) Facility, 11,880 lb/hr; (c) Remote Analytical facility Upgrade and Expansion, 1,404 lb/hr; (d) a proposed Plant Process Chemistry Building, 22,097 lb/hr; (e) other GPP projects, 900 lb/hr; and (f) reserve capacity, steam plant load and distribution losses, 13,930 lb/hr for a total additional future requirement of approximately

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 2 of 7)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

9. Purpose, Justification of Need for, and Scope of Project (continued)

69,651 lb/hr of steam. This, combined with the current base load of 65,550 lb/hr, will increase the total plant requirement to approximately 135,200 lb/hr. It will not be possible to accommodate additional loads from these facilities without expanding the existing steam generation system and adding reserve capacity. Without reserve capacity, several facilities could be forced into unplanned shutdown should be boiler malfunction during the winter months. Should this project be disapproved, curtailed operation of the above facilities would be required.

National policy is to minimize the consumption of, and eventually to eliminate the use of, fuel oil. Implementation of this project will permit the IFPF to provide normal steam requirements from coal-fired sources.

The scope of this project is determined by the volume and rate of steam generation, coal unloading rate and storage capacity. This facility will produce steam at a peak rate of 135,000 lb/hr including losses incurred from boiler breakdown, distribution, and feedwater heating. The new boilers will be designed to generate steam of a quality required for cogeneration and for process and plant heating purposes.

The coal handling plant is sized for an unloading rate of 100 ton capacity receiving hopper. The dean storage area is sized to contain 6,400 tons of coal, which represents a 30 day supply for each boiler. Coal will be delivered in 70 to 90 ton capacity bottom dumping cars. Ten cars with 700 tons of coal will be sufficient for a three day capacity at a maximum rate of 135,000 lb/hr steam.

A bucket elevator will transfer the coal from the receiving hopper to two live coal bunkers in the boiler house at a rate of 100 ton/hr. The live coal bunkers have a capacity of 135 tons of coal each, which represents 30 hours supply at maximum continuous rating.

The delay in funding or at authorizing this project will have the following effect:

(1) The existing steam-generation equipment for production activities is subject to failure causing loss of production. Many facilities will be operable with rigid administrative control of steam use. After 1983, Fluorinel fuel processing and operations of the New Waste Calcining Facility could not be conducted concurrently which would result in significantly reduced processing capacity for Fluorinel, severely increased cost per ton of fuel processed, and increased backlog of fuel being stored.

(2) Progressive growth to meet projected production requirements would be severely limited due to lack of steam.

(3) Steam required to meet projected production requirements would be installed in a stepwise manner resulting in small units with a higher installation cost, higher operation cost, and substantially decreased energy efficiency.

(4) Significantly increased overall cost to maintain and repair the existing aging system.

(5) Annual operations and maintenance costs are approximately $1.3 million per year.

Figure II-7
Construction Project Data Sheets -

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

9. Purpose, Justification of Need for, and Scope of Project (continued)

Disapproval of new coal-fired steam generation equipment will mean complete dependence on oil as fuel and will incur a serious risk to IFPF operations should the current plant's capacity at be available for reasons of repair or maintenance. In any event the existing steam capacity will be inadequate after 1983.

10. Details of Cost Estimate a/

	Item Cost	Total Cost
a. Engineering, design and inspection at 24% of construction costs, item b b/		$ 3,400 b/
b. Construction costs		16,500
(1) Improvements to land including grading, landscaping, drainage diversion, paving, parking, fencing, lighting, and pedestrian access walks	$ 200	
(2) Buildings	1,600	
(a) Coal boiler house, 16,500 sq. ft. at approximately $97/sq. ft.		
(3) Other structures includes boiler stack, ash burial pit, and underground tunnel	4,300	
(4) Utilities, including electrical power, water, sanitary sewer lines, compressed air, fuel oil, condensate return lines, railroad spurs. etc.	1,600	
(5) Special facilities includes coal handling equipment, air pollution control equipment, ash handling equipment, water treatment equipment, and two coal fired boilers capable of cogeneration	8,800	
c. Standard equipment includes auxiliary equipment ($2,995), and office furniture ($)		3,000
d. Removal less salvage		0
Subtotal		22,900
e. Contingency at approximately 24% of above cost		5,600
Total estimated Costs		$28,500 c/

a/ The above estimates we based on conceptual design and feasibility

studies which are 100% complete.

b/ Excludes $500,000 of PE&D.

c/ All cost have been escalated at the rate of 12% to current year costs based upon the methodology developed for ID.

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 4 of 7)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

11. Method of Performance

Contracting arrangements are as follows:

a. Design, Procurement and Construction: Fixed-price contract awarded on the basis of competitive bidding.
b. Title III Inspection: By Architect-Engineer contractor under operating contractor surveillance.

12. Funding Schedule of Project Funding and Other Related Funding Requirements

	Prior Years	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	Total
a. Total project costs							
1. Total facility costs							
(a) Construction line item	$ 0	$ 0	$10,000	$ 9,500	$ 8,000	$ 1,000	$28,500
(b) PE&D	500	0	0	0	0	0	500
(c) Inventories	0	0	0	0	180	0	180
Total direct costs	$ 500	$ 0	$10,000	$ 9,500	$ 8,180	$ 1,000	$29,180
2. Other project costs							
(a) R&D necessary to complete construction	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
(b) Conceptual design costs	450	0	0	0	0	0	450
(c) Other project							

related costs	200	0	440	540	470	300	1,950
Total other project costs	$ 650	$ 0	$ 440	$ 540	$ 470	$ 300	$ 2,400
Total project costs (Item 1 & 2)	$1,150	$ 0	$10,440	$10,040	$ 8,650	$ 1,300	$31,580

b. Other related annual costs (estimated life of project: 25 years)

1. Facility operating costs	$ 1,300
2. Programmatic operating expenses directly related to the facility	0
3. Capital equipment not related to construction but related to the programmatic effort in the facility	130
4. Maintenance, repair, GPP or other construction related to programmatic effort in the facility	100
Total related annual costs	$ 1,530

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 5 of 7)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

13. Narrative Explanation of Total Project Funding and Other Related Funding Requirements

a. Total project funding

1. Total Facility
   (a) Inventories - Inventories necessary to put the facility into use are estimated to cost $180,000.

2. Other project funding
   (a) R&D necessary to complete construction - Conceptual Design was completed at a cost of $450,000.
   (b) Other project related funding - Project support and startup are estimated to cost $1,950,000.

b. Total related funding requirements - It is estimated the facility will be used 25 years for its programmatic purpose.

1. Facility operating costs - The major elements comprising the annual operating costs are coal costs, labor costs, and operating costs of boiler, fan systems and motors.

The total delivery cost of coal to the steam plant will be approximately $25.45/ton based on 1977 dollars. This is equivalent to a price of $1.48/10 6 BTU.

To operate the facility, three boiler plant operators and one coal yard operator on a three shift rotation basis will be required. Routine plant maintenance will be completed by the boiler plant operators.

2. Programmatic operating expenses directly related to the facility - The steam generated by the coal-fired boilers will be consumed by the following IFPF facilities:

New Waste Calcining Facilities	14%
Remote Analytical Facility Upgrade and Expansion	1%
Fluorinel and Storage Facility	9%
Remainder of Plant	76%

3. Capital equipment not related to construction but related to the programmatic effort in the facility - Estimated cost is to cover the costs of dump trucks, inloader, bulldozer, etc. necessary to handle the coal over a 25 year period.

4. Maintenance, repair, GPP or Other Construction Related to Programmatic Effort - Estimated cost is based on experience with average cost for the replacement of lines, valves, pump and motor repairs per year.

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 6 of 7)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

14. Incorporation of Fallout Shelters: Indicate whether shelter space is included. If not, give the rationale why it is not included.

15. Federal Compliance with Pollution Control Standards: Indicate measures taken if necessary, to control environmental pollutants and indicate that those costs we included in the TEC.

16. Evaluation of Flood Hazards: Indicate whether or not flood hazards have been considered. If located in a flood plain, indicate

mitigating action planned.

17. Environmental Impact: Indicate status of compliance with the National Environmental Policy Act and if the project is located in a floodplain/wetland.

18. Accessibility for the Handicapped: Provide a statement indicating accessibility for the Handicapped in accordance with the Architectural Barriers Act (Public Law 90-480) and the Federal Property Management Regulations (41 CFR 101-19.6).

Figure II-7
Construction Project Data Sheets -
Plant and Capital Equipment Funded
(Page 7 of 7)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET PROCESS
OPERATING EXPENSE FUNDED PROJECT DATA SHEET
DEFENSE PROGRAMS

Atomic Energy Defense Activities Construction
Atomic Energy Defense Activities
Defense Nuclear Waste

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

Reedy Creek Utilities Demonstration Plant
Idaho Operations Office

Total Estimated Cost (TEC) $14,945,000
(For Design and Construction)

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 1 of 6)

Reedy Creek Utilities Demonstration Plant
Idaho Operations Office

Total Estimated Cost (TEC) $14,945,000

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

Cumulative Prior Years	FY 1980 Actual	FY 1981 Estimate

	Obs.	B/A	Obs.	B/O	B/A	B/O
Operating expenses (DOE):						
Design and construction	$ 85	$3,300	$3,300	$2,437	$8,745	$8,400
R&D related to construction	100	140	140	140	250	250
Facility operations	0	0	0	0	0	0
Direct project related support costs	0	0	0	0	0	0
Capital equipment	0	0	0	0	0	0
Total operating expenses	185	3,440	3,440	2,577	8,995	8,650
Other DOE funding:						
Activity - Conservation and Solar Energy	0	575	575	575	400	400
Total DOE funding:	185	4,015	4,015	3,152	9,395	9,050
Non-DOE funding:						
Design and construction	0	0	0	0	500	500
Total Project funding	$ 185	$4,015	$4,015	$3,152	$9,895	$9,550

	FY 1982 Estimate		Total Cost
	B/A	B/O	B/A
Operating expenses (DOE):			
Design and construction	$1,340	$2,548	$13,470
R&D related to construction	0	0	490
Facility operations	370	370	370
Direct project related support costs	0	0	50
Capital equipment	30	30	30
Total operating expenses	$1,740	$2,948	$14,410
Other DOE costs			
Activity - Conservation and Solar Energy, design and construction	0	0	975
Total DOE costs	$1,740	$2,948	$15,385
Non-DOE costs			

Design and construction	0	0	500
Total Project costs	$1,740	$2,948	$15,885*

*To reconcile with the TEC of $14,945,000 delete $940,000 associated with "Direct project related support costs."

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 2 of 6)

Reedy Creek Utilities Demonstration Plant
Idaho Operations Office

Total Estimated Cost (TEC) $14,945,000

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

Description, Objective and Justification

Conceptual design is complete for a Transuranic (TRU) Waste Treatment Facility (TWTF) at the Idaho National Engineering Laboratory (INEL). Its objective is to process (chemically and physically treat and immobilize) the retrievable stored INEL TRU waste and have the capability to process buried TRU waste. The Reedy Creek Utilities Demonstration Plant, located at Lake Buena Vista, Florida, is being undertaken as a cold (non-radioactive) pilot demonstration plant.

A promising technology for immobilizing the TRU waste it the INEL is the slagging pyrolysis incinerator. Rights to this incinerator are held by Andco, Inc. of Buffalo, New York. While the "slagger" is based on "old" blast furnace technology, it has not been used is a nuclear waste incinerator. There is limited experience with this technology in the United States and none in DOE. Development and testing it the Mol, Belgium slagging incinerator will be useful to characterize the end product, however, this incinerator his a different design and scale. Identical scale tests are necessary to confirm how the slagging incinerator will perform with simulated INEL transuranic waste.

Reedy Creek Utilities Company Incorporated (RCUC), a wholly-owned subsidiary of Walt Disney Enterprises, submitted an unsolicited proposal for a joint project to build an exact scale demonstration incinerator that will support the Idaho project: (a) a slagging pyrolysis incinerator would be designed, constructed, and tested in time to confirm or impact design before construction starts on the Idaho unit; (b) the capacity will be identical to Idaho's at approximately 100 tons/day gross throughout; (c) DOE will have unlimited use of the facility for the first year of operation and 30 days per year for the next 10 years; (d) additional use can be purchased at the pleasure of the Government; and (e) title will transfer to RCUC after the full year of exclusive use by DOE. If the incinerator meets RCUC performance expectations, the U.S. Government (Treasury) will recapture a

substantial part of its investment around 1985.

By constructing a cold pilot plant, DOE will gain early design, construction, and operating experience before the commitment to construct a major radioactive waste processing facility at the INEL. The demonstration incinerator will verify the designing of the INEL incinerator at the same scale. By operating the demonstration plant with simulated INEL feed, valuable operating and technical data will be gained. The cold demonstration plant may indicate design changes that may be required in the radioactive waste incinerator. Such changes could then be incorporated before construction rather than by retrofit during construction or after startup.

(a) Schedule of Planned Activities

The following table presents the total program broken down by primary tasks.

Activity	Start	Complete
Procurement and Fabrication	1Q FY 1980	4Q FY 1981
Facility Construction	4Q FY 1980	1Q FY 1982
Facility Startup	1Q FY 1982	2Q FY 1982
Test Program	2Q FY 1982	2Q FY 1983

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 3 of 6)

Reedy Creek Utilities Demonstration Plant
Idaho Operations Office

Total Estimated Cost (TEC) $14,945,000

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

(b) Management and Contracting

The RCUC will design and construct the total facility with the support of appropriate subcontractors. DOE approval will be required for the preliminary design, the final design, and initiation of procurement of long lead items. Operation of the facility will be the sole responsibility of RCUC.

Technical decision on the management of the facility, during DOE's dedicated operating periods, will be made jointly by representatives of RCUC and the Department of Energy. RCUC will monitor daily operation and collect date.

The RCUC stresses quality control and quality assurance in all aspects of its operation. Quality assurance programs are designed into every facet of the RCUC's operation and are highly successful

in providing utilities for up to 80,000 visitors per day plus a base population of 35,000 people at Walt Disney World. Quality assurance at Walt Disney World results primarily from emphasis on planning and the employment of competent professionals and technicians. These procedures, coupled with strong management and administrative control, will provide the same high level of quality assurance in constructing and operating the cold demonstration facility as in the other utilities operated by the company.

(c) Prior Year Achievements

Engineering design for the facility and the process were completed and construction started.

(d) CY Achievements

Civil/structural (building, site, and utilities) were completed. Installation of process equipment was started. Process equipment checkout was started.

(e) Reasons for Increases and Decreases

The TEC for this project has increased by $5,085,000 from the data sheet which supported the FY 19BY Budget Request because:

- The original estimate was parametric, we now have fixed-price bids (1-1/2 years later).
- Scope changes have been made including building, adding a second overhead crane, and a redundant induced draft fan.
- Escalation.
- Project start delayed 5 months due to difficult agreement negotiations.
- Design/construction schedule had to be extended by 5 months.

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 4 of 6)

Reedy Creek Utilities Demonstration Plant
Idaho Operations Office

Total Estimated Cost (TEC) $14,945,000

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

(f) Cost Estimate

The costs shown are based on RCUC's final design, appropriately 20% of construction complete, and fixed-price contracts for the bulk of remaining work. The DOE funding outlined in this schedule is limited to the actual design, construction, and checkout periods.

The operation of the facility will be the sole responsibility of RCUC with the first year to be devoted exclusively to DOE testing. DOE funding for the Ready Creek testing program is at included in this schedule.

	Item Cost	Total Cost
1. Engineering, design, and inspection, and project management at 34% of construction costs, Item 2		$ 3,770
2. Construction costs		11,020
(a) Improvements to land	$ 450	
(b) Buildings and structures	3,570	
(c) Process equipment	5,950	
(d) Utilities	550	
(e) Startup	500	
Subtotal		$14,790
3. Contingency @ approximately 1% of above costs		155
Total Estimated Cost		$14,945 a/

a/ Facility construction will be accomplished by fixed-price contracts and procurements. Estimate is based on fixed-price bids and quotes now in hand. Escalation is at separately identified in these fixed-price commitments.

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 5 of 6)

CONSTRUCTION PROJECT DATA SHEETS

1. Title and location of project: Steam generation facilities, Idaho Fuels Processing Facility, Idaho

2. Project No. 80-AE-3

15. Incorporation of Fallout Shelters: Indicate whether shelter space is included. If not, give the rationale why it is not included.

16. Federal Compliance with Pollution Control Standards: Indicate measures taken, if necessary, to control environmental pollutants and indicate that those costs are included in the TEC.

17. Evaluation of flood Hazards: Indicate whether or not flood hazards have been considered. If located in a flood plain, indicate

mitigating action planned.
18. Environmental Impact: Indicate status of compliance with the National Environmental Policy Act and if the project is located in a floodplain/wetland.
19. Accessibility for the Handicapped: Provide a statement indicating accessibility for the Handicapped in accordance with the Architectural Barriers Act (Public Law 90-480) and the Federal Property Management Regulations (41 CFR 101-19.6).

Figure II-8
Construction Project Data Sheets -
Operating Expenses Funded
(Page 6 of 6)

6. IMPACT SUMMARY OF ACTIVITIES FUNDED IN PRIOR YEARS FROM OPERATING OR CAPITAL EQUIPMENT (NOT RELATED TO CONSTRUCTION) FUNDS.

a. General. Every laboratory or other field facility is required to prepare a separate impact summary for each organizational element, as shown in Figure II-9. This table documents the obligation and cost impacts for FY 19PY, FY 19CY, and FY 19BY that result from prior year DOE financing from operating or capital equipment (not related to construction) funds for those activities where no DOE funding is being requested in FY 19BY. (These effects are therefore not accounted for on the WPAS or Alternative Formats.) Amounts contained in this Figure II-9, when combined with those included in the WPAS or alternative detailed request, and the summary of obligations and costs for construction projects, should equal the amounts contained in the summary of estimates. The impact summary table presents data by decision unit broken down to major activities below the decision unit level of detail (as shown in the structure attached to the annual field call letter).

b. Preparation of Impact Summary. The impact summary table includes estimates as shown in Figure II-9.

(1) Obligations (Obs.). Reflect the current estimate of obligations.

(2) Costs. Reflect current cost estimates.

c. Structural Detail. For each major activity within, a decision unit and each decision unit, operating expense (OE), capital equipment (CE), and plant data are to be identified separately. Total obligations and costs are also to be shown for each major activity and decision unit. Decision unit data are to be summarized by OE, CE, Plant, and total obligations and costs for each generic appropriation (e.g., energy supply, fossil energy). Final totals are then developed for each organizational component.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
IMPACT SUMMARY OF ACTIVITIES FUNDED IN PRIOR YEARS
(In thousands of dollars)

LABORATORY/ORGANIZATIONAL COMPONENT

	FY 19PY		FY 19CY		FY 19BY	
	Obs	Costs	Obs	Costs	Obs	Costs
General Science and Research						
1. High Energy Physics						
A. Physics Research						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL	1,100	1,100	1,400	1,400	1,900	1,900
B. Facility Operations						
OE	500	500	600	600	800	800
CE	500	500	600	600	800	800
Plant	100	100	200	200	300	300
TOTAL	1,100	1,100	1,400	1,400	1,900	1,900
Total, High Energy Physics						
OE	2,000	2,000	2,400	2,400	3,200	3,200
CE	2,000	2,000	2,400	2,400	3,200	3,200
Plant	400	400	800	800	1,200	1,200
TOTAL	4,400	4,400	5,600	5,600	7,600	7,600
Total, General Science and Research						
OE	10,000	10,000	12,000	12,000	16,000	16,000
CE	10,000	10,000	12,000	12,000	16,000	16,000
Plant	2,000	2,000	4,000	4,000	6,000	6,000
TOTAL	22,000	22,000	28,000	28,000	38,000	38,000

Figure II-9
Impact Summary of Activities Funded in Prior Years
(Page 1 of 2)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
IMPACT SUMMARY OF ACTIVITIES FUNDED IN PRIOR YEARS
(In thousands of dollars)

LABORATORY/ORGANIZATIONAL COMPONENT

	FY 19PY		FY 19CY		FY 19BY	
	Obs	Costs	Obs	Costs	Obs	Costs
Energy Supply Research and Development						
I. Magnetic Fusion						
A. Confinement Systems						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
B. Development and Technology						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
Subtotal, Magnetic Fusion						
OE	200	200	240	240	320	320
CE	200	200	240	240	320	320
Plant	40	40	80	80	120	120
TOTAL	440	440	560	560	760	760
II. Biological and Environmental Research						
A. Biological and Environmental Research						
OE	50	50	60	60	80	80
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	110	110	140	140	190	190
B. Program Direction						
OE	50	50	60	60	80	80
TOTAL	50	50	60	60	80	80
TOTAL, Biological and Environmental Research						
OE	100	100	120	120	160	160
CE	50	50	60	60	80	80
Plant	10	10	20	20	30	30
TOTAL	160	160	200	200	270	270
TOTAL, Energy Supply Research and Development						
OE	3,000	3,000	3,800	3,800	5,000	5,000
CE	2,500	2,500	3,200	3,200	4,300	4,300
Plant	500	500	1,000	1,000	1,700	1,700
TOTAL	6,000	6,000	8,000	8,000	11,000	11,000
TOTAL, Office of Energy Research						
OE	5,000	5,000	6,000	6,000	8,000	8,000
CE	5,000	5,000	6,000	6,000	8,000	8,000

Plant	1,000	1,000	2,000	2,000	3,000	3,000
TOTAL	11,000	11,000	14,000	14,000	19,000	19,000

Figure II-9
Impact Summary of Activities Funded in Prior Years
(Page 2 of 2)

DOE-5100.3 FIELD BUDGET PROCESS

CHAPTER III

SPECIAL PURPOSE AND CROSSCUT MATERIALS

1. SPECIAL PURPOSE AND CROSSCUT MATERIALS. In addition to the preceding mainline justification materials, each laboratory or other field facility should prepare and submit the following Special Purpose and Crosscut Exhibits, as appropriate:

Figures		Primary Recipient
a.	Stores Inventory (Figure III-1)	DP
b.	Fuel Fabrication Costs Inventory (Figure III-2)	DP
c.	Analysis of Special Reactor Materials Inventory Transactions (Figure III-3)	DP
d.	Other Special Materials Inventory (Figure III-4)	DP
e.	Analysis of Isotopes Inventory Transactions (Figure III-5)	ER
f.	Safeguards and Security Estimates (Figure III-6)	DP
g.	Motor Vehicle and Aircraft Statement for FY 19BY (Figure III-7)	Budget
h.	Analysis of Operating Expenses by Program and Contractor for Cost of Work for Others and Revenues (Figure III-8)	Budget
i.	Reimbursable Work for Other Federal Agencies (Figure III-9)	Budget
j.	Field Office Requirements Funded by Departmental Administration (Figure III-10)	Budget
k.	Real Property Maintenance and Repair	MA-22
	(1) Budget Overview (Figures III-11a,	

III-11b, and III-11c)

(2) General Plant Projects (Figures III-11d and III-11e)

(3) General Plant Equipment (Figure III-11f)

2. STORES INVENTORY.

a. Figure III-1 provides for an estimate of year-end balances of stores inventory and the net change in inventory for each of the three fiscal years. Estimates of current use issues and a computation of the ratio of the current issues to ending inventory are also provided. Separate schedules for each contractor, field office, or multiprogram laboratory and a summary schedule for the field office shall be submitted. Data is to be presented by decision units within each organization component.

b. A gross total figure for line 1, inventory balance on hand at end of year, shall be reflected to include current-use, standby, and excess inventories. If amounts are not to be indicated for any of the stub items, `---' (not -0-) shall be placed in the appropriate fiscal year columns.

c. The schedule provides a three-way distribution of current-use inventory:

(1) For issues;

(2) Process spares; and

(3) Other - composed of stores work in process, returnable containers, and scrap.

d. Entries in columns 2, 3, 4, and 5 for line 1.d. (Less: allowances for loss) shall reflect the estimated allowance for losses at the end of each year, with a distribution of allowance for losses by current-use for issue, current-use process spares, standby, and excess. Any change shall be explained in the narrative justification.

e. If any significant portion of the inventory change between any of the four fiscal years is attributable to accounting adjustments, such as pickup of items not previously carried in inventory accounts, or changes in the allowance for losses not charged to current operating costs, the amount should be set forth as a

footnote entry on the schedule and explained in the accompanying narrative with a reference to the offsetting item reported as adjustments to prior year costs.

f. The net change in costs and GSO balances (lines 4.a. and 4.b.) during the year is computed by subtracting from the applicable net inventory balance at the end of that year the applicable net inventory balance at the end of the preceding year. Entries for budget authority (B/A), costs, and goods and services on order (GSO) are required in columns 2, 3, 4, and 5. The net change in costs (line 4.a.) plus the net change in goods and services on order (line 4.b.) must equal the net change in budget authority (line 4.c.).

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST

STORES INVENTORY

(In thousands of dollars)

Field Office or Laboratory		Contractor or DOE Office		
(1)	FY 19PY-1 (2)	FY 19PY (3)	FY 19CY (4)	FY 19BY (5)
1. Inventory on hand, September 30 (gross total) (Costs)	(140)	(185)	(100)	(150)
a. Current use:				
(1) For issue	75	100	50	90
(2) Process spares	25	35	25	20
(3) Other	25	35	10	25
Subtotal current use	125	170	85	135
b. Standby	10	10	10	10
c. Excess	5	5	5	5
d. Less: Allowances for loss:				
(1) Current-use for issue	10	15	10	10
(2) Current-use process spares	10	15	5	---
(3) Standby	10	15	---	10
(4) Excess	10	15	5	20
Subtotal allowances for loss	40	60	20	40
e. Net inventory on hand, September 30	100	125	80	110

2.	Inventory balance on order but not delivered (GSO)	150	175	100	140
3.	Total inventory balance (B/A) (line 1.e. plus line 2)	250	300	180	250
4.	Net change during year				
	a. Net change in Costs	50	45	-85	50
	b. Net change in goods & services on order (GSO)	50	25	-75	40
	c. Net change in budget authority (B/A)	100	70	-160	90
5.	Issues during year (from items in 1.a.(1))	750	800	800	700
6.	Ratio of current use issues to ending inventory (3 divided by 1.a.(1))	3.33	3.0	3.6	2.78

Figure III-1
Stores Inventory

3. FUEL FABRICATION COSTS INVENTORY

a. Figure III-2 provides for an estimate of year end balances of fuel fabrication costs inventory and the net inventory change during the three fiscal years for annual budget submissions. The field offices or laboratories having responsibility shall submit a summary schedule for each research and test reactor and a total summary schedule.

b. If amounts are not to be indicated for any of the stub items, `---' (not -0-) shall be placed in the appropriate fiscal year columns.

c. Issues, line 3.a., shall be the estimated transfer to program costs inventory during the fiscal year. Other removals, line 3.b., should include any other kind of a removal.

d. The inventory balance on hand at the end of the fiscal year is the sum of amounts of items 1 and 2 less amount of item 3.

e. The net change in costs and GSO balances (lines 7.a. and 7.b.) during the year is computed by subtracting from the applicable inventory balance at the end of that year the applicable inventory balance at the end of the preceding year. Entries for budget authority (B/A), costs, and goods and services on order (GSO) are required in columns 2, 3, 4, and 5. The net change in costs (line 7.a.) plus the net change in goods and services on order (line 7.b.) must equal the net change in budget authority (line 7.c.)

f. Narrative justifications shall accompany each schedule. A separate justification shall accompany the schedule for each reactor. Justifications shall include (1) significant reasons for net change during the year with particular reference to new, expanding, or declining programs (identified by amount applicable to each program); and (2) reason for any difference between FY 19CY and the amount included in the President's budget.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST

FUEL FABRICATION COSTS INVENTORY
(In thousands of dollars)

Field Office or Laboratory	Reactor			
	FY 19PY-1	FY 19PY	FY 19CY	FY 19BY
(1)	(2)	(3)	(4)	(5)
1. Inventory on hand, October 1 (Costs) (line 4 from previous year)	100	200	100	150
2. Acquisitions				
a. Purchase	400	300	400	550
b. Other	100	100	200	200
3. Removals				
a. Issues	350	450	500	650
b. Other	50	50	50	50
4. Inventory balance on hand, September 30 (Costs)	200	100	150	200
5. Inventory balance on order but not delivered (GSO)	50	25	50	50
6. Total inventory balance (B/A) (line 4 plus line 5)	250	125	200	250
7. Net change during year*				
a. Net change in costs	75	-100	75	50
b. Net change in goods and services on order (GSO)	100	-25	25	---
c. Net change in budget authority (B/A)	175	-125	100	50

* Show decreases with a minus (-)

Figure III-2
Fuel Fabrication Costs Inventory

4. ANALYSIS OF SPECIAL REACTOR MATERIALS INVENTORY TRANSACTIONS

a. Figure III-3 accounts for the change between the beginning and ending balance for each commodity in the inventory during the fiscal year, both in terms of dollar requirements and quantity. A separate schedule shall be submitted for each of the following kinds of commodities: beryllium, heavy water, zirconium, boron-10, and hafnium. This schedule is not required for secondary breakouts of these commodities. A summary schedule shall be submitted for the field offices or laboratories.

b. Where applicable, finished product should be broken down between that which is on hand and that on lease or loan but still retained in the inventory account. Work in Process for each kind of commodity should be reflected on line 1.c. (If there is no work in process for a particular kind of commodity, omit data in stub column item 1 and state: "No Work in Process.")

c. The net change in costs and goods and services on order (GSO) balances (lines 4.a. and 4.b.) during the year is computed by subtracting from the applicable inventory balance at the end of that year the applicable inventory balance at the end of the preceding year. Entries for budget authority (B/A), costs, and GSO are required in columns 2, 5, 8, and 11. The net change in costs (line 4.a.) plus the net change in goods and services on order (line 4.b.) must equal the net change in budget authority (line 4.c.). Non-fund costs included in special reactor materials inventories shall be excluded from this schedule in computing the net change during the year.

d. The inventory balances on October 1 for FY 19CY and FY 19BY as shown in columns 5, 8, and 11 on line 5.a. shall be the same amounts as shown for the end of the preceding year in columns 2, 5, and 8 on line 5.e., respectively.

e. In the "Unit Measure" column, show the actual unit measure applicable to the commodity, e.g., tons or pounds and the number of such units. In the "Unit Cost" column, indicate the unit used in computing the dollar value of the inventory, e.g., cost per ton or cost per pound.

f. Narrative justifications must be given for each basic commodity. Year-end inventories shall be justified in terms of the subsequent year's usage where applicable or otherwise explained. Wherever possible, supporting data such as core schedules should be included to identify usage. In all cases, significant changes in inventory levels between years shall be explained.

g. For each commodity, this schedule shall be footnoted to reflect commitments already under contract showing the quantities to be delivered (and related dollars) by fiscal year. Each contract shall identify the name of the contractor.

ANALYSIS OF SPECIAL REACTOR MATERIALS INVENTORY TRANSACTIONS

(In thousands of dollars)

Field Office or Laboratory _____ Commodity _____

Transaction	FY 19PY-1 Amount	FY 19PY Unit Measure	FY 19PY Unit Cost	FY 19PY Amount	FY 19CY Unit Measure	FY 19CY Unit Cost	FY 19CY Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Summary							
a. Finished product on hand (kind of commodity being reported)	100	10 1/	20 2/	200	10	20	200
b. Finished product on lease or loan	50	5	20	100	5	20	100
c. Work in process	10	1	20	20	1.25	20	25
d. Total inventory on hand September 30 (Costs)	160	16	20	320	16.25	20	325
2. Inventory balance on order but not delivered (GSO)	40	4	20	80	2.5	20	50
3. Total inventory balance (B/A) (line 1.d. plus line 2)	200	20	20	400	18.75	20	375
4. Net change during year*							
a. Net change in costs	50			160			5
b. Net change in goods & services on order (GSO)	50			40			-30
c. Net change in budget authority (B/A)	100			200			-25
5. Finished products							
a. Beginning inventory on hand October 1	100			100			100
b. Acquisitions:							
(1) Purchases (list vendors)	200			400			500
(2) Processing (list processors)	50			100			100
(3) From other DOE locations (list locations)	50			100			100

Subtotal	400	700	800
c. Removals:			
(1) Issues (list projects to which issued)	250	500	400
(2) Disposals (indicate nature of disposal)	25	50	50
(3) To other DOE locations (list locations)	25	50	50
Subtotal	300	600	600
d. Adjustment (describe)	---	---	---
e. Balance, September 30 (line 1.a., above)	100	100	200

Transaction	FY 19BY Unit Measure	FY 19BY Unit Cost	FY 19BY Amount
(1)	(9)	(10)	(11)
1. Summary			
a. Finished product on hand (kind of commodity being reported)	7.5	20	150
b. Finished product on lease or loan	5.0	20	100
c. Work in process	2.5	20	50
d. Total inventory on hand September 30 (Costs)	15.0	20	300
2. Inventory balance on order but not delivered (GSO)	3	20	60
3. Total inventory balance (B/A) (line 1.d. plus line 2)	18	20	360
4. Net change during year*			
a. Net change in costs			-25
b. Net change in goods & services on order (GSO)			10
c. Net change in budget authority (B/A)			-15
5. Finished products			
a. Beginning inventory on hand October 1			200
b. Acquisitions:			
(1) Purchases (list vendors)			400
(2) Processing (list processors)			50
(3) From other DOE locations			100

	(list locations)	
	Subtotal	750
c.	Removals:	
	(1) Issues (list projects to which issued)	625
	(2) Disposals (indicate nature of disposal)	50
	(3) To other DOE locations (list locations)	50
	Subtotal	725
d.	Adjustment (describe)	---
e.	Balance, September 30 (line 1.a., above)	25

*Show decreases with a Minus (-).

1/ Footnote or indicate the unit of measure.
2/ Indicates the cost per unit.

Figure III-3
Analysis of Special Reactor Materials Inventory Transactions

5. OTHER SPECIAL MATERIALS INVENTORY

a. Figure III-4 is a summary of other special materials inventories by commodity for the field office, energy technology center, or laboratory. Schedules are not required for each contractor.

b. The stub columns shall show only those commodities for which there is an entry, i.e., balances or changes, during any of the four fiscal years involved in the budget submission.

c. The net change in costs and GSO balances (lines 4.a. and 4.b.) during the year is computed by summarizing the amounts obtained by subtracting from the applicable inventory balance at the end of that year the applicable inventory balance at the end of the preceding year. Entries for both budget authority (B/A) and costs are required in columns 2, 3, 4, and 5. The net change in costs (line 4.a.) plus the net change in goods and services on order (line 4.b.) must equal the net change in budget authority (line 4.c.). Non-fund costs included in other special materials inventories shall be excluded for this schedule in computing the net change during the year.

d. A narrative justification shall identify significant changes by contractor by field office, energy technology center, or multiprogram laboratory, and commodity for the FY 19BY. The justification may lead off with a tabular presentation of the changes for each commodity by contractor or by field office or energy technology center, or multiprogram laboratory, followed by narrative justification of the changes, with particular reference to new, expanding, or declining programs (identified by amount applicable to each program). The relationship of special material inventory requirements to operating levels and problems shall be clearly stated.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST

OTHER SPECIAL MATERIALS INVENTORY

(In thousands of dollars)

Field Office or Laboratory

(1)	FY 19PY-1 (2)	FY 19PY (3)	FY 19CY (4)	FY 19BY (5)
1. Inventory balance on hand, September 30 (Costs)				
a. Radium	10	20	30	40
b. Gold	---	---	---	40
c. Silver	10	20	30	40
d. Platinum	10	20	30	40
e. Palladium	10	20	30	40
f. Barrier items	10	20	30	40
Subtotal	50	100	150	240
g. Other (list)	10	10	20	40
Subtotal, inventory balance on hand	60	110	170	280
2. Inventory balance on order but not delivered (GSO)				
a. Radium	5	---	5	10
b. Gold	5	5	5	10
c. Silver	5	5	5	10
d. Platinum	---	5	5	10
e. Palladium	---	5	5	10
f. Barrier items	5	5	5	10
g. Other (list)	---	5	5	10

Subtotal inventory balance on order but not delivered	20	30	35	70
3. Total inventory balance (B/A)	80	140	205	350
4. Net change during year*				
a. Net change in Costs	10	60	60	110
b. Net change in goods and services on order (GSO)	20	10	5	35
c. Net change in budget authority (B/A)	30	70	65	145

*Show decrease with a minus (-).

Figure III-4
Other Special Materials Inventory

6. ANALYSIS OF ISOTOPES INVENTORY TRANSACTIONS

a. Figure III-5 accounts for the change between the beginning and ending balances for each type of isotope. A separate schedule shall be prepared for radio-isotopes and stable isotopes.

b. Where applicable, finished product should be broken down between that which was on hand and that on lease or loan but still retained in the inventory account.

c. The inventory balances on October 1 for FY 19CY and FY 19BY as shown in columns 3, 4, and 5 opposite item 5.a. shall be the same amounts as shown for the end of the preceding year in columns 2, 3, and 4 opposite item 5.e. respectively.

d. The amount reported opposite item 5.b.(1) "Production" should exclude "Transfers from Other Locations". The latter should be reported opposite item 5.b.(3).

e. The net change in costs and GS0 balances (lines 4.a. and 4.b.) during a year shall be computed by subtracting the applicable inventory balance at the end of the preceding year from the applicable inventory balance at the end of the year for which the change is computed. Non-fund costs included in isotope inventories shall be excluded from this schedule in computing the net change during the year. Entries for both budget authority (B/A) and costs are required in columns 2, 3, 4, and 5. The net change in costs (line 4.a) plus the net change in goods and services on order (line 4.b.) must equal the net change in budget authority (line 4.c.).

f. A narrative justification shall explain the change in year-end balances in terms of specific isotopes where the amount of the change is significant, e.g., Sr-90 or C-14. Significant variations between years in the estimates for the various transactions shall be explained.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST

ANALYSIS OF ISOTOPES INVENTORY TRANSACTIONS

(In thousands of dollars)

Field Office or Laboratory	Type of Isotope			
	FY 19PY-1	FY 19PY	FY 19CY	FY 19BY
(1)	(2)	(3)	(4)	(5)
1. Summary				
a. Finished product on hand	100	150	200	200
b. Finished product on lease on loan	100	50	50	50
c. Work	25	50	25	50
Subtotal inventory on hand, September 30 (Costs)	225	250	275	300
2. Inventory balance on order but not delivered (GSO)	25	50	75	100
3. Total inventory balance (B/A)	250	300	350	400
4. Net change during year*				
a. Net change in costs	50	25	25	25
b. Net change in goods and services on order (GSO)	25	25	25	25
c. Net change in budget authority (B/A)	75	50	50	50
5. Finished products				
a. Beginning inventory on hand October 1	200	150	200	200
b. Acquisitions:				
(1) Production	500	600	800	850
(2) Transfer from research	200	250	200	300
(3) Transfer from other locations (Oak Ridge National Laboratory)	50	50	100	75
(4) Other (purchased from ONL)	50	50	100	75
Subtotal	1,000	1,100	1,400	1,500
c. Removals:				

(1)	Sales to outside organizations	600	700	900	1,000
(2)	Issues to DOE activities	150	100	150	150
(3)	Transfers to other locations	80	100	150	100
	Subtotal	830	900	1,200	1,250
d.	Adjustments	-20	---	---	---
e.	Balance, September 30 (to line 1.a. above)	150	200	200	250

*Show decrease with a minus (-).

Figure III-5
Analysis of Isotopes Inventory Transactions

7. SAFEGUARDS AND SECURITY ESTIMATES.

a. Purpose. To provide total safeguards and security budgetary information for all DOE programs which protect classified information, nuclear weapons, nuclear materials, and DOE facilities against theft and sabotage. Included are the DOE's safeguards and security activities associated with the research, development, and production of nuclear weapons and special nuclear materials other critical U.S. energy resources; and international nonproliferation. This information allows a systematic overview and evaluation of safeguards and security at all DOE facilities.

b. Guidance For Completing These Figures.

(1) All safeguards and security budgetary information should be allocated to operating, capital equipment, or construction (Figure III-6a). Budget authority and budget outlays for each of 3 years are needed (19PY, 19CY, and 19BY).

(2) As part of Figure III-6a, indicate the percentage of the safeguards and security funding at each location that deals with the protection of nuclear weapons and special nuclear materials.

(3) A financial schedule for all safeguards and security construction projects should be provided in Figure III-6b, Part A.

(4) In Figure III-6b, Part B, general plant projects should show, for comparison purposes, the obligations and costs incurred for

similar work in the 2 preceding years.

(5) Copies of current Schedules 44, Construction Project Data Sheets, should be provided as backup.

c. Descriptions Of Safeguards And Security Activities.

(1) Research and Development. Includes research and development for safeguards and security activities outlined in paragraph 1c(2) through 1c(6).

(a) Analysis and evaluation of existing systems, and development of improved or new systems.

(b) Improved or new research and development technology.

(c) Test and demonstration of prototype equipment and systems in the operating environment.

(d) Provision of expert field assistance in the implementation of proven systems and equipment.

(e) Work accomplished in support of international nonproliferation activities.

(2) Facility Security for Special Nuclear Materials Classified Matter and Property. Protection of DOE Headquarters and field, operations, area offices, and contractor sites against sabotage, unauthorized entry and exit (except for those activities reported under Nuclear Control and Accountability), damage, destruction or theft of property or classified matter. (Replaces previous "plant protection").

(3) Communications.

(a) Communication systems for monitoring DOE-owned materials/ property.

(b) Systems for monitoring shipments of DOE-owned material (special nuclear materials and other) when integrated with secure transportation facilities below.

(c) Voice or digital communications between vehicles.

(d) Escorts, central stations, and local law enforcement

agencies.

(e) Other safeguards and security communications equipment and devices installed and operational within and between DOE fixed sites.

(4) Transportation. Transportation of weapons, components, special nuclear materials and other materials, DOE-owned nuclear materials.

(5) Nuclear Material Control and Accountability.

(a) Exit monitoring of personnel, packages, and vehicles to detect covert special nuclear materials removal.

(b) Escorts, tamper-indicating seals, and administrative controls to monitor authorized special nuclear materials removals.

(c) Instrumentation and stationary special nuclear materials detectors, hand-held portable detector equipment and additional personnel as necessary.

(d) Accountability systems for supervised control and accountancy based on measurement or validation of prior measurement of all nuclear material flows and inventories.

(e) Provisions for or modifications to provide substructure material balance areas and consequent process control equipment and instrumentation.

(f) Custodians for material balance areas and storage vaults.

(g) Assay instrumentation and selected internal controls for batch by batch and shift by shift control of material to provide timely nuclear material alarm capability along previously identified diversion paths.

(6) Emergency Response and Recovery Capability.

(a) Detection and recovery of special nuclear materials, weapons components, precious metals, or other items of national security interest, which have been lost or stolen.

(b) Methods for detecting and locating lost material, provision for standby instruments (portable, vehicle mounted, airborne, etc.) recovery teams, and contingency plans for organizing and conducting a recovery action.

(c) Exercises conducted as part of contingency planning.

(7) Program Direction. Safeguards and security staffing for Departmental organizations.

(8) Security Investigations. Information is to be provided by the Headquarters Office of Safeguards and Security (DP-34) only. All other programs should indicate a "zero" for this activity.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
SAFEGUARDS AND SECURITY ESTIMATES
APPROPRIATION NAME
MAJOR CATEGORY TITLE
19BY ESTIMATES
(In thousands of dollars)

Organization: _____

(Insert Name of Contractor, Field or Headquarters location as applicable in each column)

	B/A	B/O	B/A	B/O	B/A	B/O
Operating:						
Research and Development	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300
Facility Security	100	100	100	100	100	100
Communications	50	50	50	50	50	50
Transportation	50	50	50	50	50	50
Nuclear Material Control and Accountability	25	25	25	25	25	25
Emergency Response and Recovery	25	25	25	25	25	25
Program Direction	20	20	20	20	20	20
Security Investigations	15	15	15	15	15	15
Total	585	585	585	585	585	585
Capital Equipment:						
Research and Development	100	100	100	100	100	100
Facility Security	30	30	30	30	30	30
Communications	15	15	15	15	15	15
Transportation	15	15	15	15	15	15
Nuclear Material Control and Accountability	10	10	10	10	10	10

Emergency Response and Recovery	10	10	10	10	10	10
Program Direction	20	20	20	20	20	20
Security Investigations	15	15	15	15	15	15
Total	215	215	215	215	215	215
Construction:						
Research and Development	200	200	200	200	200	200
Facility Security	70	70	70	70	70	70
Communications	35	35	35	35	35	35
Transportation	35	35	35	35	35	35
Nuclear Material Control and Accountability	15	15	15	15	15	15
Emergency Response and Recovery	20	20	20	20	20	20
Program Direction	20	20	20	20	20	20
Security Investigations	15	15	15	15	15	15
Total 1/	410	410	410	410	410	410
Subtotals:						
Research and Development	600	600	600	600	600	600
Facility Security	200	200	200	200	200	200
Communications	100	100	100	100	100	100
Transportation	100	100	100	100	100	100
Nuclear Material Control and Accountability	50	50	50	50	50	50
Emergency Response and Recovery	55	55	55	55	55	55
Program Direction	60	60	60	60	60	60
Security Investigations	45	45	45	45	45	45
Total	$1,210	$1,210	$1,210	$1,210	$1,210	$1,210
% of work dealing with SNM and nuclear weapons	35%		35%		35%	

1/ Identify in summary dollar amounts allocated to GPP.

	B/A	B/O	B/A	B/O
Operating:				
Research and Development	$ 300	$ 300	$ 300	$ 300
Facility Security	100	100	100	100
Communications	50	50	50	50
Transportation	50	50	50	50
Nuclear Material Control and Accountability	25	25	25	25
Emergency Response and Recovery	25	25	25	25
Program Direction	20	20	20	20
Security Investigations	15	15	15	15

Total	585	585	585	585
Capital Equipment:				
Research and Development	100	100	100	100
Facility Security	30	30	30	30
Communications	15	15	15	15
Transportation	15	15	15	15
Nuclear Material Control and Accountability	10	10	10	10
Emergency Response and Recovery	10	10	10	10
Program Direction	20	20	20	20
Security Investigations	15	15	15	15
Total	215	215	215	215
Construction:				
Research and Development	200	200	200	200
Facility Security	70	70	70	70
Communications	35	35	35	35
Transportation	35	35	35	35
Nuclear Material Control and Accountability	15	15	15	15
Emergency Response and Recovery	20	20	20	20
Program Direction	20	20	20	20
Security Investigations	15	15	15	15
Total 1/	410	410	410	410
Subtotals:				
Research and Development	600	600	600	600
Facility Security	200	200	200	200
Communications	100	100	100	100
Transportation	100	100	100	100
Nuclear Material Control and Accountability	50	50	50	50
Emergency Response and Recovery	55	55	55	55
Program Direction	60	60	60	60
Security Investigations	45	45	45	45
Total	$1,210	$1,210	$1,210	$1,210
% of work dealing with SNM and nuclear weapons	35%		35%	
1/ Identify in summary dollar amounts allocated to GPP.				

Figure III-6a
Safeguards and Security Estimates

SAFEGUARDS AND SECURITY ESTIMATES
CONSTRUCTION PROJECTS AND SUBPROJECTS
(In thousands of dollars)

PART A

Project No.	Title	TEC	Fiscal Year	Auth	App	Oblig	Cost
BY-D-101	Weapons Prod. Fac.	20,000	19BY	10,000	5,000	5,000	1,500
			19BY+1	---	3,000	3,000	4,000
			19BY+2	---	2,000	2,000	3,500
			After 19BY+2	10,000	10,000	10,000	11,000

(Continue for each applicable project)

General Plant Projects

PART B

Project No.	Title	TEC	Fiscal Year	Auth	App	Oblig	Cost
BY-R-201	Safeguards Facility-LLL	2,500	19BY	2,500	1,000	1,000	---
			19BY+1	---	1,500	1,000	1,200
			19BY+2	---	---	500	1,000
			After 19BY+2	---	---	---	300

Figure III-6b
Safeguards and Security Estimates --
Construction Projects and Subprojects

8. MOTOR VEHICLE AND AIRCRAFT STATEMENT FOR FY 19BY.

a. Figure III-7 prepared for the budget year only, provides information relating to the cost of purchase and hire of motor vehicles and aircraft. Consolidated schedules for each appropriation shall be prepared for each field office, including its contractors, for whom Government vehicles or aircraft will be purchased or Government funds utilized for the term of hire of motor vehicles (60 days or more) or aircraft (30 days or more).

b. The number of passenger vehicles (sedans, station wagons, ambulances and buses) to be acquired is dependent on the number authorized by specific Congressional approval in the appropriation act language. The price which may be paid for sedans and station wagons should not exceed the current statutory limitation. However, police-type and special heavy-duty vehicles may exceed this limitation up to a specified amount. The existing statutory limitation may be confirmed by the Property and Equipment Management Division (MA-422). Estimates included in this schedule for the factory cost

of sedans, station wagons, police-type vehicles and special heavy-duty vehicles shall not exceed the dollar limitation stated above except that the cost of additional systems or equipment on sedans and station wagons necessary to be completely equipped for operation shall be reflected in the estimate. Freight or transportation costs incident to the acquisition of such vehicles shall not be included in the estimate.

c. Estimates to be included in this schedule shall be indicated for the following types of motor vehicles and aircraft:

(1) Motor vehicles

(a) Passenger Vehicles.
Sedans including police-type
Station wagons including police-type
Ambulances
Buses

(b) Trucks.
Light capacity under 8,500 pounds gross vehicle weight, 4X2. Light capacity under 8,500 pounds gross vehicle weight, 4X4. Medium capacity 8,500 to 23,999 pounds gross vehicle weight. Heavy capacity 24,000 pounds gross vehicle weight and over.

(c) Special Purpose Vehicles.
Include trucks with permanently mounted equipment, such as mobile cranes, air compressors, wreckers, fire trucks, line service, and special tank trucks, motorcycles, motor scooters, electric and hybrid powered vehicles and military vehicles described in FPMR 101-38.001-3.

(2) Trailers. Includes trailers and semi-trailers, but does not include truck tractors which should be included under trucks.

(3) Aircraft. Includes helicopters, single-engine and multi-engine aircraft.

d. The number of police-type vehicles to be acquired as additions and/or replacements should be included with the appropriate vehicle type and identified with a footnote on the statement.

e. Vehicles or aircraft to be purchased in the budget year must be identified in columns 2 through 5. In the case of passenger

vehicles and aircraft the term "purchased" includes transfers from other agencies with or without reimbursement.

(1) Enter in column 2 the number of additions to the fleet.

(2) Enter in column 3 the number of replacements to the fleet. This number must be less than or equal to the number in column 10, Total Replacements.

(3) Enter in column 4 the total of columns 2 and 3.

(4) Enter in column 5 the factory cost to purchase the vehicles or aircraft. Note the statutory limitations for passenger vehicles addressed in Note 2 above.

f. Old vehicles to be replaced must meet the replacement standards in FPMR 101-38.9. Since DOE standards have not been established for aircraft, all planned replacements shall be fully explained and justified in the narrative. Vehicles to be disposed of as excess surplus or by transfer, shall not be included in the number to be replaced but shall be indicated by type in a footnote.

(1) Enter in column 6 the number of vehicles to be replaced because they meet the age replacement standard only.

(2) Enter in column 7 the number of vehicles to be replaced because they meet the mileage standard only.

(3) Enter in column 8 the number of vehicles to be replaced that meet both the age and mileage standards.

(4) Enter in column 9 the number of vehicles to be replaced for other reasons (wrecked or damaged beyond economical repair).

(5) Enter in column 10 the total of columns 6 through 9.

(6) Enter in column 11 the total estimated allowance to be received from the replaced vehicles or aircraft. In computing estimates for exchange allowances, the best estimate based on sales experience and local market conditions shall be used.

g. In column 12, net cost, enter the results computed by deducting the estimated allowance (column 11) from the factory cost (column 5).

h. The estimated cost of hire of motor vehicles and aircraft for term periods shall be entered in columns 13, 14, and 15. In column 13 enter the estimated amount of reimbursement to the General Services Administration for rental of vehicles from Interagency Motor Pools. In column 14 enter the estimated cost of motor vehicles (60 days or longer) and aircraft (30 days or longer) to be hired from commercial sources. Enter the total of columns 13 and 14 in column 15.

i. A detailed narrative justification shall be submitted with each schedule, and shall include:

(1) Motor Vehicles.

(a) A justification as why vehicles are being replaced. Include a comment on the age and mileage standards for replacement and the economics justifying replacement. Vehicles that do not meet the age or mileage standards for replacement should be justified separately from those which do meet the standards.

(b) Full justification of the need for additional vehicles over and above the number for replacement only. Include an explanation of the program, project or purpose for which any additional passenger vehicles are being acquired, and identify why these requirements cannot be met with the redeployment of existing fleet resources.

(c) Justification of the need for police-type vehicles with identification by number and type.

(2) Aircraft.

(a) Full justification for any additional aircraft and the circumstances requiring the replacement of aircraft. Include economics.

(b) The need for the hire of aircraft (particularly term lease) with an estimate of the cost of hire. Include economics.

j. In addition to the copies submitted to the Office of Budget, one copy of each Motor Vehicle and Aircraft Statement should be provided under separate cover to the Property and Equipment Management Division (MA-422).

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
DOE FIELD ORGANIZATION
APPROPRIATION
MOTOR VEHICLE AND AIRCRAFT STATEMENT FOR FY 19BY
(In thousands of dollars)

	To Be Purchased				Old Vehicles To Be Replaced					
Type (1)	Addns. (2)	Replmt (3)	Total (4)	Factory Cost (5)	Age (6)	Miles (7)	Age & Miles (8)	Other (9)	Total (10)	Total Allowance (11)
Sedans	1	2	3	21	6	60	2	---	2	-1
Station Wagons	1	---	1	10						
Ambulances										
Buses										
Pass. Vehicle Subtotal	2	2	4	31						-1
Light Trucks 4 X 2	1	2	3	30	8	75	2		2	-1
Light Trucks 4 X 4	1	2	3	45	8	75	2		2	-2
Medium Trucks	1	2	3	60	8	75	1	1	2	-5
Heavy Trucks	1	2	3	90	8	75	2		2	-10
Trucks Subtotal	4	8	12	225						-18
Spec. Purpose Vehicles										
Trailers										
Aircraft	1		1	100						
Total	7	10	17	356						-19

Type (1)	Net Cost (12)	Cost of Hire GSA Pools (13)	Cost of Hire Commerical Sources (14)	Cost of Hire Total (15)
Sedans	20	---	---	---
Station Wagons	10	---	---	
Ambulances				
Buses				
Pass. Vehicle Subtotal	30	---	---	---
Light Trucks 4 X 2	29	---	---	---
Light Trucks 4 X 4	43	---	---	---
Medium Trucks	55	---	---	---
Heavy Trucks	80	---	---	---
Trucks Subtotal	207	---	---	---
Spec. Purpose Vehicles				
Trailers				
Aircraft	100	---	---	---
Total	337	---	---	---
NOTE: Narrative Justification Must Be Provided.				

Figure III-7
Motor Vehicle and Aircraft Statement for FY 19BY

9. COST OF WORK FOR OTHERS AND REVENUES.

a. Figure 8 provides the basic data required to formulate the FY 19BY Budget submission for the Cost of Work for Others and Revenue Programs. A separate schedule should be prepared for Cost of Work and Revenues. Additionally, schedules should be submitted by individual Operations Office and Laboratory, as appropriate.

b. Column (1) should show the Budget and Reporting (B&R) classification.

c. Column (2) should identify all Cost of Work for Others, or Revenues, as appropriate, to the lowest possible B&R classification and contractors involved.

d. Column (3) should show the FY 19PY appropriation.

e. Column (4) should show original FY 19BY budget request as submitted in the previous Field Budget submission.

f. Column (5) should show the latest revised FY 19CY budget estimates, if appropriate.

g. All revised estimates for FY 19CY should be explained (in bullet format) as changes from the FY 19CY President's Budget to FY 19CY Revised Request. (See Narrative Justification)

h. Column (6) represents the FY 19BY estimate. Estimates are to be fully explained and justified (in bullet format) in the Narrative Justification.

i. Column (7) should show the Assistant Secretary and appropriate program associated with the particular activity.

j. For the Revenue schedule, the two sub-headings below columns 3 thru 6 should reflect revenues earned (revenues associated with the amount of cost of work that is requested for a particular year) and revenues collected (revenues expected to be collected and deposited in the special fund). If any collections should carry forth into the next fiscal year, this should be reflected on the revenue schedule and explained in the narrative justification.

k. For the Revenue schedule, show percentages used for the added factor, and depreciation. If the added factor is to be waived, provide justification as to why.

l. Narrative Justification:

(1) Summary of Changes from FY 19CY President's Budget to FY 19CY Revised Request:

(2) Summary of Changes from FY 19CY Revised Request to FY 19BY Request:

(3) Explanation of the FY 19BY Estimates:

(4) Explanation of Added Factors and Depreciation:

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
COST OF WORK FOR OTHERS
ANALYSIS OF OPERATING EXPENSES
(Dollars in Thousands)

Operations Office: Kansas City Operations Office
Lab/Facility: Lawrence National Laboratory

B&R	Activity	FY 19PY Orig. Request	FY 19CY President's Budget	FY 19CY Revised Request	FY 19BY Request	Assistant Secretary & Program
(1)	(2)	(3)	(4)	(5)	(6)	(7)
WN-01	Products Sold:					
0102	Nuclear Reactor Material:					
	- Heavy Water	$ 3,033	$ --	$ --	$ --	DP - XXX
0103	Radioisotopes	4,773	5,367	5,175	5,175	ER - XXX
0104	Stable Isotopes	2,694	2,682	1,685	1,685	ER - XXX
0105	Handling Charges:					
	- Radioisotopes	208	230	210	210	ER - XXX
	- Stable Isotopes	76	83	38	38	ER - XXX
0119	Miscellaneous Products:					
	- U.S. Forrest Service	2,040	2,245	3,250	3,250	DP - XXX
	- United Kingdom	3,600	2,000	1,000	1,000	CE - XXX
Subtotal, Products Sold		$16,424	$12,607	$10,358	$10,358	
WN-02	Services Performed:					
0202	Use of DOE-owned Facilities and Equipment:					
	- SERI	$ --	$ 1,404	$ 1,404	$ 2,000	CE - XXX
	- University of California	3,000	3,200	3,200	3,200	ER - XXX
0203	Irradiation Services and Test Reactor Experiments:					
	- General Electric	1,010	1,200	1,200	1,200	DP - XXX
	- Ontario Hydro	290	--	--	--	
0205	Security Investigations	6	6	6	6	
0206	Special Services and Fabrication:					
	- Tetra Tech	400	--	--	--	ER - XXX
	- EPRI	500	600	600	600	NE - XXX
0207	Research for Protection of Public Health & Safety:					

- EPRI	5,000	3,000	1,050	1,050	NE - XXX
- Gas Research Institute	485	176	478	478	NE - XXX
0219 Miscellaneous Services:					
- REECo	2,037	1,129	1,129	2,200	DP - XXX
- Hot Dry Rock					
-- Japan	2,500	2,500	2,276	2,286	CE - XXX
-- Germany	2,500	2,500	2,276	2,275	CE - XXX
- University of Tokyo	600	900	900	900	ER - XXX
Subtotal, Services Performed	$18,328	$16,615	$14,519	$16,186	
TOTAL, COST OF WORK FOR OTHERS	$34,752	$29,222	$24,877	$26,544	

Figure III-8
Analysis of Operating Expenses by Program and Contractor for Cost of Work for Others and Revenues
(Page 1 of 4)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
COST OF WORK FOR OTHERS
ANALYSIS OF OPERATING EXPENSES
(Dollars in Thousands)

Operations Office: Kansas City Operations Office
Lab/Facility: Lawrence National Laboratory

NARRATIVE JUSTIFICATION:

Summary Of Changes From FY 19CY President's Budget To FY 19CY Revised Request:

- WN-0103 Reduction of Sr-90 radioisotope due to decline in demand by U.S. private-sector ($-191,000).
- WN-0104 Reduction of EM stable isotope due to decline in medical research items ($-1,000,000).
- WN-0105 Associated reduction of handling charges ($-65,000).
- WN-0119 Increase in timber sales to the US Forest Service due to new contract with DuPont plant long-needle pines ($+85,000) and for road repairs ($+145,000).
- WN-0119 Decrease in weapons to the United Kingdom ($-1,000,000).
- WN-0207 Cancellation of contract with EPRI for the research of In-reactor Source Term Experiments ($-1,950,000).
- WN-0207 Reflects new contract with the Gas Research Institute for Installation of Gas Transmission Pipeline ($+302,000).

o WN-0219 Decrease in the Hot Dry Rock at Japan ($-224,000) and Germany ($-224,000).

Summary Of Changes From FY 19CY Revised Request to FY 19BY Request:

o WN-0202 Increase at SERI for research related to Renewable Energy ($+596,000).

o WN-0219 Increase is a result of additional R&D for the United Kingdom on the ARMADA II event ($+1,071,000).

Explanation of the FY 19BY Estimates:

o Brief explanation of activities describing type of work being performed, research services, products sold, contractors, to whom work is being provided for (foreign, domestic) etc.

o Any new or cancellation of projects or contracts expected should be included in explanation.

Figure III-8
Analysis of Operating Expenses by Program and Contractor for Cost of Work for Others and Revenues
(Page 2 of 4)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REVENUES
ANALYSIS OF OPERATING EXPENSES
(Dollars in Thousands)

Operations Office: Kansas City Operations Office
Lab/Facility: Lawrence National Laboratory

		FY 19PY		FY 19CY			
		Original Request		President's Budget		Revised Request	
B&R	Activity	Earned	Collection	Earned	Collection	Earned	Collection
(1)	(2)	(3)		(4)		(5)	
Revenues Associated with Cost of Work:							
ZN-01	Product Sold:						
0102	Nuclear Reactor Material:						
	- Heavy Water	$ 7,240	$ 7,240	$ --	$ --	$ --	$ --
0103	Radioisotopes	5,198	5,099	5,878	5,978	5,687	5,787
0104	Stable Isotopes	2,875	2,775	2,842	2,942	2,742	2,842

0105 Handling Charges:						
- Radioisotopes	240	235	365	370	245	250
- Stable Isotopes	--	--	--	--	--	--
0119 Miscellaneous Products:						
- U.S. Forrest Service	2,040	2,041	2,245	2,245	2,245	2,245
- United Kingdom	6,800	6,800	4,000	4,000	2,000	2,000
Subtotal, Products Sold	$24,393	$24,190	$15,330	$15,535	$12,919	$13,124
ZN-02 Services Performed:						
0202 Use of DOE-owned Facilities and Equipment:						
- SERI	$ --	$ --	$ 1,404	$ 1,404	$ 1,404	$ 1,404
- University of California	3,010	3,010	3,220	3,220	3,220	3,220
0203 Irradiation Services and Test Reactor Experiments:						
- General Electric	1,240	1,200	1,475	2,675	1,475	2,675
- Ontario Hydro	290	200	--	90	--	90
0205 Security Investigations	6	6	6	6	6	6
0206 Special Services and Fabrication:						
- Tetra Tech	400	400	--	--	--	--
- EPRI	500	450	600	650	600	650
0207 Research for Protection of Public Health & Safety:						
- EPRI	5,000	5,000	3,000	3,000	1,050	1,050
- Gas Research Institute	485	485	176	176	478	478
0219 Miscellaneous Services:						
- REECo	4,574	4,574	4,209	4,209	4,209	4,209
- Hot Dry Rock:						
-- Japan	2,500	2,000	2,500	3,000	2,276	2,776
-- Germany	2,500	2,500	2,500	2,500	2,276	2,276
- University of Tokyo	600	500	900	1,000	900	1,000
Subtotal, Services Performed	$21,105	$20,325	$19,990	$21,930	$17,894	$19,834

		FY 19BY Request		
B&R	Activity	Earned	Collection	Assistant Secretary & Program
(1)	(2)	(6)		(7)

Revenues Associated with Cost of Work:			
ZN-01 Product Sold:			
0102 Nuclear Reactor Material:			
- Heavy Water	$ --	$ --	DP - XXX
0103 Radioisotopes	5,475	5,475	ER - XXX
0104 Stable Isotopes	2,750	2,750	ER - XXX
0105 Handling Charges:			
- Radioisotopes	245	245	ER - XXX
- Stable Isotopes	--	--	ER - XXX
0119 Miscellaneous Products:			
- U.S. Forrest Service	3,250	3,200	DP - XXX
- United Kingdom	2,000	2,000	CE - XXX
Subtotal, Products Sold	$13,720	$13,670	
ZN-02 Services Performed:			
0202 Use of DOE-owned Facilities and Equipment:			
- SERI	$ 2,000	$ 2,000	CE - XXX
- University of California	3,220	3,220	ER - XXX
0203 Irradiation Services and Test Reactor Experiments:			
- General Electric	1,400	1,400	DP - XXX
- Ontario Hydro	--	--	
0205 Security Investigations	6	6	DP - XXX
0206 Special Services and Fabrication:			
- Tetra Tech	--	--	ER - XXX
- EPRI	650	650	NE - XXX
0207 Research for Protection of Public Health & Safety:			
- EPRI	1,050	1,050	NE - XXX
- Gas Research Institute	478	478	NE - XXX
0219 Miscellaneous Services:			
- REECo	8,850	8,850	DP - XXX
- Hot Dry Rock:			
-- Japan	2,276	2,276	NE - XXX
-- Germany	2,276	2,276	CE - XXX
- University of Tokyo	900	900	
Subtotal, Services Performed	$23,106	$23,106	

Figure III-8
Analysis of Operating Expenses by Program and Contractor for
Cost of Work for Others and Revenues
(Page 3 of 4)

(Dollars in Thousands)

Operations Office: Kansas City Operations Office
Lab/Facility: Lawrence National Laboratory

B&R	Activity	FY 19PY Original Earned	FY 19PY Request Collection	FY 19CY President's Budget Earned	FY 19CY President's Budget Collection	FY 19CY Revised Earned	FY 19CY Revised Request Collection
(1)	(2)	(3)		(4)		(5)	
	Revenues Not Associated with Cost of Work:						
ZN-06	Nuclear Materials:						
0601	- Nuclear Materials Consumed (Navy)	$ 4,200	$ 4,000	$ 7,700	$ 7,900	$ 7,700	$ 7,900
ZN-07	Other Nuclear Material	400	400	500	500	500	500
ZN-08	Lease of Material	50	50	50	50	50	50
ZN-09	Recovery of Nuclear Material:						
	- (Navy Department)	3,500	3,000	4,300	4,800	4,000	4,500
	- (DuPont)	2,405	2,400	2,400	2,405	2,400	2,405
ZN-19	Miscellaneous:						
1903	- Lease of Uranium Bearing Land	--	--	500	500	450	450
1906	- Sale of Reactor Steam	5,800	3,500	7,000	9,300	5,800	8,100
Subtotal,	Revenues Not Associated with Cost of Work	$16,355	$13,350	$22,450	$25,455	$20,900	$23,905
TOTAL,	REVENUES	$61,854	$57,865	$57,770	$62,920	$51,713	$56,863

B&R	Activity	FY 19BY Request Earned	FY 19BY Request Collection	Assistant Secretary & Program
(1)	(2)	(6)		(7)
	Revenues Not Associated with Cost of Work:			
ZN-06	Nuclear Materials:			
0601	- Nuclear Materials Consumed (Navy)	$ 5,020	$ 4,870	DP - XXX
ZN-07	Other Nuclear Material	250	250	NE - XXX
ZN-08	Lease of Material	50	50	DP - XXX
ZN-09	Recovery of Nuclear Material:			
	- (Navy Department)	4,000	2,500	DP - XXX

	- (DuPont)	2,400	2,400	DP - XXX
ZN-19	Miscellaneous:			
1903	- Lease of Uranium Bearing Land	50	50	NE - XXX
1906	- Sale of Reactor Steam	5,810	3,500	DP - XXX
Subtotal, Revenues Not Associated with Cost of Work		$17,580	$13,620	
TOTAL, REVENUES		$54,406	$50,396	

NARRATIVE JUSTIFICATION:

Summary Of Changes From FY 19CY President's Budget To FY 19CY Revised

Request:

- ZN-0103 Reduction of Sr-90 radioisotope due to decline in demand by U.S. private-sector ($-191,000).
- ZN-0104 Reduction of EM stable isotope due to decline in medical research items ($-1,000,000).
- ZN-0105 Associated reduction of handling charges ($-65,000).
- ZN-0119 Increase in timber sales to the US Forest Service due to new contract with DuPont to plant long-needle pines (+860,000) and for road repairs ($+145,000).
- ZN-0119 Decrease in weapons to the United Kingdom ($-2,000,000).
- ZN-0207 Cancellation of contract with EPRI for the research of In-reactor Source Term Experiments ($-1,950,000).
- ZN-0207 Reflects new contract with the Gas Research Institute for the Installation of Gas Transmission Pipeline ($+302,000).
- ZN-0219 Decrease in the Hot Dry Rock at Japan ($-224,000) and Germany ($-224,000).

Summary Of Changes From FY 19CY Revised Request To FY 19BY Request:

- ZN-0202 Increase at SERI for research related to Renewable Energy ($+596,000).
- ZN-0219 Increase is a result of additional R&D for the United Kingdom on the ARMADA II event ($+4,641,000).
- 0 ZN-0601 Decrease in work performed for the Navy Department at the Pittsburgh Naval Reactor ($-2,680,000).

Explanation of the FY 19BY Estimates:

- Brief explanation of activities describing type of work being performed, research services, products sold, contractors, to whom work is being provided for (foreign, domestic) etc.
- Any new or cancellation of projects or contracts expected should be included in explanation.

Explanation Of Added Factor:

Figure III-8

10. REIMBURSABLE WORK FOR OTHER FEDERAL AGENCIES.

a. Figure III-9 provides additional information for limitation 93 reimbursements, Reimbursable Work for Other Federal Agencies, which is necessary to comply with OMB Circular No. A-11 requirements.

b. This schedule should be formatted as shown in the exhibit. Estimates for total obligational authority (B/A) should be provided on one schedule for FY 19PY, FY 19CY, and FY 19BY. A separate schedule must be submitted for each appropriation.

c. Reimbursable Work for Other Federal Agencies will be identified in two separate appropriations: 89X0220, Atomic Energy Defense Activities; and 89X0224, Energy Supply Research and Development Activities.

(1) 89X0220, Atomic Energy Defense Activities, will include all work performed under the following Budget and Reporting Classifications:

40 01 Weapons Parts and Assemblies
40 02 Weapons Testing
40 03 Nuclear Materials and Fuels
40 04 03 Department of Defense
40 04 70 Other Federal Agencies - Defense-Related Activities
40 07 Other - Defense-Related Activities

(2) 89x0224, Energy Supply Research and Development Activities, will include all work performed under the remaining Budget and Reporting Classifications.

d. Unobligated budget authority for Reimbursable Work for Other Federal Agencies expires at the end of each fiscal year. When determining obligational requirements for each fiscal year, care should be taken to assure that sufficient budget authority is requested to fund all obligations expected to be incurred in that fiscal year; i.e., if the terms of any unobligated reimbursable orders at year-end are such that they will still be available for obligation in the next fiscal year, requests for new budget authority should include amounts for these carryover orders as well as for anticipated new orders.

e. In addition to providing contractor estimates by Budget and Reporting Classification, the grand total for each contractor must be provided for Total Program 40 at the end of the schedule.

f. The amounts included for the FY 19CY estimates will be used as the basis for issuing the initial FY 19CY Approved Funding Program for Reimbursable Work.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REIMBURSABLE WORK FOR OTHER FEDERAL AGENCIES
(In thousands of dollars)

Appropriation Symbol and Title

Organizational Component

Contractor Designation Under Each B&R Level	Total Obligational Authority (B/A) FY 19PY Actual	FY 19CY Estimate	FY 19BY Request
40-01 Weapons Parts or Assemblies (by Contractor)	10	20	30
40-02 Weapons Testing (by Contractor)	10	20	30
40-03 Nuclear Materials and Fuels			
40-03-01 Fuel Fabrication (by Contractor)	10	20	30
40-03-02 Withdrawals, Analyses, and Fabrication (by Contractor)	10	20	30
Subtotal 40-03	20	40	60
40-04 Research and Development			
40-04-01 Dept. of Agriculture (by Contractor)	10	20	30
40-04-02 Dept. of Commerce (by Contractor)	---	20	30
40-04-03 Dept. of Defense (by Contractor)	10	---	30
40-04-05 Dept. of HUD (by Contractor)	10	20	---
40-04-06 Dept. of Interior (by Contractor)	10	20	30
40-04-07 Dept. of Transportation (by Contractor)	10	20	30
40-04-08 Env. Protection Agency (by Contractor)	10	20	30
40-04-09 NASA (by Contractor)	10	20	30
40-04-10 NSF (by Contractor)	10	20	30

40-04-11 Dept. of Education (by Contractor)	10	20	30
40-04-12 Dept. of Health and Human Resources (by Contractor)	10	20	30
40-04-70 Other Federal Agencies - Defense-Related Activities (by Contractor)	10	20	30

Figure III-9
Reimbursable Work for Other Agencies
(Page 1 of 2)

REIMBURSABLE WORK FOR OTHER FEDERAL AGENCIES
(In thousands of dollars)

Appropriation Symbol and Title

Organizational Component

Contractor Designation Under Each B&R Level	Total Obligational Authority (B/A) FY 19PY Actual	FY 19CY Estimate	FY 19BY Request
40-04-80 Other Federal Agencies - Energy-Related Activities (by Contractor)	10	20	30
Subtotal 40-04	120	240	360
40-07 Other - Defense-Related Act. (by Contractor)	10	20	30
40-08 Other - Energy-Related Act. (by Contractor)	10	20	30
40-10-01 Nuclear Regulatory Comm.			
40-10-01-01 Standards Development (by Contractor)	10	20	30
40-10-01-02 Nuclear Reactor Regulation (by Contractor)	10	20	30
40-10-01-03 Inspection and Enforcement (by Contractor)	10	20	30
40-10-01-04 Office of Administration (by Contractor)	10	20	30
40-10-01-05 Nuclear Materials Safety and Safeguards (by Contractor)	10	20	30
40-10-01-06 Nuclear Regulatory Research			
40-10-01-06-1 Operating (by Contractor)	10	20	30
40-10-01-06-2 Capital Equipment (by Contractor)	10	20	30
40-10-01-06-3 Construction (by Contractor)	10	20	30
40-10-01-06-4 Environmental and Fuel Cycle Research (by Contractor)	10	20	30

40-10-01-06-5 Safeguards Research (by Contractor)	10	20	30
Subtotal 40-10-01-06	50	100	150
40-10-01-07 Commission and Staff Offices (by Contractor)	10	20	30
40-10-01-08 Executive Director for Operations and Staff Offices (by Contractor)	10	20	30
Subtotal 40-10-01	120	240	360
Grand Total Program 40 (by Contractor)	300	600	900

Figure III-9
Reimbursable Work for Other Agencies
(Page 2 Of 2)

11. FIELD OFFICE REQUIREMENTS FUNDED BY DEPARTMENTAL ADMINISTRATION. Each operations office funded by Departmental Administration should complete the following schedules:

a. The narrative justification should provide a detailed explanation of the program goals and objectives, the best means for attaining them, and the estimated resources required to do so. The merits of increases must be explained fully by each object class. Generally, the justification is arranged so that the first few pages highlight program goals and the components of change proposed in the budget request. Indicate the amount of the increase over the current year's budget authority and the reasons for change for each object class.

b. Analysis of Budget by Object Class (Figure III-10a) is a summary of the three years of budget data by the various object classes.

c. The back-up schedules for Communications, Utilities and Other Rent (Figure III-10b) and Other Services (Figure III-10c) provides for a greater level of detail to support your request as contained in the Analysis of Budget by Object Class.

d. The Estimate of Standard Level of User Charges (SLUC) back-up schedule (Figure III-10d) provides for the total SLUC costs of an operations office. The cost of SLUC is divided into two categories, SLUC funded from the Departmental Appropriation and SLUC funded by all other appropriations.

e. The Estimate of Telecommunications back-up schedule (Figure III-10e) provides for the total telecommunication costs of an operations

office. The cost of telecommunications is divided into two categories, telecommunications funded from the Departmental Administration appropriations and telecommunications funded from all other appropriations.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
DEPARTMENTAL ADMINISTRATION
ANALYSIS OF BUDGET BY OBJECT CLASS
(Dollars in Thousands)

			FY 19BY		
	FY 19PY	FY 19CY	Decrement Level	Target Level	Department Request
Personnel Compensation and Benefits					
Full-Time Permanent	$16,638	$15,544	$14,000	$15,544	$19,194
Other Than Full-Time Permanent	600	540	487	540	650
Other Personnel Compensation	356	355	261	355	474
Subtotal, Personnel Compensation	$17,594	$16,439	$14,748	$16,439	$20,318
Benefits	2,020	1,810	2,212	2,465	3,048
Total, Personnel Compensation & Benefits	$29,614	$18,249	$16,690	$18,904	$23,366
Travel & Transportation of Persons	382	320	311	320	893
Support Services					
Transportation of Things	$ 164	$ 142	$ 98	$ 142	$ 154
Communications, Utilities and Other Rent:					
-SLUC	1,415	1,484	1,484	1,484	1,690
-Telecommunications	893	893	860	893	1,317
-Rental of Equipment	83	78	70	78	78
-Other Rent and Utilities	37	37	37	37	45
Subtotal, Communications, Utilities and Other Rent	2,428	2,492	2,451	2,492	3,130
Supplies and Materials	434	375	350	375	530
Printing and Reproduction	5	5	4	5	6
Other Services:					
-Building Operations	303	293	293	293	345
-Guard Services	91	101	101	101	5

-ADP Equipment	298	283	283	283	607
-Other	857	729	650	729	947
Subtotal, Other Services	1,549	1,406	1,317	1,406	2,436
Total, Support Services	$ 4,580	$ 4,420	$ 4,230	$ 4,420	$ 6,256
Total, Operating Expenses	$24,576	$22,989	$21,501	$23,644	$30,515
Equipment	141	246	0	246	246
Total, Operating Expenses & Equipment	$24,717	$23,235	$21,501	$23,890	$30,761
FTE'S: FTP/TOTAL	484/532	453/494	408/445	453/494	523/572

Figure III-10a
Analysis of Budget by Object Class

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
BACK-UP SCHEDULE
COMMUNICATIONS, UTILITIES, AND OTHER RENT
(Dollars in Thousands)

			FY 19BY		
	FY 19PY	FY 19CY	Decrement Level	Target Level	Department Request
Communications, Utilities & Other Rent:					
SLUC	$ 1,415	$ 1,484	$ 1,484	$ 1,484	$ 1,690
Other Rent	--	--	--	--	--
Telecommunications:					
Commercial Telephone	325	325	300	325	450
FTS	300	300	300	300	300
SACNET	74	74	74	74	74
Commercial Telegraph	3	3	3	3	7
Operation of Communication Center	100	100	100	100	100
Other Communications	91	91	83	91	386
Subtotal, Telecommunications	893	893	860	893	1,317
Rental of Equipment	83	78	70	78	78
Other Rent & Utilities	37	37	37	37	45
Total, Communications,					

Utilities and Other Rent	$ 2,428	$ 2,492	$ 2,451	$ 2,492	$ 3,130

Figure III-10b
Communications, Utilities, and Other Rent

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
BACK-UP SCHEDULE
OTHER SERVICES
(Dollars in Thousands)

			FY 19BY		
	FY 19PY	FY 19CY	Decrement Level	Target Level	Department Request
Other Services:					
Building Operations:					
-Maintenance-Space	$ 150	$ 152	$ 152	$ 152	$ 191
-Maintenance-Custodial	28	28	28	28	31
-Services from OFA	125	113	113	113	123
Subtotal, Building Operations	$ 303	$ 293	$ 293	$ 293	$ 345
Guard Services:					
-Guard Contract	$ 91	$ 101	$ 101	$ 101	$ 537
ADP Equipment:					
-Maintenance-IBM Equipment	$ 16	$ 16	$ 16	$ 16	$ 19
-Operation of ADP Service Center	82	82	82	82	96
-Computer Services	200	185	185	185	492
Subtotal, ADP Equipment	$ 298	$ 283	$ 283	$ 283	$ 607
Other:					
-Motor Vehicle Maintenance	57	57	57	57	67
-Office Machine Maintenance	85	85	85	85	106
-Operations of the Word Processing Center	275	179	109	179	310
-Employee Health Services	57	57	57	57	69
-Training	60	60	60	60	72
-Processing of Procurement Requests	117	100	62	100	62
-Court Reporting Services	8	8	8	8	8
-Security Hearing Board Consultants	11	11	11	11	11
-Operation/Maintenance of Emergency Communications					

Center	2	2	2	2	2
-Fire Protection Consultants	10	10	10	10	12
-Miscellaneous	175	160	151	160	228
Subtotal, Other	$ 857	$ 729	$ 650	$ 729	$ 947
Total, Other Services	$ 1,549	$ 1,406	$ 1,327	$ 1,406	$ 2,436

Figure III-10c
Other Services

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
DEPARTMENTAL ADMINISTRATION
ESTIMATE OF STANDARD LEVEL OF USER CHARGES (SLUC)
(Dollars in Thousands)

	FY 19PY			FY 19CY		
	Dept Admin Appro	All Other Appro	Total	Dept Admin Appro	All Other Appro	Total
SLUC	$1,415	$225	$1,640	$1,484	$240	$1,724
Other Rent	--	--	--	--	--	--
Total	$1,414	$225	$1,640	$1,484	$240	$1,724

	FY 19BY								
	Decremental Level			Target Level			Department Request		
	Dept Admin Appro	All Other Appro	Total	Dept Admin Appro	All Other Appro	Total	Dept Admin Appro	All Other Appro	Total
SLUC	$1,484	$240	$1,724	$1,484	$240	$1,724	$1,690	$265	$1,955
Other Rent	--	--	--	--	--	--	--	--	--
Total	$1,484	$240	$1,724	$1,484	$240	$1,724	$1,690	$265	$1,955

Work Sheet for SLUC Estimates

	Square Ft. Assigned	Square Ft. Joint Use Space	Square Ft. Total Space	Average Rate Per Square Ft.	Estimated Amount (Dollars In Thousands)
FY 19PY					

SLUC	$81,539	$2,467	$84,006	$19.52	$1,640
Other Rents	--	--	--	--	--
Total	$81,539	$2,467	$84,006	$19.52	$1,640
FY 19CY					
SLUC	$81,539	$2,467	$84,006	$20.52	$1,124
Other Rents	--	--	--	--	--
Total	$81,539	$2,467	$84,006	$20.52	$1,124
FY 19BY					
SLUC	$95,420	$2,467	$97,887	$19.97	$1,955
Other Rents	--	--	--	--	--
Total	$95,420	$2,467	$97,887	$19.97	$1,955

Figure III-10d
Estimate of Standard Level of User Charges (SLUC)

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
DEPARTMENTAL ADMINISTRATION
ESTIMATE OF TELECOMMUNICATIONS
(Dollars in Thousands)

	FY 19PY			FY 19CY		
Telecommunications	Dept Admin.	All Other Appro.	Total	Dept Admin.	All Other Appro.	Total
FTS	$300	$100	$ 400	$300	$125	$ 425
Commerical Telephone	325	150	475	325	160	485
Commerical Telegraph	3	--	3	3	--	3
Communication Center	100	--	100	100	--	100
SACNET	74	--	74	74	--	74
Other	91	100	191	91	100	191
Total, Telecommunications	$893	$350	$1,243	$893	$385	$1,278

	FY 19BY								
	Decremental			Target			Departmental Request		
Telecommunications	Dept Admin.	All Other Appro	Total	Dept Admin.	All Other Appro	Total	Dept Admin.	All Other Appro	Total

FTS	$300	$100	$ 400	$300	$100	$ 400	$ 300	$200	$ 500
Commerical Telephone	300	150	450	325	150	475	450	200	650
Commerical Telegraph	3	--	3	3	--	3	7	--	7
Communication Center	100	--	100	100	--	100	100	--	100
SACNET	74	--	74	74	--	74	74	--	74
Other	83	60	143	91	100	191	386	200	586
Total, Telecommunications	$860	$310	$1,170	$893	$350	$1,243	$1,317	$600	$1,917

Figure III-10e
Estimate of Telecommunications

12. REAL PROPERTY MAINTENANCE AND REPAIR-BUDGET OVERVIEW.

a. Narrative (See Figure III-11a, Page III-39).

(a) Introduction. This section should provide a brief overview of the maintenance, repair, and improvement requirements at the site in general terms.

(b) Initiatives Planned. This section should provide a brief, but specific description of the site's requirements highlighting those significant areas with emphasis on increased or decreased requirements.

b. Operating Expenses for Maintenance and Repair of Real Property (See Figure III-11b, Page III-40). This Section includes three major categories and one general catch-all category. This section is intended to present the total real property maintenance and repair budget requirements in the broad terms of in-house work force, work contracted out, and any other special categories which may be either peculiar to the site or be meaningful to list separately for understanding or visibility purposes.

(1) In-house Work Effort. This entry should include the cost of all in-house work effort, including labor, materials, equipment, etc. The FTE's involved are those portions of the plant engineering staff, or equivalent organization at a site, whose efforts are devoted to the management, engineering design, inspection, and actual maintenance and repair work by the craftsmen of the real property assets at the site.

(2) Contracted Maintenance and Repair Work. This entry should

include all work accomplished by contract. These would normally all be fixed price, but all types should be included and footnoted separately.

(3) Contracted Services. This entry should include service type contracts. Examples might be: custodial, refuse collection, equipment maintenance, snow removal, grass cutting, entomology services, etc.

(4) Other. This entry should include all other real property expenses not included in (1), (b), and (c), above. Explain entries by footnote.

c. Functional Categories of Real Property Maintenance and Repair (See Figure III-11b, Page III-40). This section divides the real property maintenance and repair activities into several very general functional categories. All of the resources identified in section 2. above should also be include here. The fiscal year totals for section 2. and 3. should be equal.

(1) Maintenance and Repair of:

(a) Building and Related Equipment Systems. This entry should include all work associated with the maintenance and repair of buildings and their related installed equipment which can logically be considered as an integral part of the building or structure. Examples are: the installed plumbing, heating and electrical systems, elevators, etc. All resources expended to manage, plan, design, and accomplish the work should be included along with the materials and equipment costs.

(b) Utilities and their Distribution Systems. Similar to the previous item, all associated maintenance and repair should be included. For example, such items as electrical substations and their distribution lines sewage treatment plants and sewage collection systems; water wells, treatment plants, and distribution systems; natural gas distribution systems; and other utility systems. All resources expended to manage, plan, design, and accomplish the work should be included along with the materials and equipment costs.

(c) Central Heating and Cooling Plants. Similar to the previous item, all associated maintenance and repair

should be included. For example, such items as central heating and cooling facilities and their distribution systems. All resources expended to manage, plan, design, and accomplish the work should be included along with the materials and equipment costs.

(d) Roads, Grounds, and Land Management. As with the previous item, all associated maintenance and repair should be included. For example, such items as roads, streets, parking lots, trash collection, sanitary land fill operation, improved and unimproved grounds, forest management, air fields, etc. Such things as entomology services, snow removal, and grass cutting are also included. All resources expended to manage, plan, design, and accomplish the work should be included along with the materials and equipment costs.

(e) Other. This entry should include all real property maintenance and repair not included in (a), (b), (c), and (d), above. Any especially high cost items or those of special concern or interest should be individually identified. For example: management, engineering, construction equipment, or other items whose costs are not included in items (a), (b), (c), and (d) above should be included. Explain entries by footnote. All resources expended to manage, plan, design, and accomplish the work should be included along with the materials and equipment costs.

(2) Custodial. This entry should include all costs associated with the accomplishment of custodial services.

(3) Management, Engineering Design, Inspection, and Other Technical Support. This entry should include all management, engineering support etc., costs not already included in paragraph (1). above.

(4) Other. This entry should include additional items that cannot be categorized in items (1), (2), or (3), above. Explain entries by footnote.

d. Operating Expenses Funded Maintenance of Equipment Other Than Real Property (See Figure III-11b, Page III-40). This section should include all of the maintenance work at the site that is accomplished to non-real property.

(1) General Support. This entry should include all costs for maintaining laboratory, production, experimental equipment, etc.

(2) Vehicles and Mobile Equipment Support. This entry should include all costs for maintaining vehicles and mobile equipment.

(3) Other. This entry should include the maintenance costs for property not included in paragraphs (1) and (2) above. Explain entries by footnote.

e. Supporting Information (Real Property) (See Figure III-11c, Page III-41). This section is intended to summarize the expenditures of all non-operating funds that will be used for construction, improvement, expansion, alteration, or repair of real property. This information will provide a more complete overview of the Department's real property assets.

(1) General Plant Projects (GPP). This entry should include the total GPP funding requested in the budget year and current year. It should also include the actual GPP funding received for the past year and the actual GPP expenditures for the year prior to the past year.

(2) General Purpose Facilities (GPF). This entry should include a summary of the line item funds received in prior and past years and also that budgeted for in the current year and for the budget year.

(3) Multiprogrammatic General Purpose (MGPF). Same as paragraph (2), above (for multiprogram laboratories only.)

(4) Major Line Items for Real Property. Same as paragraph (2), above, but for line items not included in paragraphs (1), (2), and (3), above.

f. Consolidated Summary of Estimates (See Figure III-11c, Page III-41). This section is a partial duplication of the Consolidated Summary of Estimates figure in the annual DOE Controller's Field Budget Request.

Field sites requested to provide the above crosscut information are listed on Page III-51.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
BUDGET OVERVIEW

1. Page Number One (Formatted as Follows).

   Site Name:
   Contractor:
   Field Office:

2. Narrative: (Use Additional Pages as Required)

   a. Introduction
   b. Initiatives Planned

Figure III-11a
Real Property Maintenance and Repair
Budget Overview

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
BUDGET OVERVIEW

Page Number Two (Formatted as Follow)

	Prior Year	FY 19PY	FY 19CY	FY 19BY
		($000)		
2. Operating Expenses for Maintenance and Repair of Real Property				
a. In-house work effort (1)	1,000	2,000	3,000	4,000
b. Contracted Maintenance and Repair	1,000	2,000	3,000	4,000
c. Contracted Services	1,000	2,000	3,000	4,000
d. Other (not included in a, b, and c above. Explain by Note)	1,000	2,000	3,000	4,000
Fiscal Year Total	4,000	8,000	12,000	16,000
3. Functional Categories of Real Property Maintenance and Repair				
a. Maintenance and Repair of:				
(1) Buildings and related Equipment and Systems	500	1,000	1,500	2,000
(2) Utilities and their Distribution Systems	500	1,000	1,500	2,000

(3) Central Heights and Cooling Plants	500	1,000	1,500	2,000
(4) Roads, Grounds, and Land Management	500	1,000	1,500	2,000
(5) Other (Explain by Note				
b. Custodial	500	1,000	1,500	2,000
c. Management, Engineer Design, Inspectors, and Other Technical Support	500	1,000	1,500	2,000
d. Other (Explain by Note)	500	1,000	1,500	2,000
Fiscal Year Total	4,000	8,000	12,000	16,000
4. Operating Expenses Funded Maintenance of Equipment Other Than Real Property				
a. General Support of Program Equipment (2)	1,000	2,000	3,000	4,000
b. Vehicles and Mobile Equipment Support	1,000	2,000	3,000	4,000
c. Other (Explain by Note)	1,000	2,000	3,000	4,000
Fiscal Year Total	3,000	6,000	9,000	12,000

Figure III-11b
Real Property Maintenance and Repair
Budget Overview

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
BUDGET OVERVIEW

Page Number Three (Formatted as Follow).

	Prior Year	FY 19PY	FY 19CY ($000)	FY 19BY
5. Supporting Information (Real Property).				
a. General Plant Projects (GPP)	1,000	2,000	3,000	4,000
b. General Purpose Facility (GPF)	2,000	3,000	4,000	5,000
c. Multiprogrammatic General Purposes Facilities (3)	1,000	2,000	3,000	4,000
	3,000	4,000	5,000	6,000
d. Major Line Items (Not Listed in 1, 2, or 3 Above)	4,000	5,000	6,000	7,000
Fiscal Year Total	10,000	14,000	18,000	22,000
6. Consolidated Summary of Estimates ($000) (As Shown in the FY 19BY Field Budget Call.				

Operating Expenses	4,000	8,000	12,500	16,000
Capital Equipment	3,000	6,000	9,500	12,000
Plant	10,000	14,000	18,500	22,000
	------	------	------	------
Fiscal Year Total	17,000	28,000	39,000	50,000

a. For Real Property, indicate by footnote the number of in-house workmen involved in this effort. List by fiscal year.

b. For Programmatic Property, include by footnote the number of in-house workmen involved in this effort. List by fiscal year.

c. This entry should be filled in only by those multiprogram laboratories who participate in the Multiprogram General Purpose Facility (MGPF) Program.

Figure III-11c
Real Property Maintenance and Repair
Budget Overview

13. REAL PROPERTY MAINTENANCE AND REPAIR GENERAL PLANT PROJECTS (GPP).

a. Background. During the FY 1985 Internal Review Budget (IRB) and the subsequent Office of Management and Budget (OMB) hearings, considerable interest was expressed by the various examiners as to what constitutes proper GPP funding levels for various DOE programs. Early reactions were to level fund program GPP requests at the FY 1984 level. A high level of effort was expended to convince these examiners through detailed engineering analysis that FY 1984 levels were unrealistically low and that the higher levels requested in FY 1985 were essential to maintaining our physical plant assets and to start reversing the current trend of deteriorating facilities. The end result was that our arguments were accepted by the examiners and the FY 1985 GPP levels supported by the engineering analysis were carried in the budget submission. The only stipulation was that these funds above the FY 1984 level were to be utilized to relive the conditions outlined in the analysis.

Lacking any consistent historical data which could be utilized to defend various GPP funding levels, the Department chose to justify these higher expenditures on the basis of statistical engineering analysis. This analysis equates the need for GPP funds directly to the size and condition of the physical plant and the level of operational activity underway during the time period under review. Based on the experience of facilities managers, data available in the literature regarding facilities requirements in the private and

public sector, and the types of facilities in the DOE complex, a range of percentages was arrived at which logically represents need for an active site. These ranges equate to 1 to 3 percent of replacement plant value and 1 to 5 percent of the operating budget levels. Even when selecting the minimum value for each of these ranges, it became clear that minimum funding levels required so greatly exceeded past GPP funding levels that corrections to minimum levels would not be possible in a 1 year time frame. Consequently, the Department elected to phase the necessary increases over several budget years.

It should be noted that while this approach has a reasonable degree of accuracy for a large data base such as program totals, it does not reflect this same accuracy for individual site requirements. Only actual backlog lists, prioritized for necessity, represent individual site needs correctly. These lists should be prepared on the basis of actual deficiencies and anticipated funding requirements during the time frame reviewed. Even though the Department, as a whole, will continue to utilize statistical techniques to justify overall funding levels, site level submissions should be based on verifiable backlog and reasonably anticipated future needs.

To demonstrate the Department's commitment to maintain facilities through more realistic GPP funding, the Assistant Secretary, Management and Administration, has tasked the Office of Project and Facilities Management to closely monitor GPP funding in order to ensure that these proposed projects are supporting the premise on which the higher funding was based. This task will be accomplished through periodic onsite reviews, more rigorous field organization control of planned GPP expenditures, and individual proposed projects lists submitted as part of the IRB.

b. Requirements. For purposes of this crosscut is to provide detailed information concerning each site to support the annual GPP requirement:

(1) For FY 19PY, a prioritized list of projects planned for funding during FY 19PY and utilizing FY 19PY funds. Format shall be that shown in Figure III-11d.

(2) For FY 19CY, a prioritized list of GPP projects proposed for FY 19CY funding utilizing FY 19CY funds. Format shall be that shown in Figure III-11d.

(c) For FY 19BY, a summary listing of proposed expenditures showing funds required for direct program related facilities, for program support facilities, and for site-wide support facilities. Format shall be that shown in Figure III-11e.

c. GPP Definitions and Restrictions. GPP funds are intended to be utilized for construction projects totaling less than $1,000,000 where the DOE owns or controls the improvement. Generally, individual GPP items are not specifically itemized in budget submissions external to the Department. Rather, a summary total is presented by program with narrative justification for the entire amount and examples of the kind of use the funds are required for. Beginning in FY 19BY, one category of GPP items will require a further explanation, by project, on the data sheets when the work is to be done on non-Government owned or controlled land. Those responsible for preparation of these data sheets should be aware of this requirement and should contact their program sponsors for additional information when specific projects fit this category. This distinction is not necessary for the submissions required by this call.

d. Definitions of Specific Entries on the Attachments.

(1) Project Title. To the extent practicable, the Project Title should describe the work to be performed and the facility affected. Avoid the use of terms such as "rehabilitated" "improve" which are non-specific. Examples of acceptable title are:

(a) "Replace air conditioning chiller in building 411A for production line C."

(b) "Resurface 2 miles of Mesquite Road in administrative area."

(c) "Repair by replacement, roofs on 9 buildings in assembly area."

(d) "Construct 30,000 square foot modular security facility on Research Avenue."

Examples of unacceptable titles are:

(e) "Improve administrative facilities."

(f) "Repair road."

(g) "Rehabilitate building 425."

(h) "Improve various parking lots."

(2) Type of Work. For each project listed, enter the number which best described the work to be performed:

(a) Expansion

(b) Addition

(c) Improvement or betterment

(d) Replacement

(e) Repair

(f) New Construction

(g) Other (explain by footnote)

(3) Facilities Supported. For each project listed use the number which best describes the facility being supported.

(a) Direct programmatic

(b) Programmatic support

(c) General site-wide support facility

(4) Multiprogrammatic facilities are to be considered general site-wide support facilities.

(5) Status. For each project listed, identify the status or urgency for submission of the project by one of the numbers shown below.

(a) Emergency

(b) Urgent (planned)

(c) Routine (planned)

(d) Routine (unplanned)

(6) Fund Source. Identify by Assistant Secretary code the appropriate HQ. source of funds for each listed project:

(a) ER - Energy Research

(b) DP - Defense Programs

(c) NE - Nuclear Energy

(d) FE - Fossil Energy

(e) PE - Policy, Safety, and Environment

(f) CE - Conservation and Renewable Energy

(g) Other - (explain)

e. Headquarters Notification. When a field organization authorizes design or construction to begin for a specific GPP project, notification, by information copy, shall be forwarded to the Office of Project and Facilities Management. The information shall include Project Number, Project Title, Project Description, current estimated cost, and any other information contained in the attachment. As a suggestion, field offices who utilize the formerly required Construction Management Authorization form may send forward a copy of that authorization to satisfy this requirement. Others may wish to institute a similar procedure for their own records and to satisfy the HQ requirement. This report is required for all GPP projects and should be forwarded to the Office of Projects and Facilities Management (attention: MA-222).

f. On-Site Reviews. During periodic on-site reviews, personnel from the Office of Projects and Facilities Management will review the on-going management efforts in the field offices to control the use of GPP funds. This will involve the on-site inspection of completed GPP efforts, inspection of projects underway, review of planned and proposed lists of recommendation projected and methods used to manage or control the funds.

g. Summary. The intent of the above described efforts is to satisfy the need for assuring Headquarters and OMB examiners that the GPP funds we, as a Department requested, are in fact being utilized to accomplish the type of work we stated we would accomplish. Since

the Department has gone on record stating that higher GPP funding levels are essential to properly maintain facilities assets which are rapidly aging and in some cases deteriorating, we will have to demonstrate to these examiners that we are making efforts to correct these deficiencies through the GPP programs. Failure to utilize funds in this way will, in fact, jeopardize our ability to justify future GPP levels necessary to maintain our plant assets. Based on the information submitted, we will provide the IRB with an assessment of the Department's commitment in this area.

Field sites requested to provide the above crosscut information are listed on page III-51.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
GENERAL PLANT PROJECTS (GPP)

PLANNED FOR FY 19PY AND FY 19CY

(Dollars in Thousands)

Site Name: _____

HQ. Sponsoring Program: _____

Operations Office: _____

Project Number	Project Title	Type of Work	Facilities Supported	Estimated Cost ($)	Status	Fund Source
83-AA-01	Replace air-condition building 100	(4) Replace-ment	(2) Programmatic support	100	(3) Routine planned	ER
84-A8-02	Resurface main access road to facilities - 2 miles	(5) Repair	(3) General site-wide	300	(2) Urgent planned	NE
85-AC-03	Construct 100 sq. ft. security screening access room to lab R-4	(2) Addition	(1) Direct programmatic	50	(2) Urgent planned	ER

(Use this form for submission of FY 19PY and FY 19CY data)

Figure III-11d
Real Property Maintenance and Repair

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
GENERAL PLANT PROJECTS (GPP)

PROPOSED FOR FY 19BY
(Dollars in Thousands)

Site Name: _____

HQ. Program Sponsor: _____

Operations Office: _____

Number of Projects	Facilities Supported	Proposed
4	Direct Programmatic	400
5	Programmatic Support	700
3	General Site Support	400
	Total	1,500

(Use this form for submission of FY 19BY data only)

Figure III-11e
Real Property Maintenance and Repair
General Plant Projects (GPP)

14. REAL PROPERTY MAINTENANCE AND REPAIR GENERAL PLANT EQUIPMENT (GPE).

a. Background. During the FY 19CY IRB, reviewing officials complained of the inconsistency and the lack of information regarding the basic annual recurring requirement for this type of funding at our geographic locations. For this reason, the Assistant Secretary, Management and Administration, requested the Office of Projects and Facilities Management to arrive at a methodology to project future requirements for these types of funds on some measurable set of parameters that would remain reasonably consistent throughout the various budget cycles. The basis for the analysis was the amount of equipment now in the hands of our contractors, its projected life expectancy, and the anticipated amount of replacement necessary to maintain current equipment levels. To arrive at the current equipment levels, we utilized the most current printout of the

summary Financial Information System (FIS), by three digit code for each of the sites in the Department. Information provided by this crosscut will be used to develop future submissions.

b. Requirement. For each reporting site, the information shown on Figure III-11f should be provided for each of the years in the budget. This information is shown summarized by three digit FIS code for each site. Only routine GPE requirements should be listed. Unusual or major one-of-a-kind requests should be flagged separately and fully described as has been done in the past.

c. Field sites requested to provide the above crosscut information are listed on page III-51.

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
REAL PROPERTY MAINTENANCE AND REPAIR
GENERAL PLANT EQUIPMENT (GPE) REQUEST
FISCAL YEAR 19BY
(Dollars in Thousands)

Site Name: _____

Program Sponsor: _____

Operations Office: _____

FIS Code	Code Description	Proposed ($)
610	Communication Systems	100
620	Fire Alarm Systems	100
710	Heavy Mobile Equipment	100
715	Hospital and Medical Equipment	100
720	Laboratory Equipment	100
725	Motor Vehicles and Aircraft	100
730	Office Furniture and Equipment	100
735	Process Equipment	100
740	Railroad Rolling Stock	100
750	Security and Protection Equipment	100
755	Shop Equipment	100
760	Reserve Construction Equipment Pool	100
770	Automatic Data Processing Equipment	100
799	Miscellaneous Equipment	100
	Total	1,400

(Use this form for submission of FY 19PY, FY 19CY, and FY 19BY data.)

Figure III-11f

DEPARTMENT OF ENERGY
FY 19BY FIELD BUDGET REQUEST
LIST OF SITES FOR WHICH
REAL PROPERTY MAINTENANCE AND REPAIR
SUBMISSIONS ARE REQUESTED

Solar Energy Research Institute
Pantex Plant
Pinellas Plant
Rocky Flats Plant
Mound Facility
Bendix Plant
Los Alamos National Laboratory (all locations separately)
Sandia National Laboratories (all locations separately)
Idaho National Engineering Laboratory (all locations separately)
Exxon ICPP
Nevada Test Site (all locations separately)
Fernald Materials Plant
Y-12 Plant
Rockwell Hanford
J. A. Jones Hanford
Lawrence Livermore National Laboratory (all locations separately)
Savannah River Plant
Savannah River Laboratory
Inhalation Toxicology Research Institute
Brookhaven National Laboratory
FERMI National Accelerator Laboratory
Ames Laboratory
Argonne National Laboratory (all locations separately)
Princeton Plasma Physics Laboratory
Oak Ridge National Laboratory
Lawrence Berkeley National Laboratory
Stanford Linear Accelerator laboratory
Bates Linear Accelerator Center
Notre Dame Radiation Laboratory
University of Rochester Biomedical Laboratory
Radiobiology Laboratory (University of Utah)
Oak Ridge Associated Universities
Laboratory of Radiobiology (University of California - San Francisco)
Laboratory for Energy Related Health Research (University of California-Davis)
Argonne National Laboratory West
Hanford Engineering Development Laboratory

Pacific Northwest Laboratory
United Nuclear Hanford
Energy Technology Engineering Center
Oak Ridge Gaseous Diffusion Plant
Portsmouth Gaseous Diffusion Plant
Paducah Gaseous Diffusion Plant
Bettis Laboratory
Knolls Laboratory
Bartlesville
Morgantown Energy Technology Center
Pittsburgh Energy Technology Center
Strategic Petroleum Reserve
Naval Petroleum Reserve