5100.4 INTERNAL REVIEW BUDGET PROCESS

DOE-5100.4 INTERNAL REVIEW BUDGET PROCESS

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

ORDER
DOE 5100.4
10-31-84

SUBJECT: INTERNAL REVIEW BUDGET PROCESS

1. PURPOSE. To provide policies and procedures for the preparation and submission of internal review budget material that is required by the Department of Energy (DOE) for the subsequent preparation of the annual budget submission to the Office of Management and Budget (OMB).

2. REFERENCES.

a. DOE 1360.1, ACQUISITION AND MANAGEMENT OF AUTOMATED DATA PROCESSING

EQUIPMENT AND RESOURCES, of 8-9-78, which establishes policies and procedures for the acquisition and management of automatic data processing (ADP) equipment and resources.

- b. DOE 2200.1, ACCOUNTING POLICY AND PRACTICES, of 11-9-79, which establishes the accounting policy, principles, and objectives, and responsibilities for DOE.
- c. 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.
- d. 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.
- e. 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.
- f. DOE 5100.1A, PROGRAMMING, BUDGETING AND ACCOUNTING FOR THE ACQUISITION OF LOW VALUE CAPITAL EQUIPMENT, of 10-18-84, which

defines capital equipment, low value capital equipment, and object class 31 equipment, and sets forth the policy of DOE for programming, budgeting, accounting for, and funding low value capital equipment acquisition.

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, of 9-8-83, which establishes procedures for implementing OMB Circular A-109, DOE 5700.1C, and other guidance on major system acquisitions and establishes the project management system for major system acquisitions and projects.
- i. DOE 5700.4A, PROJECT MANAGEMENT SYSTEM, of 11-17-83, which establishes the DOE project management system; and sets forth governing principles and requirements, including the execution of DOE's outlay program acquisitions.

BY ORDER OF THE SECRETARY OF ENERGY:

WILLIAM S. HEFFELFINGER Director of Administration

DOE-5100.4/TOC TABLE OF CONTENTS ISSUE DATE: 10-31-84 LAST CHANGE: CHANGE DATE:

DOE-5100.4 INTERNAL REVIEW BUDGET PROCESS

TABLE OF CONTENTS

CHAP	TER I - INTRODUCTION AND GENERAL INSTRUCTIONS	Page
1. 2.	Introduction Definitions a. Decision Unit b. Program Planning Level c. OMB Target Level d. Decremental Funding	I - 1 I - 1 I - 1 I - 2 I - 2 I - 2
3. 4.	Internal Review Budget Structure	I - 2 I - 2
5. 6.	Ranking	-4 -4 -5 -6
7. 8.	Lead Table Summary of Changes Figure I-4 - Lead Table Figure I-5 - Summary of Changes	I - 7 I - 7 I - 8 I - 9
9. 10. 11.	Analysis of Budget by Object Class Analysis of Outyear Impact Narrative Justification a. General Figure I-6 - Analysis of Budget by Object Class Figure I-7 - Analysis of Outyear Impact b. OMB Target Level Funding	I - 10 I - 10 I - 10 I - 10 I - 11 I - 12 I - 14
12.	c. Decremental Level Funding	I - 14 I - 15 I - 15 I - 16 I - 17
13.	Construction Project Data Sheets a. Key Concepts, Budgeting for Plant Acquisition and Construction and Capital Equipment Not Related to Construction versus Operating Expenses b. General c. Preparation of Construction Project Data Sheets	I - 19 I - 19 I - 20 I - 21
	Figure I-9 - Financial Schedule - Construction Projects Figure I-10 - Financial Schedule - General Plant Projects	I -25

	Figure I-12 -	and Capital Equipment	I - 42 I - 49
CHAI	OTED II SDECLAL DUDE	Expenses Funded Project Data Sheet OSE AND CROSSCUT MATERIALS	1 - 49
СПАГ	PIER II - SPECIAL PURP	USE AND CRUSSCUT MATERIALS	
1. 2. 3. 4.	Supporting Schedules/ Regulatory Reform Ana Safeguards and Securi Figure II-1 Figure II-2	rosscut Materials Analysis lysis ty Estimates - Safeguards and Security Estimates - Summary of General Plant Projects	-1 -1 -2 -3 -6 -8 -9
5.	Instructions for Moto	Summary of General Purpose Facilitiesr Vehicle and Aircraft StatementMotor Vehicle and Aircraft Statement for FY 19BY	
6.	9	for Consultant and Related Services Estimated Obligations for Consultant and Related Services	
7.	Figure II-6 -	Resources	-16 -17
	Figure II-9	Production and Revenue Report	
8.	_	and Receipt Reporteserve Internal Review Budget Data	11-21
0.	9	Badget Bata	11-23
	Figure II-11	- Strategic Petroleum Reserve Fill Rates - Strategic Petroleum Reserve Budget	11-24
	Figure II-13	Summary Strategic Petroleum Reserve - Storage Facilities Development Detail and Summary	11-25
	Figure II-15 Figure II-16	Sheet	-26 -27 -28 -29
		Function	11-30
CHAF	PTER III - MANPOWER (T	o be Issued)	
NOTE	occurred. Conseque manpower reporting process has been of the IRB process wi	in manpower reporting requirements have rece ently, Chapter III, which previously provide requirements for the Internal Review Budget eleted. Revised interim manpower guidelines II be issued separately by the Office of anagement Systems (MA-21).	d (I RB)

DOE-5100.4/CI

CHAPTER I - INTRODUCTION AND GENERAL INSTRUCTIONS

ISSUE DATE: 10-31-84

LAST CHANGE: CHANGE DATE:

DOE-5100.4 INTERNAL REVIEW BUDGET PROCESS

CHAPTER I

INTRODUCTION AND GENERAL INSTRUCTIONS

1. INTRODUCTION.

- a. The Internal Review Budget (IRB) process converts the Department's planning and programming decisions into a budget which is reviewed by the Department and will ultimately be submitted to the Office of Management and Budget. The format for this budget reflects a modification of the congressional budget approach.
- b. Each Departmental organization shall submit its budget request in the structure contained in the annual call letter. Budget submissions address three levels of funding: the program planning level; the OMB target level; and a decremental level. The program planning level reflects decisions made as part of the strategic program planning process or, in absence of such decisions, reflects program desired level of funding. There is no incremental level above the program planning level. If events subsequent to Secretarial decisions in the strategic program planning cycle would indicate that an adjustment to the program planning level is necessary, organizations must seek prior approval through the Office of Budget.
- c. The format for the IRB submission is similar to that used in the congressional justifications. The basic narrative will be written to justify the program planning level. In a separate section of the justification, organizations will explain the impact of funding at the OMB target level and, in another separate section, the impact of funding at a decremental level 10 percent below the OMB target.
- d. Organizations must rank the various funding levels for each decision unit above 90 percent of the OMB target. The ranking process is on page I-4, paragraph 5.
- e. Organizational submissions will be reviewed for consistency with the

guidance contained in the allowance table and ongoing project reviews. Budgets will be evaluated to determine that funding and staffing levels are accurately priced in order that the program objectives may be most effectively achieved.

- 2. DEFINITIONS. The following definitions are to be used in the IRB process:
 - a. Decision Unit. A program entity for which various funding requests may be developed. It represents a division of all of the activities for which managers are responsible into discrete elements. While the strategic program planning cycle allowance table will address the major activity level of detail, justifications should discuss a lower level of programmatic detail, as indicated in the structure accompanying the annual call letter.
 - b. Decremental Funding. A reduced level of funding for a decision unit which, when added together with the other decremental levels of an organization's decision units, equals 90 percent of the OMB guidance for the organization. This does not mean that each and every decision unit must be reduced by 10 percent, rather some may be reduced by an amount less than 10 percent, and offset in another decision unit with a reduction greater than 10 percent, so that when all decremental levels of a given organization are added together, they total 90 percent of the OMB guidance for the organization. In making this reduction, organizations should not assume that funding for the reduced activities would be restored in subsequent years.
 - c. OMB Target Level. This funding level is typically distributed by OMB to the decision unit level of detail. However, organizations may shift funds from one decision unit to another provided that they do not exceed the overall OMB allowance for the organization and do not reopen major issue items already the subject of Secretarial decisions.
 - d. Program Planning Level. The level of funding resulting from Secretarial decisions in the strategic program planning cycle. The main justifications are written to this level. If an organization proposes to redistribute this allowance within its overall total, an explanation and justification for the redistribution must be included in the IRB submission (see Figure I-1). Organizations not participating in the planning process or not receiving specific fiscal guidance based on planning decisions will not have a predetermined program planning level.

- 3. INTERNAL REVIEW BUDGET STRUCTURE. The budget structure is based upon the program structure which should be related to the outlay mission areas assigned to each organization. The structure is proposed to OMB for approval in the spring. This is done to facilitate the transition to the OMB submission phase of the budget cycle. The approved OMB structure is included in the annual call letter for the IRB. The justifications will address the levels of detail indicated for funding and manpower.
- 4. CONTROL TOTALS AND ESCALATION. The Office of Budget will provide control tables reflecting all three funding levels by decision unit. Construction project data sheets and the operating expense funded project data sheets must explicitly state the amount of escalation over fiscal year 19 calendar year (FY 19CY) included in the estimate and the assumption upon which the escalation is based. This should be indicated in items 5, 6, and 10 of the construction project data sheets and in the cost estimate section of the operating expense funded project data sheets.

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET PROPOSED REDISTRIBUTION OF PROGRAM PLANNING ALLOWANCE									
	(In thousands of Dollars)								
 	Current Program Planning Allowance	Program Planning	Change	Expl anati on					
Activity 1 2 3				(Explain all proposed changes to planning allowance)					
 Total	\$ 37,000	\$ 37,000	\$						
 NOTE: This exh 	ibit may not	be required	for every	y IRB submission.					

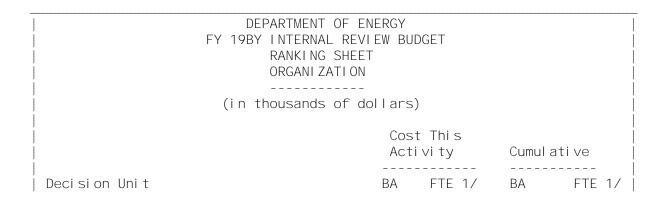
Figure I-1
Proposed Redistribution of Program Planning Allowance

5. RANKING.

a. Organizations must rank all requested budget authority (BA) and staffing levels above 90 percent of the OMB guidance in priority order. In other words, organizations must indicate at rank position one the first activity which would be funded if they received an

allowance in excess of 90 percent of the OMB guidance. Rank position two would be the next activity the organization would fund if it received still another additional allowance. Organizations should proceed in this manner until they have ranked all of the activities for which they are requesting funds. For any decision unit, the add back of the decremental amount must be ranked ahead of the OMB target and program planning levels for the same decision unit. However, a program planning level for one decision unit may be ranked ahead of the decremental add back of another decision unit.

- b. A statement containing the rationale for the ranking must be submitted. Once an organization has ranked all of its levels, it is likely that it will be held to that ranking throughout the decision making process. Therefore the priority strategy employed and the potential impact of the rankings should be carefully considered. (See Figure I-2.)
- 6. PROGRAM OVERVIEW. The program overview is a brief narrative which gives a general description of the substantive direction of the program. It is intended to be more programmatic than budgetary in tone. The goals of the program, as well as past year accomplishments and current year expectations, should be included as background. This should lead to a discussion of the general direction the program will be taking in the budget year through the budget year plus 3 years. Include milestones to be met, benefits to be derived, and the cost of meeting those milestones in the 3 outyears. State significant long-term commitments that may be made this fiscal year which will impact future year resources. These may include long-lead procurements, lease of lands, fuels storage, insurance provisions, and project guarantees. To the extent possible, benefits derived from this particular course of action should be quantified. Figure I-3 is an example of a program overview. Program overviews will be prepared at the level of detail indicated by the program structure attached to the budget call letter.



 Base Level (90% of OMB Guidance)			4, 670, 700	3, 000
 Research, Development, and Testing (add back of decrement) Production and Surveillance (add back of decrement) Research, Development and Testing (OMB Target level) Internal Confinement (add back of decrement) 		5	5, 011, 100 5, 061, 100	3, 025 3, 030
15. Defense Nuclear Waste (Program	+50, 100	3	5, 705, 360	3, 595
Planning level) 16. Security Investigations	3, 200	5	5, 707, 560	3, 600
Narrative explanation of rankings. 1/ Expressed in total FTE's.				

Figure I-2 Ranking Sheet

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET
PROGRAM OVERVIEW

TITLE - ENTER TITLE FROM BUDGET STRUCTURE ATTACHED TO CALL LETTER

Identify the specific program by title and clearly state its goal. Provide a brief description of the activities and mechanisms used to achieve the stated goals.

The goal of the XXXXXXXXXX Program is to provide alternative means of meeting the nation's energy demands by accelerating the use of renewable energy resources. The program supports mission YYYY and is structured to utilize the full resources of Government to remove economic, technical and institutional barriers; to foster the growth of a solar industry; to provide policies to support the widespread use of solar energy. The mechanisms employed in the program are systems development, market and field tests, financial incentives, and legislative and regulatory policies.

State in concise terms the accomplishments achieved in the present (FY 19PY) year. Be specific and comprehensive.

- Provided incentives background papers and option model analysis to domestic policy review support.
- Installed training program implemented in 15 colleges.
- Pilot program initiated to disseminated DOE-developed school curricula in selected school districts.

Specific objectives for FY 19BY + 3, formulated in response to Public Laws are:

State the specific program objectives for the budget year and the 3 out-years. Ensure that these objectives are directly responsive to the Public Law authorizing the program.

- Conduct a directed research and technology development program for substantially reducing solar heating and cooling system costs.
- Operate an information system to collect, store, evaluate and disseminate user-oriented, technical data relating to energy utilization.
- Develop solar system performance standards and criteria for the production and installation of solar energy systems.

State briefly the benefits that the accomplishment of the objective will produce.

Accomplishment of these specific objectives will help meet the objectives of pertinent Public Laws; sustain the interest of private industry, participating Government agencies and the general public; and provide an alternative source for meeting the nation's energy needs.

Figure I-3 Program Overview

7. LEAD TABLE.

- a. Justifications prepared for each decision unit shall include a lead table in the format of Figure I-4. The table should include a breakout of each lower level of detail addressed in the narrative. Funding data included in the table must be consistent with control tables and the narrative justifications. The table shall include five columns, as follows:
 - (1) FY 19 Prior Year (19PY) Appropriation. Reflects amounts appropriated to date including enacted supplementals made

comparable to the FY 19 budget year (19BY) structure. Comparability transfers should be footnoted.

- (2) FY 19CY Estimate. Should reflect the amounts contained in the President's budget, as amended, made comparable to the budget year. However, if there is an enacted appropriation or a conference report, funding provided in the appropriate congressional reports would be reflected. Comparability transfers should be footnoted.
- (3) FY 19BY Estimates.
 - (a) Decremental level.
 - (b) OMB target level.
 - (c) Program planning level.
- b. Figure I-4 should be typed as illustrated. It may be necessary to reduce it on a photocopy machine in order to accomplish this.

8. SUMMARY OF CHANGES.

- a. A summary of changes, Figures I-5, shall follow each lead table in the justification material and be consistent. This table is an itemized list of the dollar changes which occur among the FY 19CY budget level, the decremental, OMB target, and program planning FY 19BY levels. The table is not intended to be a justification, but rather an identification of proposed changes. The relationship between the lead table and the summary of changes table is analogous to the same tables used in the congressional justification.
- b. The summary of change will be prepared for each decision unit and must agree with the preceding lead table. Increases will be identified for each sub-activity level shown in the lead table and discussed in the narrative justification. The stub should be constructed in such a way that the increases can be explained in one or two lines.

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET
LEAD TABLE
DECISION UNIT

Nucl ear

Energy Supply Research and Development - Operating Expenses Energy Supply Research and Development - Plant and Capital Equipment (Tabular dollars in thousands. Narrative material in whole dollars)

FY 19BY

	FY 19PY Appropriation			OMB Target	Program Planning Level
Conventional Reacto Systems (NE) High Temperature Reactor Technolog Operating Expens	y es \$ 23, 900				
Capital Equipmen		500	600	600	600
Subtotal Light Water Reacto Systems		\$53, 000	\$ 51,800	\$ 57,500	\$ 63, 200
Operating Expens Capital Equipmen		0	0	0	0
Subtotal Three Mile Island (TMI)	42, 000	0	0	0	0
Examination Acti Operating Expens Capital Equipmen	es 0 1		9, 000 0	10, 000 0	10, 000 0
Subtotal Advanced Reactor Systems	0	8, 500	9, 000	10, 000	10, 000
Operating Expens Capital Equipmen			5, 400 300	5, 400 300	300
Subtotal Program Direction		5, 700		5, 700	
Operating Expens	es 941	1, 500	1, 500	1, 500	1, 600
Subtotal Total	941	1, 500	1, 500	1, 500	1, 600
Operating Expens Capital Equipmen	t 2,600	800	900		900
Conventi onal Reactor Syste	\$ 70, 941		\$ 68,000		
Staffing Total FTE'					20
Authorization: Sec					

2/ Excludes a pending supplemental request of \$2,500,000 capital equipment.

Figure I-4 Lead Table

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET	
SUMMARY OF CHANGES DECISION UNIT TITLE	
(In thousands of dollars)	
 FY 19CY budget request	\$ 68,700
High temperature reactor technology - Reduce scope of experiment by eliminating one test	-1, 200
 TMI - Increase number of inspections	+500
Decremental Level	\$ 68,000
High temperature reactor technology - Expand number of experiments	+5, 700
TMI - Expand program to include core removal	+1, 000
 OMB target level	\$ 74, 700
 High temperature reactor technology - Conduct temperature test 	+5, 700
Program direction - Increase FTE by 3 positions in quality control monitoring	+100
Program planning level	\$ 80, 500

Figure I-5 Summary of Changes

9. ANALYSIS OF BUDGET BY OBJECT CLASS. Program organizations must prepare an analysis by object class (Figure I-6) for each funding level requested for each decision unit. The analysis should reflect total obligations for the 19CY and 19PY columns and total budget authority for each level of the 19BY columns.

10. ANALYSIS OF OUTYEAR IMPACT.

- a. Program organizations must prepare an analysis of outyear impact (Figure I-7) for each funding level requested for each decision unit. All outyear projections should be adjusted to reflect current escalation rates provided by OMB. The analysis will reflect budget authority, budget outlays, and staffing, stated in full-time equivalents, for each year from FY 19BY through FY 19BY + 4. Budget authority and outlays will be identified as to operating expenses, capital equipment, and construction. The program office should discuss significant contractual or programmatic long-term decisions which will commit the Government over this period of time. This may include contract closeout provisions, leases of land, insurance coverage, and project guarantees.
- b. Outyear projections developed during the internal review process will serve as the basis for the initial outyear submission to the OMB. Accordingly, it is important that program organizations pay close attention to the development of these estimates and assure that each is adequately supported with sound logic. For projections at the decremental level organizations may not assume that reduced funding in the budget year may be offset by increases in the outyears. For purposes of the outyear projections these reductions are assumed to be permanent.

11. NARRATIVE JUSTIFICATION.

- a. General.
 - (1) The narrative justification provides a detailed, logical explanation of program goals and objectives, the best means for attaining them and the estimated resources required to do so. In the internal review budget, the narrative material should address the funding level consistent with the program planning level distributed with the annual call letter for the organization. It must explain and justify the FY 19BY amounts in the lead table in a consistent and organized fashion and should focus at whatever level of detail necessary to adequately support the funding and staffing request, but at least at the level indicated by the structure in the annual call letter.

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET

ANALYSIS OF BUDGET BY OBJECT CLASS

APPROPRIATION DECISION UNIT

(In thousands of dollars)

FY 19BY 2/

						_,
	F'	1 Y 19PY		/ Decremental	OMB Target	Program Planning
l I Dir	rect Funding:					
	Personnel compensation:					
11.1	•		1, 000	900	1, 000	1, 100
11.3	Other than full-time		100	90	100	110
İ	permanent					
11. 5	Other personnel	10	10		10	20
	00pooa t. 0					
11. 9	Total personnel	1, 110	1, 110	990	1, 110	1, 230
	compensation					
12.1	Personnel benefits:	100	100	90	100	110
	Civilian	100	100	00	100	110
21.0	Travel and trans-	100	100	90	100	110
 -	portation of					
l l 25.0	persons Other services	900	900	810	900	990
31.0	Equi pment	10	10	9	10	12
32.0	Land and structure	10	20			
33.0	Investment and Loans					
1						
		2, 230	2, 230	1, 989	2, 230	2, 472
	- · · ·	=====	======	========	=====	======
j	Reimbursables (if applicable) personnel compensation:					
11. 1	•	100	100	90	100	100
11.3	Other than full-time	10	10	9	10	12
	permanent					
11.5	Other personnel	1	1		1	2
 11 0	compensation	111	111	00	111	104
11.9	Total personnel compensation	111	111	99	111	124
 12.1	Personnel benefits:	10	10	9	10	11
12.1 	Ci vi li an	10	10	7	10	1 1
1 21.0	Travel and trans-	10	10	9	10	11
= 1.0	portation of		, 0	,	, 0	
! 	persons					
25.0	Other services	50	50	45	50	55
26.0	Supplies and	10	10	10	10	10
	materials -					
99.0	Subtotal,	191	191	172	191	211
		=====	======	========	=====	======
99.9	Totals	2, 421	2, 421	2, 161	2, 421	2, 683
	=:	=====	======	========	======	======

- 1/ Show obligation amounts in 19PY and 19CY columns.
- 2/ Show budget authority in 19BY columns.

Figure 1-6 Analysis of Budget by Object Class

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET ANALYSIS OF OUTYEAR IMPACT DECISION UNIT TITLE FY 19BY DECREMENTAL 1/							
		ousands of					
			FY 19BY+2		FY 19BY+4		
Budget Authority							
Operating Expenses	1, 000	1, 040	1, 092	1, 150	1, 200		
Capital Equipment	500	520	545	575	600		
Constructi on	1, 000	1, 040	1, 092				
Total, Budget Authority	2, 500	2, 600	2, 729				
Outlays							
Operating Expenses	950	988	1, 035	1, 085	1, 140		
Capital Equipment	450	468	490	515	540		
Constructi on	800	832			965		
Total, Outlays	2, 200	2, 288	2, 400				
Staffi ng							
Total FTE	100	90	90	90	90		
1/ A separate i.e., Decre							

Figure I-7 Analysis of Outyear Impact

projections should reflect the current OMB escalation rates.

(2) The merits of increases over the fiscal year 19CY funding must be fully explained and the policy rationale used in arriving at the increases described. Generally, the justification is arranged so that the first few pages highlight program goals and the components of change proposed in the budget request. The body of the justification is used to describe the existing program and the changes proposed to maintain and improve it. Finally, the budget request provides a variety of standards, financial and workload data, that may be helpful in understanding the characteristics of the organization or appropriation.

- (3) Be specific in formulating the narrative. Indicate initially the amount of the increase over the current year's budget authority. For example, "The FY 19BY budget request for the project is \$30 million, a \$10 million increase over the amount budgeted in FY 19CY." Indicate planned purchases, requested positions, and expected accomplishments. Identify projects of significant size, or of special interest. If some, or all, of the funds are not yet allocated or if no particular project is cited, indicate the unallocated amount as such and indicate that a competition will take place.
- (4) Prepare the narrative justification at least to the level shown in the program structure attached to the call letter.

 Typically, lower level breakdown strengthens the justification, and its use is encouraged. Initially, state the objectives and goals of the level of effort being justified. Explain how the attainment of these objectives supports the program objectives cited in the program overview. Orient the remainder of the justification toward the following:
 - (a) State the reasons supporting both the particular dollars amount requested, and the specific number of personnel needed in order to meet the stated objectives. For example, explain why a requested \$10 million is required to meet a project's objective as opposed to \$11 million or \$9 million. Provide comprehensive studies or detailed evaluations that have been completed and that have identified the amounts requested at the optimum level of commitment. Provide, also, supporting workload data.
 - (b) Explain in detail the benefits to be realized at the particular level of funding and staffing in the request. State the benefits in terms of quantifiable data whenever possible. For example, use terms such as the number of barrels of oil to be saved at this level, as opposed to a higher or lower level of resource commitment. This

- narrative should address those programs mandated by law and how those programs were carried out in the past and what is proposed to be done in the budget year.
- (5) In addition, provide in the first portion of the narrative, a discussion of the operating expenses portion of the program followed by the capital equipment and plant requirements. Although the funding for plant and capital equipment may be in a different appropriation, discuss it as part of the appropriate program. For example, capital equipment and construction items for the solar small power system are funded in the energy supply research and development-plant and capital equipment appropriation. The operating expenses for the solar small power systems are funded through the energy supply research and development-operating expenses appropriation. Regardless, all of the requirements for the solar small power systems should be discussed at the same physical location in the narrative justification. Use tabular data within the justification to lend clarity to the explanation of the program and to reduce the narrative. New initiatives (initiatives that have never been attempted before in a particular area) should be especially highlighted in the narrative.
- (6) Manpower requirements are to be justified at the program planning level by each organization. Manpower is to be identified for each decision unit to the level of detail indicated in the program structure attached to the budget call. All manpower requirements are to be expressed in terms of full-time equivalents.
- b. OMB Target Level Funding. In addition to the mainline justification which provides a detailed explanation of the funding at the program planning level, each justification must have a specific section which provides a brief description of the impact of funding at the OMB target level. The narrative should specifically identify reductions or increases and the impact that would have on the overall program.
- c. Decremental Level Funding. In another separate section, each justification must provide a description of funding at 90 percent of the OMB target level. A brief narrative should be included to specifically identify the activities proposed for reduction and to explain the impact the reduction of the activity would have on the overall program. This does not mean that each major activity must be reduced by 10 percent, rather that overall, the decision units of

an organization must be reduced. An organization may choose to not apply any of the reduction against a particular decision unit and instead apply a 10 plus percent against another activity.

Decremental manpower levels associated with decremental funding levels are to be identified if the reduced funding level has a direct impact on federal manpower levels. For organizations whose budgets are primarily comprised of personnel funding, decremented staffing levels are required. It is the responsibility of each organization to justify whether manpower levels are or are not reduced at the decremental level. When manpower reductions are identified they should be identified by decision unit and program as required and they should tie to the corresponding rankings.

- 12. AUTOMATIC DATA PROCESSING (ADP) BUDGET DATA. The Department has two principal requirements for budget data relating to ADP: the identification and justification for major items of ADP equipment; and information required to meet the ADP reporting requirements of OMB Circular A-11.
 - a. Major Items of ADP Equipment.
 - (1) A major item of ADP equipment is defined as a component or group of components having a total estimated purchase cost of \$400,000 or more including related capitalizable costs. The determining factor for a major item of ADP equipment is the estimated purchase cost of the item irrespective of the type of funding used or whether the actual method of acquisition is purchase, lease, or some combination of the two. Thus, a leased item is a major item of ADP equipment if the estimated purchase cost is \$400,000 or more, even if the annual lease cost is less than \$400,000.
 - (2) All major items of ADP equipment must be identified separately and justified in the appropriate budget narrative material of the funding or landlord program. This separate identification and justification pertains to all major items of ADP equipment proposed for the budget year regardless of whether they are proposed for lease or purchase or whether they are to be funded by operating, capital, or construction funds.
 - (3) In cases where a single program obtains major items of ADP equipment using lease or lease to ownership arrangements, the total annual cost must be shown by the funding program. In those cases where major items of ADP equipment are acquired by multiple programs, the total annual cost of the lease, or lease

to ownership, must be shown by the program having budget responsibility for general purpose equipment at that location. Where appropriate, however, it should be noted that the actual costs will be shared programmatically according to a charge-back plan based upon utilization.

- (4) In addition to the identification and justification of major item of ADP equipment in the main budget material, the Department prepares a crosscut summary computer table which specifically lists each major item of ADP equipment (excluding items funded from construction funds) utilizing and requiring funds during either the past year (PY), the current year (CY), or the budget year (BY). These cross-cut summaries are provided to OMB and Congress at the time of the Departmental budget submissions.
- (5) An example of the format to be used for the crosscut summary of major computer requirements is included (See Figure I-8). Each funding or landlord program having a major item of ADP equipment where the item requires budget authority (BA), incurs obligations (OB), or accrues costs (BO) during the PY, CY, or BY period is required to prepare a crosscut summary. This summary should be submitted directly to the Office of ADP Management, MA-24, with a copy to the Office of Budget, MA-301.31.
- b. ADP Reporting Requirements of OMB Circular A-11.
 - (1) Pursuant to OMB Circular A-11, the Department is required to report information on the acquisition, operation, or use of general management computer systems along with the Departmental budget submission to OMB. (General management computer systems are those not classified as either partially or fully exempt in the ADP reporting system of DOE 1360.1.)
 - (2) These reporting requirements will be coordinated within the Department by the Office of ADP Management. A substantial portion of the information required will be prepared by MA-24 on the basis of information contained in individual ADP site plans prepared pursuant to the "Call for ADP and Data Communication Long Range Site Plans" issued annually by the Director of Administration. However, in order to complete the various ADP reports required by OMB, MA-24 will need assistance from Headquarters program offices. For example, one report requires the identification of acquisitions planned during the

CY through BY+4 period. This report will be prepared initially by MA-24 on the basis of information contained in individual ADP site plans. Programmatic review and concurrence in this report is essential before it can be submitted to OMB as a consolidated Departmental submission. The Office of ADP Management will, therefore, submit this information to cognizant Headquarters program offices subsequent to the internal review and in sufficient time for review prior to the OMB submission.

 	DEPARTI FY 19BY INTI MAJOR COMI		EVIEW B	UDGET			
	(In thous	sands of	f dolla	rs)			
	ION NAME: (6 ISION UNIT:					CH)	
				imate		9CY Esti	mate
Capital Equipement- Computer Acquisition						0bs. 1/	/ B/O
 E.g., Brookhaven National Laborator	у						
 Mass Storage Device	December 19PY	\$1,000	\$1,000	\$1,000	\$	\$	\$
Stanford Linear Accel erator Cent	er						. /
 Mass Storage Systems	October 19CY	2, 000				2, 000	2,000
Class VI Computer							
Administrative Computer							
 Subtotal SLAC		2, 000					2, 000
 Total Capital Equi	pment		\$1,000	\$	\$2,000	\$2,000	
 a/ FY 19PY Carryove	r	=====	=====	=====	=====	=====	=====
 Operating Expenses							
 1. Show Leasing co 2. Use same format computer item	and detail				nase) oi	r major	

Total Operating	g Expenses			\$	\$	\$	\$ = =====	
 1/ Footnote any ca	arry over	and def	ferral a	amounts				
					BY Estima			
		Decre	emental		Target	Prog. I	PI anni ng	
Capital Equipement- Computer Acquisition	n Date	B/A	Obs.		Obs.	B/A	Obs.	
E.g., Brookhaven National Laborato								
Mass Storage Device				\$				
Stanford Linear Accelerator Cen	ter							
Mass Storage Systems	October 19CY							
Class VI Computer		8, 000	8, 000	8,000	8, 000	8, 000	8, 000	
Administrative Computer				6, 000	6, 000	6, 000	6, 000	
Subtotal SLAC		8, 000					14, 000	
 Total Capital Equi	pment		\$8,000		\$14,000	\$14,000	\$14, 000 =====	
a/ FY 19PY Carryov	er							
Operating Expenses								
1. Show leasing column 2. Use same forma computer item	t and deta	,				or majo	r	
Total Operating	Expenses		\$	\$	\$	\$	\$ ======	
 1/ Footnote any cal	arry over	and det	ferral a	amounts				
Figure 1.0								

Figure I-8 Major Computer Requirements

NOTES: 1. A major computer item is defined as "an ADP equipment (ADPE) (computer) component or group of ADPE computer components (e.g., a computer system) having a total estimated cost of \$400,000 or more including related capitalized costs." This includes leasing situations where the estimated purchase

cost would be \$400,000 or more.

- 2. Each major item of ADP equipment included in any budget schedule (other than construction), regardless of whether it is proposed for purchase or rental/lease, should be specifically identified in this computer schedule.
- 3. In those cases where major items of ADP equipment are funded by operating expenses for use by multiple programs, the total annual cost of lease, or lease to ownership expense, shall be shown against that item by the program having budgetary responsibility for general purpose equipment at that location. However, in such cases, the item will be footnoted to show that actual costs will be shared programmatically according to a charge-back plan based on utilization. The footnote must also contain a breakdown of estimated programmatic utilization by percentage. The appropriate percentages may be obtained from the current ADP long-range plan maintained by the Office of ADP Management (MA-24).

Figure I-8
Major Computer Requirements
(Continued)

13. 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 (OE), 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, Chapters II and IV. 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, cost in excess of \$3,000, have an expected service life of more than 1 year, and 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 5100.1A.
 - (2) Items of capital equipment not related to construction required for experimental projects shall be budgeted from operating

- expenses if 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.
- (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.
 - (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) ADP Planning Documents. When ADP equipment is going into a rehabilitated location it should be capital equipment; in a new location it should be plant.

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 I-11, "Plant and Capital Equipment Funded" and Figure I-12, "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) The review and validation of projects proposed for inclusion in the FY 19BY budget is an assigned responsibility of the Office of Project and Facilities Management (MA-22) as set forth in DOE 5700.3B and DOE 5700.4A, and the Controller's FY 19BY Field Budget Call.
 - (a) In coordination with the Controller's FY 19BY Field Budget Call, the Office of Project and Facilities Management issues instructions to all outlay program Assistant Secretaries and the Directors of Energy Research and Civilian Radioactive Waste Management describing and scheduling the project reviews and validation process.
 - (b) All outlay program Assistant Secretaries and Directors of Energy Research and Civilian Radioactive Waste Management shall coordinate the FY 19BY construction project data sheets with the Office of Project and Facilities Management prior to submission to the Controller.
- (3) Construction projects and operating expenses funded projects with a total estimated cost (TEC) over \$25 million should be validated by the Office of Project and Facilities Management prior to submission of the internal review budget.
- (4) 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 (GPP's) shall provide only for work to be authorized during the fiscal year, since funds for this purpose are both authorized and appropriated annually.

- (5) General plant projects shall be assigned to outlay programs. The predominant program at any given site assumes budget responsibility for those GPP's which provide basic support for all functions at the site. GPP support for program specific work at the weapons activities multi-program laboratories 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 million. 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 is 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 as indicated in Figure I-12.

- (c) Data sheets for the multi-program general purpose facilities program will submitted for those projects selected by the multi-program 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 judgments 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 (3)(m) through (q) on pages I-35 through I-37 and information requested by subparagraphs (4)(o) through (s) on pages I-39 through I-40 should be presented on separate sheets as these data are removed before the submission to Congress.
- (3) The following detailed instructions govern the preparation of construction project data sheets, Figure I-9:
 - (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. Show amount of any escalation rate adjustments as appropriate.
 - 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 the current estimate differs from a previous cost estimate

that has been submitted to Congress, explain the specific reason(s) for the change. The amount of any cost escalation changes should be clearly indicated. 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	Authori zati ons	Appropri ati ons	Obligations	Costs
	Pri or Years	\$50,000	\$30,000	\$30,000	\$ 5,000
ĺ	19CY		\$20,000	\$20,000	\$ 7,000
j	19BY	\$15,000	\$15,000	\$15,000	\$13,000
j	19BY+1	\$15,000	\$15,000	\$15,000	\$20,000
j	19BY+2				\$20,000
j	after 19BY+3	}			\$14, 400
j					
i_					

Figure I-9

2 In addition, general plant projects shall show, for purpose 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 FY 19PY Projects FY 19CY Projects FY 19BY Projects	\$ 1/ 5,000 6,000 7,000	\$1,000 3,000 	\$ 500 1,000 4,000	\$ 1, 000 1, 000 4 000				
\$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								
incurred in FY 1 shall not be sho			Costs pric	or to FY 1	9PY 			

Figure I-10 Financial Schedule - General Plant Projects

- (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 item 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, and 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, sewer, 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 For those facilities where nuclear contamination will occur, identify the tentative method of decommissioning

the facility at the end of its useful life, indicate the expected useful life of the facility and include a cost estimate for decommissioning. The cost estimate should be developed using constant year dollars. (See page I-34, subparagraph (1,b,iii). Indicate that the estimate is in constant year dollars and the reference year. Identify the approximate year when the final decommissioning method will be selected and the final cost estimate for decommissioning will be developed. This information will be used as a baseline for an authorization request for a construction project where the decommissioning will be a significant project.

- 10 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. For GPP requirements on nongovernment-owned or -controlled land, however, the specific project description, cost, and ownership arrangements should be identified in a GPP data sheet.
- (i) Item 9, Purpose, Justification of Need, and Scope of Project. This item should state 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 organization concerned.

- 4 If the purpose of the project is for replacement of 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 on line 5 and 6 of Figure I-11, 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 off-setting reductions which are applicable. In the case of replacement facilities, include comparative data for the facilities being replaced.

- a For production type facilities or power producing facilities both 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; 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. The justification for GPP shall set forth major known sub-projects 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 break-down 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. 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 technical 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 at the Approximate Percent of Construction Costs.
 - i 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.
 - ii A statement shall be included as a footnote identifying the cost of engineering design accomplished with plant engineering and design (PE&D) funds.
 - 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 (REAL PROPERTY) MANAGEMENT, for regulations concerning the acquisition of real property.

c Construction Costs.

cost. Where
Cost. Which
tion of the
ms of
as
t

- 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 I-26, subparagraph (h) 3.
- iv Special Facilities. Identify major engineering equipment, and special systems, as described on page I-26, subparagraph (h) 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 I-26, subparagraph (h) 5, and the total cost. Where this subitem constitutes a major portion of the project, units, unit costs, and total costs should be shown.
- d Construction Management Costs. Identify complete costs and indicate as approximate percentage of total construction cost rounded to nearest whole percent.

- e 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 I-26, subparagraph (h) 6. Costs shall include any engineering effort required.
- f Major Computer Items. List and provide costs for each major computer item as described on page I-26, subparagraph (h) 7.
- g 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.
- h 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.
- i Computed Unit Costs. 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.
- j Include and Explain all TEC Elements. 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 items 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.
- k Basis for Estimate. 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, and Title 1 design is 25 percent complete".

- 1 Cost Data Format. 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; and factors affecting the contingent amount. The method to be used in showing these footnotes is noted in Figure I-11.
- m Rounding. Normally costs should be rounded off to the nearest \$10,000 for item costs and to the nearest \$100,000 for total costs.
- n Escalation Rates. Escalation rates should be explicitly stated and when the rates are significantly different than 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:
 - Design and inspection will be performed under a negotiated architect or engineer contract.
 Construction and procurement will be accomplished by fixed price contracts awarded on the basis of competitive bidding.
 - 2 Design and inspection will be performed by the operating contractor. To the extent feasible, construction and procurement will be accomplished by fixed price contracts and subcontracts awarded on the basis of competitive bidding.

- 3 Construction management services will be performed under a (negotiated, fixed price, or other) professional services contract.
- (1) Items 12 and 13. All projects which have a total estimated cost of \$5 million or more, and for projects with a less than \$5 million where there are significant "other direct project costs" or when there are exceptionally large "other related costs," will contain an item 12 and an item 13. Item 12 will contain the financial schedule and item 13 will 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 on pages I-46 and I-47, the Figure I-12, using the amount of space as required for presentation under each section. If items 12 and 13 are not required, so indicate on the data sheet "item 12 and 13 are not required."
- (m) Detailed Instructions In Completing Items 12 and 13. The cost estimates in items 12 are to be developed using the general guidance provided below. Item 13 will 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 basic 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 expenses funded 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 request, the total estimated cost by fiscal year for such R&D will be included. Funds used for conceptual design should be included.
 - ii Conceptual Design. Include the cost of conceptual design and the amount included should be 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 and a narrative explaining and justifying each cost should be provided.
- iv All costs under subparagraphs 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 will 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 will 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 efforts 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 2 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 b, 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.
- 3 Any significant variations in the annual costing rates for 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 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 and 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, DOE 5440.1B, the Council on Environmental quality Regulation (40 CFR 1500-1508), DOE's NEPA guidelines (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 scheduled 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, P.L. 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.

(4) The following instructions govern the preparation of Operating Expenses Funded Project Data Sheets, Figure I-12. 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 I-12 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 and items 4 through 7 in Figure I-12, 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 Costs. 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 Costs. Includes all other DOE funding related to the program/project activity (i.e., PE&D and line-item).
- (e) Total DOE Cost. Total of subparagraphs (b) and (c).
- (f) Non-DOE Cost. Includes identification of all non-DOE funding. The basis for the non-DOE funding should be identified (i.e., signed contract and contractor proposal).
 - 1 Design and construction.
 - 2 Facility operations and maintenance.
 - 3 Other.
 - 4 Total non-DOE funding.
- (g) Total Project Cost. Summation of subparagraphs (b) 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 relate 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 achievements relating to the development of the project in prior years.
- (l) CY 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 I-29, subparagraph (j).
- (o) Incorporation of Fallout Shelters in Future Federal Buildings. Refer to page I-36, subparagraph (m). 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 I-35, subparagraph (n).
- (q) Evaluation of Flood Hazards. Refer to page I-36, subparagraph (o).
- (r) Compliance with the National Environmental Policy Act and Related Statutes. Refer to page I-37, subparagraph (p).
- (s) Accessibility for the Handicapped. Refer to page I-37, subparagraph (q).

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET
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.)

Title and location of project: 2.
 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.	estimate:	\$24,000
За.	Date physical construction starts: 2nd Qtr. FY 1982		Less amount for PE&D: Net cost estimate: Date: 1/80	500 \$23,500 d/
4.	Date construction ends: 3rd Qtr. FY 1984 a/	6.	Current cost estimate: Less amount for PE&D (FY 79): Net cost estimate: Date: 12/80	\$29, 000 500 \$28, 500 a/ d/

7. Financial Schedule:

Fi scal	Year	Authori zati on	Appropri ati ons	Obligations	Costs
1000		ФОО БОО	 ф10, 000	ф. 7. 000 1. /	
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.
- d/ The amount of cost escalation over 19CY must be explicitly stated as part of new estimate totals (footnoting these amounts is acceptable).

Figure I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded

	CONSTRUCTION PROJECT DATA SHEETS
<u></u> 1. 	Title and location of project: Steam 2. Project No. 80-AE-3 generation facilities, Idaho Fuels Processing Facility, Idaho
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 I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

CONSTRUCTION PROJECT DATA SHEETS

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 I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

CONSTRUCTION PROJECT DATA SHEETS 1. Title and location of project: Steam 2. Project No. 80-AE-3 generation facilities, Idaho Fuels Processing Facility, Idaho 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 Bui I di ngs 1,600 (2) (a) Coal boiler house, 16,500 sq. ft. at approximately \$97/sq. ft. Other structures includes boiler stack, (3) ash burial pit, and underground tunnel 4,300 Utilities, including electrical power, water, sanitary sewer lines, compressed air, fuel oil, condensate return lines, railroad spurs. etc. 1,600 Special facilities includes coal (5)

handling equipment, air pollution

	control e	quipment, ash handling			
	equi pment,	water treatment equipment,			
	and two co	oal fired boilers capable of			
	cogenerati	on	8, 800		ĺ
C.	Construction ma	anagement costs	0		ĺ
d.	Standard equi pr	ment includes auxiliary			j
	equipment (\$2,	995), and office furniture (\$)		3, 000	j
e.	Removal less sa	al vage		0	
		Subtotal		22, 900	
f.	Contingency at	approximately 24% of above		5, 600	
	cost				b/c/
		Total estimated Costs		\$28, 500	

- 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 I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

CONSTRUCTION PROJECT DATA SHEETS Title and location of project: Steam 2. Project No. 80-AE-3 generation facilities, Idaho Fuels Processing Facility, Idaho 11. Method of Performance Contracting arrangements are as follows: 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 Years FY 1980 FY 1981 FY 1982 FY 1983 FY 1984 Total a. Total project costs 1. Total facility

(a) (b)	osts Construction Line item PE&D Inventories	\$	0 500 0	\$	0 0 0	\$10,	000	\$		500 0 0	8, 000 0 180	\$ 1, 000 0 0	\$28,	500 500 180
CC	Total direct costs ther project osts R&D necessary to complete	\$	500	\$	0	\$10,	000	\$	9,	500	\$ 8, 180	\$ 1, 000	\$29,	180
	construction	\$	0	\$	0	\$	0	\$		0	\$ 0	\$ 0	\$	0
	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										\$ 470	\$ 300	\$ 2,	400
	<pre>proj ect costs Total proj ect costs I tem 1 & 2)</pre>	\$1,	150	\$	0	\$10,	440	\$1	10,	040				
1. Fa	b. Other related annual costs (estimated life of project: 25 years) 1. Facility operating costs 2. Programmatic operating expenses directly related													
	to the facilit	ty	Ü	,									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														
 Тс	otal related ar	าทนะ	al co	osts								\$ 1, ====		

Figure I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

.3
ed -
- (1)

- 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 I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

CONSTRUCTI ON	PROJECT	DATA	SHEETS		

- 1. Title and location of project: Steam 2. Project No. 80-AE-3 generation facilities, Idaho Fuels Processing Facility, Idaho
- 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.
- 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 I-11 Construction Project Data Sheets -Plant and Capital Equipment Funded (Continued)

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 I-12 Construction Project Data Sheets -Operating Expenses Funded

Reedy Creek Utilities Demonstration Plant Idaho Operations Office Total Estimated Cost (TEC) \$14,945,000 (Tabular dollars in thousands. Narrative material in whole dollars.) -----Cumul ati ve FY 1981 Prior Years FY 1980 Actual Estimate ______ Obs. B/A Obs. B/O B/A B/0 Operating expenses (DOE): -----Design and construction \$ 85 \$3,300 \$3,300 \$2,437 \$8,745 \$8,400 R&D related to 100 140 140 250 250 construction Facility operations 0 0 0 0 0 0 0 0 Direct project related 0 0 0 0 0 support costs 0 0 0 0 0 0 Capital equipment Total operating expenses 185 3,440 3,440 2,577 8,995 8,650 Other DOE funding: _____ Activity - Conservation 0 575 575 575 400 400 and Solar Energy ----------_ _ _ _ _ Total DOE funding: 185 4,015 4,015 3,152 9,395 9,050 Non-DOE funding: _____ Design and construction 0 0 0 0 500 500 500 Total Project funding \$ 185 \$4,015 \$4,015 \$3,152 \$9,895 \$9,550

> Figure I-12 Construction Project Data Sheets -Operating Expenses Funded (Continued)

Total Estimated Cost (TEC) \$14,945,000 (Tabular dollars in thousands. Narrative material in whole dollars.) 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 Facility operations 370 370 Direct project related support 0 0 490 370 50 30 30 30 Capital equipment Total operating expenses \$1,740 \$2,948 \$14,410 Other DOE costs Activity - Conservation and Solar Energy, design and 0 0 975 construction ____ 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*

Figure I-12 Construction Project Data Sheets -Operating Expenses Funded (Continued)

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

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

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	10 FY 1980	40 FY 1981
Facility Construction	40 FY 1980	10 FY 1982
Facility Startup	10 FY 1982	20 FY 1982

Test Program 20 FY 1982 20 FY 1983

Figure I-12 Construction Project Data Sheets Operating Expenses Funded (Continued)

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 Achi evements

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:

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

Figure I-12 Construction Project Data Sheets -Operating Expenses Funded (Continued)

Reedy Creek Utilities Demonstration Plant Idaho Operations Office

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

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

(0)

(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	s schedul e.	Item Cost	Total Cost
1.	Engineering, design, and inspection, and project management at 34% of construction		
	costs, Item 2		\$ 3,770
2.	Construction costs (a) Improvements to land (b) Buildings and structures (c) Process equipment (d) Utilities (e) Startup Subtotal	\$ 450 3,570 5,950 550 500	11, 020
3.	Contingency @ approximately 1% of above co	osts	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 I-12 Construction Project Data Sheets -Operating Expenses Funded (Continued)

CONSTRUCTION PROJECT DATA SHEETS 1. Title and location of project: Steam 2. Project No. 80-AE-3 generation facilities, Idaho Fuels Processing Facility, Idaho 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 I-12 Construction Project Data Sheets -Operating Expenses Funded (Continued) DOE-5100.4/CII

CHAPTER II - SPECIAL PURPOSE AND CROSSCUT MATERIALS

ISSUE DATE: 10-31-84

LAST CHANGE: CHANGE DATE:

DOE-5100.4 INTERNAL REVIEW BUDGET PROCESS

CHAPTER II

SPECIAL PURPOSE AND CROSSCUT MATERIALS

- SPECIAL PURPOSE AND CROSSCUT MATERIALS. In addition to the preceding materials, each organization should prepare and submit the following figures:
 - a. Safeguards and Security Estimates, Figure II-1;
 - b. Summary of General Plant Projects, Figure II-2;
 - c. Summary of General Purpose Facilities, Figure II-3;
 - d. Motor Vehicle and Aircraft Statement for FY 19BY, Figure II-4;
 - e. Estimated Obligations for Consultant and Related Services, Figure II-5; and
 - f. Summary of Personnel Resources, Figure II-6.
- 2. SUPPORTING SCHEDULES/ANALYSES. The following list of supporting schedules/analyses are required for submission with internal review budgets for only those programs listed below. See the following figures for content and format of these requirements:
 - a. Naval Petroleum and Oil Shale Reserve, Production/Revenue Report, Figure II-7;
 - b. Uranium Enrichment Sale/Revenue Report, Figure II-8;
 - c. Uranium Enrichment Production and Power Cost Report, Figure II-9;
 - d. Power Marketing Administrations Revenue and Receipts Report, Figure II-10;
 - e. Strategic Petroleum Reserve Fill Rates, Figure II-11;

- f. Strategic Petroleum Reserve Budget Summary, Figure II-12;
- g. Strategic Petroleum Reserve Storage Facilities Development Detail and Summary Sheet, Figure II-13;
- h. Strategic Petroleum Reserve Permanent Capacity, Figure II-14;
- i. Strategic Petroleum Reserve Oil Acquisition and Transportation, Figure II-15;
- j. Strategic Petroleum Reserve Facilities Development, Figure II-16; and
- k. Strategic Petroleum Reserve Non-phase Specific Funding, Figure II-17.
- 3. REGULATORY REFORM ANALYSIS. Each Departmental Element will supply a list of all planned regulatory actions contemplated in the budget year. This list will include all actions which may affect the Code of Federal Regulations (CFR) or legal interpretations relating to sections of the code. For each entry, the information listed below will be provided. These actions may relate to deregulation, changes to procedures, and additional regulations.
 - a. CFR citation(s);
 - b. Short name of action or regulation;
 - c. Description of action or regulation;
 - d. Governmental entities affected by this action;
 - e. Effective date of action;
 - f. Summary regulatory impact statement;
 - g. Authority for action/source of request; and
 - h. Budgetary impact of action (addition or deletion of manpower and data processing systems).
- 4. SAFEGUARDS AND SECURITY ESTIMATES.
 - a. Purpose. The purpose of Figure II-1 is 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 safeguards and security activities associated with the research, development, and production of nuclear weapons and special nuclear materials (SNM); 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.

- (1) All safeguards and security budgetary information should be allocated to operating, capital equipment, or construction (Figure II-1). Budget authority and budget outlays for each of 3 years are needed (19PY, 19CY, and 19BY).
- (2) As part of Figure II-1, 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 II-1, Part A.
- (4) In Figure II-1, Part B, safeguards and security 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 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 related to those indicated in subparagraphs (2) through (6) below.
 - (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, Property. Protection of Departmental 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, and 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, and airborne), 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-30) only. All other programs should indicate a "zero" for this activity.

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET
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)

	,						
	FY 1	19PY	FY 19CY		FY 1	19BY	
	В/А	B/0	B/A	B/0	B/A	B/0	
Operating:							
Research and Development	1, 000	1, 000	1, 000	1, 000	1, 000	1, 000	
Facility Security	750	750	750	750	750	750	
Communi cati ons	500 400	500 400	500 400	500 400	500 400	500 400	
Transportation Nuclear Material Control	400	400	400	400	400	400	
and Accountability	300	300	300	300	300	300	
Emergency Response and							
Recovery	200	200	200	200	200	200	
Program Direction	100	100	100	100	100	100	
Security Investigations	10	10	10	10	10	10	
Total	3, 260	3, 260	3, 260	3, 260	3, 260	3, 260	
Capital Faul pmant							
Capital Equipment: Research and Development	100	95	100	95	100	95	
Facility Security	100	95	100	95	100	95	
Communi cations	100	95	100	95	100	95	
Transportati on	100	95	100	95	100	95	
Nuclear Material Control							
and Accountability	100	95	100	95	100	95	
Emergency Response and							
Recovery	100	95	100	95	100	95	
Total	600	570	600	570	600	570	
Construction:							
Research and Development	1,000	500	1, 000	750	1, 000	750	
Facility Security '	2, 000	1,000	2, 000	1, 500	2,000	1, 500	
Communications	500	250	500	375	500	375	
Transportati on	500	250	500	375	500	375	
Nuclear Material Control							
and Accountability	2,000	1, 000	2, 000	1, 500	2,000	1, 500	
Emergency Response and	1 000	F00	1 000	750	1 000	750	
Recovery	1, 000	500	1, 000	750 	1, 000	750 	
Total 1/	7, 000	3, 500	7, 000	5, 250	7, 000	5, 250	
Subtotal s:							
Research and Development	2, 100	1, 595	2, 100	1, 845	2, 100	1, 845	
Facility Security	2, 850	1, 845	2, 850	2, 345	2, 850	2, 345	
Communi cations	1, 100	845	1, 100	970	1, 100	970	

Transportation	1,000	745	1,000	870	1,000	870	
Nuclear Material Control							ĺ
and Accountability	2, 400	1, 395	2, 400	1, 895	2, 400	1, 895	
Emergency Response and							
Recovery	1, 300	795	1, 300	1, 045	1, 300	1, 045	
Program Direction	100	100	100	100	100	100	
Security Investigations	10	10	10	10	10	10	
Total	10, 860	7, 330	10, 860	9, 080	10, 860	9, 080	
	=====	=====	=====	=====	=====	=====	
% of work dealing with SN	M 50	0%	50)%	50%		
and nuclear weapons							
1/ Identify in summary do	llar amou	unts all	ocated to	GPP.			

Figure II-1 Safeguards and Security Estimates

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET SAFEGUARDS AND SECURITY ESTIMATES CONSTRUCTION PROJECTS AND SUBPROJECTS								
	(In thou	ısands	s of do	llars)			
PART A								
 Project No.	Title	TEC	Fiso	cal Yea	r Auth	App	Oblig	Cost
 BY-D-101 	Weapons Prod. Fac.	Д	ıfter	19BY+1 19BY+2 19BY+2	10, 000	3, 000 2, 000 10, 000	3, 000 2, 000	4, 000 3, 500
(Continue for each applicable project) General Plant Projects								
PART B								
Project No.	Ti tle	TEC	Fisa	cal Yea	r Auth	App	Oblig	Cost
 BY-R-201 	Safeguards Facility-LLL			19BY+1	2, 500 	1.500	1,000	

Figure II-1 Safeguards and Security Estimates (Continued)

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET SUMMARY OF GENERAL PLANT PROJECTS

(In thousands of dollars)

ORGANIZATION TITLE (i.e., DEFENSE PROGRAMS) APPROPRIATION DECISION UNIT

	FY 19PY Actual		FY 19CY Estimate		FY 19 Decreme Estimat	ental
	B/A	B/0	B/A	B/0	B/A	B/0
Contractor 2/						
Multi-Program Laboratories						
Argonne National Laboratory	1, 000	900	1, 000	900	900	810
Brookhaven National Laboratory	1, 000	900		900	900	810
Lawrence Berkeley Laboratory	1, 000	900	1,000	900	900	810
Lawrence Livermore National Laboratory	1, 000	900	1, 000	900	900	810
Los Alamos National Laboratory	1, 000	900	1, 000	900	900	810
Oak Ridge National Laboratory	/ 1,000	900	1, 000	900	900	810
Pacific Northwest Laboratory		900	1, 000	900	900	810
Sandia National Laboratory	1,000	900	1,000	900	900	810
Ames Laboratory	1,000	900	1,000	900	900	810
Hanford Engineering Development Lab	1, 000	900	1, 000	900	900	810
Idaho National Engineering Lab	1, 000	900	1, 000	900	900	810
Savannah River Laboratory	1, 000	900	1, 000	900	900	810
Subtotal	12, 000	10, 800	12, 000	10, 800	10, 800	9, 720
Other Contractors						
(List each contractor for which GPP funds are budgeted.)		3, 200	4, 000	3, 200	3, 600	2, 800
Subtotal	4, 000	3, 200	4, 000	3, 200	3, 600	2, 800
Total GPP 2/			16, 000		14, 400	12, 600
		F\ OME	Y 19BY 3 Target stimate	t I	FY 19BY Program Planninq Estimate	9

	B/A	B/0	B/A	B/0
Contractor 2/				
Multi-Program Laboratories				
Argonne National Laboratory Brookhaven National Laboratory Lawrence Berkeley Laboratory Lawrence Livermore National Laboratory Los Alamos National Laboratory Oak Ridge National Laboratory Pacific Northwest Laboratory Sandia National Laboratory Ames Laboratory Hanford Engineering Development Lab Idaho National Engineering Lab Savannah River Laboratory	1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000	900 900 900 900 900 900 900 900 900 900	1, 100 1, 100	1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000
Subtotal	12, 000		13, 200	12, 000
Other Contractors				
(List each contractor for which GPP funds are budgeted.)	4, 000	3, 200	4, 200	3, 500
Subtotal	4,000	3, 200	4, 200	3, 500
Total GPP 2/		14,000		
1/ FY 19BY amounts should be cumulative Outlays should include those from pr				al.
2/ Detailed GPP, GPE and property main provided to the Office of Project are each site as part of field office but	nd Facil	ities Mar	nagement	

Figure II-2 Summary of General Plant Projects

			FY 19PY Actual			FY 19CY Estimate		ental e 1/
Proj ect	Locati on	TEC	B/A	B/0	B/A	B/0	B/A	B/0
81-DP-01	Argonne National Laboratory	10, 000	2, 000	1, 000	3, 000	1, 500	3, 600	1, 800
82-DP-02	Oak Ridge National Laboratory	10, 000	1, 000	500	2, 000	1, 000	2, 700	1, 350
88-DP-06		10, 000					2, 700	1, 350
	neral Purpose ties 2/	60, 000	6, 000	3, 000	10, 000	5, 000	18, 000	8, 000
	-		Т	FY 19BY Target Estimate 1/			FY 19BY Incremental Estimate 1/	
Proj ect	Location		B/A	В	/0	B/A	B/0	
81-DP-0	1 Argonne Nati Laboratory		4, 0	00 2	, 000	5, 000	2, 500	
82-DP-02	2 Oak Ridge Na	ti onal	3, 0	00 1	, 500	4,000	2, 000	
88-DP-06	Laboratory 6 Ames Laborat Laboratory	ory	3, 0	00 1,	, 500	4, 000	2, 000	
	v v eneral Purpose ities 2/		20, 0	00 10	, 000	24, 000	12, 000	
	- II line item G e landlord fun							eral
1/ FY	 19BY amounts s	hould be	cumulati	ve as (opposed	to inc	remental	
esti	reported in t imate of the p dlord, i.e., n	ortion of	total G	PP requ	ui remen	ts which		
			i guro II					

Figure II-3 Summary of General Purpose Facilities

5. INSTRUCTIONS FOR MOTOR VEHICLE AND AIRCRAFT STATEMENT FOR FY

- a. Figure II-4, 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 organization, including its contractors, for whom Government vehicle 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 subparagraph (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 g 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 INTERNAL REVIEW BUDGET DOE FIELD ORGANIZATION APPROPRIATION MOTOR VEHICLE AND AIRCRAFT STATEMENT FOR FY 19BY												
 	(In thousands of dollars)												
	To Be Purchased Old Vehicles To Be Replaced												
				Factory Cost (5)						Total Allowance (11)			
Sedans	1	2	3	21	6	60	2		2	-1			
Station Wagons	1		1	10									
Ambulanc	ces												
Buses													
Pass. Vehicle Subtota	9	2	4	31						-1 			
Light Trucks 4 X 2	1	2	3	30	8	75	2		2	-1 -1 			

Light Trucks 4 X 4	1	2	3	45	8	75	5 2			2	-	-2
Medium Trucks	1	2	3	60	8	75	5 1		1	2	-	-5
 Heavy Trucks	1	2	3	90	8	75	5 2			2	 - 1	0
Trucks Subtotal	4	8	12	225							 - 1	8
Spec. Pur Vehicles												
Trailers												
 Ai rcraft	1		1	100								
 Total 	 7 	10	17 	356							 - 1 	9
							Cost of	 - Hir	 `е			
Type (1)			Net Cos (12)		GSA Poc (13)	ols	Commeri	cal (14)		ces	Total (15)	
Sedans			20									
Station W	agons		10									
Ambul ance:	S											
Buses												
Pass. Veh	icle S	Subtotal	30									
 Light Tru	cks 4	1 X 2	29									
 Light Tru	cks 4	1 X 4	43									
 Medium Tr	ucks		55									
 Heavy Tru	cks		80									
 Trucks Su	btotal		207									
 Spec. Pur	pose \	/ehi cl es	5									
 Trailers												

Ai rcra	ft	100			
 Total		337			
NOTE:	Narrative Justif	i cati on	Must Be Provid	ed.	

Figure II-4
Motor Vehicle and Aircraft Statement for FY 19BY

6. ESTIMATED OBLIGATIONS FOR CONSULTANT AND RELATED SERVICES. Public Laws

96-304 section 307(a), 96-514, section 309(b), and 96-528, section 616(a), require each Federal agency to annually prepare an estimate of the amount of funds contained in their budget request that will be obligated for consultant services, Figure II-5. Each agency must reflect the amount for consultant services within each appropriation, by organization, and provide a brief description of the need for consultant services. Combined estimates will be transmitted to OMB and to Congress with the Department's budget submissions.

- a. Each program office should prepare an estimate of the amount of consultant and related services contained in their budget request for each appropriation. These estimates should be prepared in the format of Figure II-5.
- b. Consultant and related services estimates are divided into six different sub-components or categories. Estimates are intended to be comprehensive and include all obligations for consultants, special studies, advisory committee expenses, and other similar services even though contract agreements or cost records may not clearly identify these services and expenses. Precise definitions for each service category do not exist. Program offices must use judgement in determining if services and expenses meet the general descriptions that follow:
 - (1) Consultant Services Contracts. Represent all anticipated obligations to be incurred under contracts clearly and solely designated as contracts for consultant services.
 - (2) Temporary Personnel Appointments. Represent the amount to be paid to hire consultants that are employed because of special expertise for a specific period of time and in accordance with prescribed personnel guidelines. For this line the estimated number of consulting workdays should be shown.
 - (3) Advisory Committee Expenses. Represent all expenses associated

- with conducting or participating in an advisory committee including travel and salaries, whether for DOE employees or hired consultants, and whether reimbursed or not reimbursed.
- (4) Contractual Studies and Analyses. Represent obligations in Federal Procurement Data System (FPDS) codes R501 through R599 which are the standard procurement code numbers for special studies and analyses contracts that are not otherwise identified as a consulting service.
- (5) Management and Professional Services. Represent contract obligations coded in the FPDS codes R401 through R499 which are used for general management and professional support service contracts.
- (6) Management Services for Research and Development Activities. Represent the same type of services as contracted for in subparagraph (5) above, except the contracts are funded with research and development funds. Typically such contracts would be coded as a R&D procurement and not necessarily as consultant services.

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET ESTIMATED OBLIGATIONS FOR CONSULTANT AND RELATED SERVICES												
ENERGY SUPPLY RESEARCH AND DEVELOPMENT												
 Appropriation	Service Category 1/	_	tions (I sands		App		nt -					
		PY	СҮ	BY	PY	СҮ	BY					
89X0224 	Consultant Service Consultant Service Contracts Temporary Personnel		\$ 10		37							
	Appointments	7			57							
 	Subtotal, Consultant Services	21	10	10	37		 					
 	Other Related Service Advisory Committee Expenses		395	470			 					
 	Contractual Studies and Analyses	3, 570	3, 482	3, 595			 					
	Management and Professi onal	9, 322	712	900								

Management Service for R&D Activities				
Subtotal, Related	13, 216	4, 589	4, 965	
Total, Consultant	\$13, 237	\$4, 599	\$4, 975	37
	=======			===========

Narrative Comments:

Servi ces

Consulting and related services provides cost effective assistance necessary to satisfy program requirements by corroborating in-house conclusions, performing detailed analysis, conducting independent evaluations, providing unbiased judgements, and providing new insights to program issues. The alternative to using these services is to hire permanent staff. Due to the fact that the need for these consulting services fluctuates the need and practicality of employing permanent staff is not warranted.

- 1/ Consultant and related service categories, as listed, are the category designations the Office of Management and Budget has previously requested the Department to use for developing comprehensive consultant service estimates. These categories continue to be used for prior year reporting comparability purposes.
- 2/ The number of workdays is provided only for Temporary Personnel Appointments.

Figure II-5
Estimated Obligations for Consultant and Related Services

- 7. SUMMARY OF PERSONNEL RESOURCES. The House Appropriations Subcommittees on Energy and Water Development and Interior and Related Agencies have requested certain personnel related data to assist in their review of the Departments budget request. Each organization should prepare a summary of personnel resources by appropriation at the decision unit level for the past year, current year, and budget year (Figure II-6).
 - a. Full-Time Equivalents

Total FTE's (including OTFTP) (1)

b. Personnel Compensation: Object Class

Full-Time Permanent (2) 11.1 Other than Full-Time Permanent (3) 11.3 Other Personnel Compensation (3) 11.5

c. Benefits:

Personnel Benefits-Civilian (4) 12.1 Benefits for former Employees (4) 13.0

Travel and Transportation of Persons (5) 21.1

Contractual Services (6)

Transportation of things 22.0

Communications, utilities, and other rent 23.2

Printing and reproduction 24.0
Supplies and materials 26.0
Other services 25.0

DEPARTMENT OF ENERGY FY 19BY INTERNAL BUDGET REVIEW SUMMARY OF PERSONNEL RESOURCES OFFICE OF ENERGY RESEARCH FY 19PY ACTUAL OBLIGATIONS											
(Dollars Amounts in Whole Thousands)											
Appropri ati on/ Program		FTP Base									
General Science and Research											
General Science	30	\$ 1, 149	\$ 29	\$ 104	\$ 85						
Program Direction Subtotal, General Science and Res	30	\$ 1, 149	\$ 29	\$ 104	\$ 85						
Energy Supply Researc	ch										
Magnetic Fusion - I	HQ 68	\$ 2,673	\$ 128	\$ 261	\$ 223						
Bi ological and Environment Resea Headquarters		\$ 2, 265	\$ 185	\$ 225	\$ 97						
Chi cago - EML	95	2, 767	106	298	93						
Subtotal, Biologi and Environmen Research Headqu	t 155	\$ 5,032	\$ 291	\$ 523	\$ 190						
Supporting Research and Technical Ana Basic Energy Scie	al ysi s	\$ 1, 953	\$ 98	\$ 189	\$ 123 						

- HQ Advisory and Oversigh Program Direction - HQ				145	218		133
Subtotal, Support Resource and Technol ogy	148	\$ 4, 113		243	\$ 407	\$	256
Policy and Management		641		95	66		29
Subtotal, Energy Supply Research and Development	392	\$12, 459		757	157		698
Grand Total							
Headquarters Chi cago - EML	284 95	\$10, 841 2, 767		680 106	063 298		690 93
Total	379	\$13, 608		786	361		783
Appropri ati on/Program				(6) ntractual ervi ces	(° To		
General Science and Resea	arch						
General Science Program	Direct	ion		\$	\$ 1,	367	7
Subtotal, General Sci	ence ar	d Research	1	\$	\$ 1,	367	7
Energy Supply Research ar		•					
Magnetic Fusion - HQ				\$121	\$ 2,	206	,)
Biological and Environm	nent Res	earch		\$	\$ 2,	772	2
Headquarters Chi cago - EML	and En	d roomont			6,	036	Ò
Subtotal, Biological Research Headquarte		Tronnent		\$	\$ 8,	808	3
Supporting Research and		cal Analys	sis	\$ 32	\$ 2,	395	5
Basic Energy Sciences Advisory and Oversigh		am Directi	on		2,	656	Ó
- HQ Subtotal, Support Res	source a	nd Technol	ogy	\$ 32	\$ 5,	051	-
Policy and Management				4		835	5
Subtotal, Energy Supp Development	oly Rese	earch and		\$ 57	\$16,	900)
Grand Total							

 Headquarters Chicago - EML	\$ 57 	\$13, 331 3, 264
 Total 	\$ 57	 \$16, 595

Figure II-6 Summary of Personnel Resources

	FY 19	BY INTERNAL	. REVIEW BUD	IGE I							
	NAVAL PET	ROLEUM AND	OIL SHALE R	RESERVES							
	PROD	UCTION AND	REVENUE REP	PORT							
	(1	n thousands	of dollars	5)							
FY 19PY FY 19CY FY 19BY FY 19BY+1 FY 19BY+2											
Gross Receipts NPR-1 NPR-2	50, 000	50, 000	50, 000	1, 510, 000 51, 000	52, 000						
Total	1, 550, 000	1, 550, 000		1, 561, 000							
Estimated Windf Profits Tax	-250, 000										
Net Receipts			1, 300, 000	1, 300, 000	1, 300, 000						
	======	FY 19BY+3	1/ FY 19E		======						
Gross Receipts NPR-1 NPR-2		1, 530, 000 53, 000	1, 54C), 000							
Total		1, 587, 000	1, 594	., 000							
Estimated Windf Profits Tax	al I		-294								
Net Receipts		1, 300, 000	1, 300), 000							

1/ For purposes of the IRB, estimates should be provided for all years indicated. Footnotes assumptions or method used to derive BY+3 and BY+4 projections as necessary.

Figure II-7 Naval Petroleum and Oil Shale Reserves Production and Revenue Report

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET

URANIUM ENRICHMENT SALES/REVENUE REPORT

			SALES/	REVEN	JE REPO	ORT			
			(SWU Sa	les in	า \$000'	s)		FY 19	 9BY
		FY 198	Ργ		FY 190	CY		Decre	 ment
	SWUs								 Estimate
Domestic Requirements Fixed	5. 0	50. 00	250	5. 0	50. 00	250	5. 0	50. 00	250
Commitments		40.00	160	4. 0	40. 00	160	4. 0	40. 00	160
Subtotal Domestic	9. 0		410	9. 0		410	9. 0		 410
Foreign Requirements Fixed	2. 5	50. 00	125	2. 5	50. 00	125	2. 5	50. 00	 125
Commitments Subtotal	5.0	40.00	200	5.0	40.00	200	5.0	40.00	200
Forei gn	7. 5		325	7. 5		325	7. 5		325
	16. 5			16. 5			 16. 5		 735
Advanced			-35			-35			-35
Payments			700			700			 700
Mi scel I aneous			10			10			10
Other Charges			5			5			5
Government Services	1. 0	25. 00	25 	1.0	25. 00	25 	1.0	25. 00	25
Total /Sal es/ Revenue			740 ===			740 ===			740 ===
				ſ	FY 19B\	(
		OMB Target Program Planning							
		SWUs	Price E	stima ⁻	te SV	WUs Pric	e Es	ti mate	
Domestic Requirements Fixed		5. 0	50. 00	250		5. 0 50. 0	0 :	250	

Commitments Subtotal	4. 0	40. 00	160	4. 0	40. 00	160	-
Domestic	9. 0		410	9. 0		410	
Foreign Requirements Fixed	2. 5	50. 00	125	2. 5	50. 00	125	
Commitments Subtotal	5. 0	40.00	200	5. 0	40. 00	200	į
Forei gn	7. 5		325	7. 5		325	
Total Commercial	16. 5		735	16. 5		735	
Advanced Payments			-35 700			-35 700	
Mi scel I aneous			10			10	
 Other Charges			5			5	
Government Services	1. 0	25. 00	25 	1. 0	25. 00	25 	
 Total/Sales/ Revenue			740 ===			740 ===	

Figure II-8 Uranium Enrichment Sales/Revenue Report

	DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET URANIUM ENRICHMENT PRODUCTION AND POWER COST REPORT												
			(In t	housar	nds of	dollars)							
							FY	19BY					
	Separative Work Units	FY	19PY	FY 	19CY	Decrement	OMB	Target	Program Planning				
	Beginning Inventory	y	10		5	10		10	10				
	Producti on		10		20	25		25	25				
	Total Available		20		25	 35		35	 35				
	Usage												

Domestic Foreign Other (Spe	eci fy)	5 5 5	5 5 5		10 10 10	10 10 10	10 10	į
Total Avai	ilabl	е	15	15		30	30		- 1
 Ending Inver	ntory	Level	5	10		5	5	5	
								FY 19BY	
		FY 19PY			FY 19CY		D	ecrement	
 MV Power	W-YR	Mills/KW	'H SM	MW-YR	Mills/KWH	H SM	MW-YR	Mills/KWH	 SM
 Paducah Energy ´ Capacity Charge for Energy	100	25	20 5	100	25	20 5	100	25	20 5
not Taken Total Portsmouth			 25			 25			 25
Energy 2 Capacity Charge Energy	200	50	40 10	200	50	40 10	200	50	40 10
not Taken Total Oakridge			- <i>-</i> 50			50			 50
,	300	45	50 5	300	45	50 5	300	45	50 5
not Taken Total Totals			 55			 55			 55
	600	40	110 20	600	40	110 20	600	40	110 20
not Taken Grand Total	l		130			130			 130
Recap by Supplier									
TVA Energy 4 Capacity Charge Energy	400	50	40 5	400	50	40 5	400	50	40 5
not Taken			= -			= =			

Total EEI			45			45			45
Energy Capacity Charge Energy	300	30	35	300	30	35 	300	30	35
not Take Total OVEC	en		 35			 35			 35
Energy Capacity Charge Energy not Take	200 en	40	30 1	200	40	30 2	200	40	30 3
Total	21.		31			32			33
Totals Energy Capacity Charge Energy	900	40	105 6	900	40	105 7	900	40	105 9
not Take	en		 111			112			113
			FY 1				M Amt	Y 19BY inimum . Without	
	С	MB Target		Prog	ram Plannir	ng	Dema	nd Charges	5
 Power	MW-YR	Mills/KWH	SM	MW-YR	Mills/KWH	SM	MW-YR	Mills/KWH	 SM
Power	MW-YR	Mills/KWH	SM	MW-YR	Mills/KWH	SM	MW-YR	Mills/KWH	 SM
Paducah Energy Capacity Charge	MW-YR	Mills/KWH	SM 20 5	MW-YR	Mills/KWH	SM 20 5	MW-YR	Mills/KWH	 SM
Paducah Energy Capacity Charge for Energy not Take	100 en		20			20			20
Paducah Energy Capacity Charge for Energy not Take Total Portsmouth Energy Capacity Charge	100 en		20 5			20 5			20
Paducah Energy Capacity Charge for Energy not Take Total Portsmouth Energy Capacity Charge Energy not Take	100 en 1 200	25	20 5 25 40	100	25	20 5 25 40	100	25	20 20 40
Paducah Energy Capacity Charge for Energy not Take Total Portsmouth Energy Capacity Charge Energy not Take	100 en 1 200	25	20 5 25 40 10	100	25	20 5 25 40 10	100	25	20 20 40

Energy Capacity Charge Energy not Taked Grand Tota		40	110 20 130	600	40	110 20 130	600	40	110 110
Recap by Supplier	ui		130			100			
TVA Energy Capacity Charge Energy	400	50	40 5	400	50	40 5	400	50	40
not Take	n		 45			 45			 40
EEI			0.5	0.00		0.5	0.00		0.5
Energy Capacity Charge Energy	300	30	35 	300	30	35 	300	30	35
not Take	n								
Total OVEC			35			35			35
Energy Capacity Charge Energy	200	40	30 4	200	40	30 5	200	40	30
not Take	n								
Total			34			35			30
Totals Energy Capacity Charge Energy	900	40	105 9	900	40	10	900	40	105
not Take Total 	n		114			115			 105

Figure II-9 Uranium Enrichment Production and Power Cost Report

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET
POWER MARKETING ADMINISTRATIONS
REVENUE AND RECEIPT REPORT
 (In thousands of dollars)

Gross Revenues	100	100	100	110	120
Recei pts:					
Sale and transmission of					
electric energy - Eklutna Project	50	50	50	55	60
Sale and transmission of	30	30	50	55	00
electric energy -					
Snetti sham Project	50	50	50	55	60
Net billing amount credited					
back to appropriation as an offsetting receipt	75	75	75	80	85
Percent of sales to	7.5	7.5	7.5	00	00
preference customers	25	25	25	25	25
Energy Sales from Power Markete		1 000	1 000	4 040	1 000
(billions of kilowatt hours)	1, 000	1, 000	1, 000	1, 010	1, 020
Southeastern Power Administrati	on				
Gross Revenues	200	200	200	210	220
Recei pts:					
Sale and transmission of	100	100	100	105	110
electric energy Deposit from sale and	100	100	100	105	110
transmission of electric					
energy	100	100	100	105	110
Net billing amount credited					
back to appropriation as an offsetting receipt	50	50	50	55	55
Percent of sales to	30	30	30	33	99
preference customers	30	30	30	30	30
Energy Sales from Power Markete		1 500	1 500	1 E10	1 500
(billions of kilowatt hours)	1, 500	1, 500	1, 500	1, 510	1, 520
Southwestern Power Administrati	on				
Gross Revenues	300	300	300	310	320
Receipts:					
Sale and transmission of	200	300	200	310	320
electric energy Net billing amount credited	300	300	300	310	320
back to appropriation as					
an offsetting receipt	200	200	200	210	220
Percent of sales to preference customers	40	40	40	40	40
Energy Sales from Power Markete		40	40	40	40
(billions of kilowatt hours)		2,000	2,000	2, 010	2, 020
			FY 19BY+	3 FY 191	3Y+4

Gross Revenues Receipts:	130	140	
Sale and transmission of electric energy - Eklutna Project Sale and transmission of electric	65	70	
energy - Snettisham Project Net billing amount credited back to	65	70	
appropriation as an offsetting receipt Percent of sales to preference customers	90 25	95 25	
Energy Sales from Power Marketed (billions of kilowatt hours)	1, 030	1, 040	
 Southeastern Power Administration			
 Gross Revenues Receipts:	230	240	
Sale and transmission of electric energy Deposit from sale and transmission of	115	120	
electric energy Net billing amount credited back to	115	120	
appropriation as an offsetting receipt Percent of sales to preference customers	60 30	60 30	
Energy Sales from Power Marketed (billions of kilowatt hours)	1, 530	1, 540	
 	1, 000	1, 040	
Gross Revenues	330	340	
Receipts: Sale and transmission of electric energy	330	340	İ
Net billing amount credited back to appropriation as an offsetting receipt	230	240	İ
Percent of sales to preference customers Energy Sales from Power Marketed (billions of	40	40	
kilowatt hours)	2, 030	2, 040	

Figure II-10
Power Marketing Administration
Revenue and Receipt Report

DEPARTMENT OF ENERGY
FY 19BY INTERNAL REVIEW BUDGET

POWER MARKETING ADMINISTRATIONS
REVENUE AND RECEIPT REPORT
(In thousands of dollars)

FY 19PY FY 19CY FY 19BY FY 19BY+1 FY 19BY+2

Western Area Power Administration

Gross Revenues (CRO&M) Gross Revenues (CRB) Receipts:	400 100	400 100	400 100	410 110	420 120
Sale and transmission of electric energy - Falcor Dam Reclamation Fund, all othe	200	200	200	210	220
sale of power and other utilities Sale of power and other	100	100	100	100	100
utilities, not otherwise classified Revenues, Colorado River	100	100	100	100	100
Dam Fund, Boulder Canyor Project Net billing amount credited	100	100	100	110	120
back to appropriation as an offsetting receipt Percent of sales to	300	300	300	310	320
preference customers	50	50	50	50	50
Gross Revenues returned to Revolving Fund Energy Sales from Power	100	100	100	110	120
Marketed (billions of kilowatt hours)	3, 000	3, 000	3, 000	3, 010	3, 020
 Bonneville Power Administration	n				
Gross Revenues: Federal Non-Federal Receipts: Reclamation Fund, all	500 1, 000	500 1, 000	500 1, 000	510 1, 010	520 1, 020
other, sale of electric energy (Reclamation Func Repayments on miscellaneou recoverable costs, not		1, 000	1, 000	1, 010	1, 020
otherwise classified (COE) Energy Sales from Power	500	500	500	510	520
Marketed (billions of kilowatt hours)	10, 000	10 000	10 000	10, 100	10, 200
Kilowatt Hours)	10, 000	10, 000		3 FY 19E	į
Western Area Power Administra	ition				
Gross Revenues (CRO&M) Gross Revenues (CRB) Receipts:			430 130		10 10
Sale and transmission of Falcon Dam Reclamation Fund, all oth			230	24	 10
power and other utiliti		. O1	100	10	00

Sale of power and other utilities, not otherwise classified Revenues, Colorado River Dam Fund,	100	100	
Boulder Canyon Project Net billing amount credited back to	130	140	
appropriation as an offsetting receipt	330	340	İ
Percent of sales to preference customers	50	50	
Gross Revenues returned to Revolving Fund Energy Sales from Power Marketed (billions of	130	140	
kilowatt hours)	3, 030	3, 040	į
Bonneville Power Administration Gross Revenues:			
Federal	530	540	i
Non-Federal	1, 030	1, 040	i
Receipts:	., 000	.,	i
Reclamation Fund, all other, sale of electric energy (Reclamation Fund)	1, 030	1, 040	
Repayments on miscellaneous recoverable	1, 030	1, 040	i
costs, not otherwise classified (COE) Energy Sales from Power Marketed (billions of	530	540	
kilowatt hours)	10, 300	10, 400	

Figure II-10
Power Marketing Administration
Revenue and Receipt Report
(Continued)

8. STRATEGIC PETROLEUM RESERVE INTERNAL REVIEW BUDGET DATA REQUIREMENTS.

Strategic Petroleum Reserve (SPR) data, as referenced in the following schedules, is required by the Office of Budget (MA-301.43) for the annual Internal Review Budget (IRB) process.

- a. Figure II-11, "SPR Fill Rate", provides the annual oil deliveries and barrel per day rate for each IRB funding level by year out to completion for a 750 million of barrels (MMB) reserve.
- b. Figure II-12, "SPR Budget Summary", summarizes total SPR budget request and out-year funding by major funding categories for each proposed IRB funding level.
- c. Figure II-13, "SPR Storage Facilities Development Detail and Summary Sheet", provides a break-out of the SPR budget request for storage facilities development activities by appropriate detail and out-years at each level of the IRB request.
- d. Figure II-14, "SPR Permanent Capacity", projects annual increases for Phases II and III through 1990. These annual increases are to

be updated annually.

- e. Figure II-15, "SPR Oil Acquisition and Transportation", provides a quarterly break-out of oil acquisition and transportation costs, obligations, and outlays for all years for each IRB funding level through FY 1991.
- f. Figure II-16, "SPR Facilities Development", shows BA and Obligations allocated to each SPR site for each phase I, II, and III site and non-phase portion of SPR facility development funding. The subtotals for each phase by site should equal the corresponding phase subtotals shown on Figure II-13.
- g. Figure II-17, "SPR Non-Phase Specific Funding", provides a BA and obligations break-out of budget request and outyear funding by site and functional category.

		-	DEPARTMEN BY INTERN			Γ		
 	S ⁻	TRATEGI C	PETROLEU	M RESER\	/E FILL F	RATES		
	Decremental Level (MMB)		Fi scal Year	OMB Target Level (MMB)		Fi scal Year	Program Plannir Level (MMB)	ng
 Fill to Date	400. 0		Fill to Date	400. 0		Fill to Date	400. 0	
FY 19BY	50. 0	200, 000	FY 19BY	60. 0	250, 000	FY 19BY	70. 0	300, 000
 FY 19BY +1	50. 0	200, 000		60. 0	250, 000		70. 0	300, 000
 FY 19BY +2 	50. 0	200, 000		60.0	250, 000		70. 0	300, 000
VV Total	750. O MMI	_ B		750. O M	ММВ		750. 0	

Figure II-11 Strategic Petroleum Reserve Fill Rates

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET

STRATEGIC PETROLEUM RESERVE BUDGET SUMMARY 1/

(In thousands of dollars)

	Pri or Years		FY 19CY	FY 19BY	FY 19BY+1	FY 19BY+2
 General Fund Program Direction Budget Authority Total Obligations Total Outlays	500 475 450	50 50 45	50 50 45	50 50 45	55 55 50	60 55 55
 Planning Budget Authority Total Obligations Total Outlays	500 475 450	50 45 45	50 45 45	50 45 45	55 50 50	60 55 50
 Facilities Budget Authority Obligations Outlays	1, 000 250 900	100 95 90	100 95 90	100 95 90	110 105 100	120 110 105
 Oil Acquis. & Tran Budget Authority Obligations Budget Outlays	10, 000 9, 950 9, 900	 25 50	 25 25	 25		
 Total Gen. Fund Budget Authority Obligations Outlays	12, 000 11, 850 11, 700	200 215 230	200 215 205	200 190 205	220 210 200	240 220 210
 Entitlements Budget Authority Obligations Outlays	500 500 500	 		 	 	
 SPR Petroleum Acco Budget Authority Obligations Outlays	5, 000 4, 950	3, 000 2, 950 2, 900	3, 000 2, 950 2, 900	3, 000 2, 950 2, 900	3, 000 2, 950 2, 900	3, 000 2, 950 2, 900
 Total All Fund Budget Authority Obligations Outlays	17, 500 17, 300 17, 100	3, 200 3, 165 3, 130	3, 200 3, 165 3, 105	3, 200 3, 140 3, 105	3, 320 3, 160 3, 100	3, 240 3, 170 3, 110
 	FY 19B	SY+3 FY 1		uture ears	Total Fill	

General Fund Program Direction Budget Authority Total Obligations Total Outlays	65 60 60	70 65 65		900 860 815	
Planning Budget Authority Total Obligations Total Outlays	65 60 55	70 65 60		900 840 800	
Facilities Budget Authority Obligations Outlays	130 120 115	140 130 125		1, 800 1, 700 1, 615	
Oil Acquis. & Trans. Budget Authority Obligations Budget Outlays		 		10, 000 10, 000 10, 000	
Total Gen. Fund Budget Authority Obligations Outlays	260 240 230	280 260 250		13, 600 13, 400 13, 230	
Entitlements Budget Authority Obligations Outlays		 		500 500 500	
SPR Petroleum Accoun Budget Authority Obligations Outlays	t 3, 000 2, 950 2, 900	3, 000 2, 950 2, 900		26, 000 25, 740 25, 200	
 Total All Fund Budget Authority Obligations Outlays	3, 260 3, 170 3, 130	3, 280 3, 210 3, 150		40, 100 39, 640 38, 930	
 1/ Provide for each Program Planning.	proposed	fundi ng level:	Decre	ement, OMB Target	and

Figure II-12 Strategic Petroleum Reserve Budget Summary

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET

STRATEGIC PETROLEUM RESERVE STORAGE FACILITIES DEVELOPMENT DETAIL AND SUMMARY SHEET 1/

	(In th	nousands c	of dollars	s)	
	FY 19PY	FY 19CY	FY 19BY	FY 19BY+1	FY 19BY+2
Phase I					
B/A		100		110	120
Total Obs.	950	95	95	105	115
B/0	900	90	90	100	110
Sustaining Operations					
B/A	1, 000	100	100	110	120
Total Obs.	950	95	95	105	115
B/0	900	90	90	100	110
Withdrawal Engineerin	_				
B/A	1, 000	100	100	110	120
Total Obs. B/O	950 900	95 90	95 90	105 100	115 110
В/О	900	90	90	100	110
Phase Subtotal	0.000	000	000	202	0.10
B/A	3, 000	300	300	330	360 305
Total Obs. B/O	2, 850 2, 750	285 270	285 270	315 300	395 330
D/ O	2, 730	270	270	300	330
Phase II Subtotal	1 000	100	100	110	100
B/A Total Obs.	1, 000 950	100 95	100 95	110 105	120 115
B/0	900	90	90	100	110
Phase III B/A	1, 000	100	100	110	120
Total Obs.	950	95	95	105	115
B/0	900	90	90	100	110
A.E. O					
AE Contract B/A	500	50	50	50	50
Total Obs.	450	45	45	45	45
B/0	400	40	40	40	40
Phase III Subtotal					
B/A	1, 500	150	150	160	170
Total Obs.	1, 400	140	140	150	160
B/0	1, 300	130	130	140	150
Non-Phase Specific					
В/А	1,000	100	100	110	120
Total Obs.	950	95	95	105	115
B/0	900	90	90	100	110
Total SFD Fund					
B/A	6, 500	650	650	710	770
Total Obs.	6, 150	615	615	675	735
B/0	5, 800	580	580	640	690

 	FY 19BY+3	FY 19BY+4	Future Years	Total Fill
Phase B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
Sustaining Operations B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
Withdrawal Engineering B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
 Phase Subtotal B/A Total Obs. B/O	390 375 360	420 405 390	 255 510	5, 400 5, 400 5, 400
 Phase Subtotal B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
Phase III B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
AE Contract B/A Total Obs. B/O	50 45 40	50 45 40	 85 170	850 850 170
Phase III Subtotal B/A Total Obs. B/O	180 170 160	190 180 170	 170 340	2, 650 2, 650 2, 650
Non-Phase Specific B/A Total Obs. B/O	130 125 120	140 135 130	 85 170	1, 800 1, 800 1, 800
 Total SFD Fund B/A Total Obs. B/O	830 795 760	890 855 820	 595 1, 190	11, 650 11, 650 11, 650

1/ Provide for each proposed funding level: Decrement, OMB Target and Program Planning.

Figure II-13
Strategic Petroleum Reserve
Storage Facilities Development Detail and Summary Sheet

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET											
STRATEGIC PETROLEUM RESERVE PERMANENT CAPACITY 1/											
(In MMB's)											
Cumulative Capacity Tota as of 9-30-84 1985 2/1986 2/1987 2/1988 2/1989 2/1990 2/city											
West Hackberry	XXX XXX XXX	17. 4 34. 1 0	10 10 5	10 10 5	10 10 5	10 10 5	10 10 5	XXX XXX XXX			
 Subtotal	XXX		25	25	25	25	25	290. 0			
 Phase III											
 Bryan Mound West Hackberry Bayow Choctaw Big Hill		14	5 2 2 1	5 2 2 1	5 2 2 1	5 2 2 1	5 2 2 1	XXX XXX XXX XXX			
 Subtotal	XXX		10	10	10	10	10	200. 0			
 Total Annual Additions 	N/A	 65. 5	 35	 35	 35	 35	 35	 			
 Total Capacity	Total Capacity 430. 2 495. 7 750. 0										

^{1/} Complete the attached table indicating the yearly permanent capacity projections consistent with each annual SPR IRB submission for fiscal years 1986 through 1990.

^{2/} Replace projections with actual increases in progressional budget years so that all years remain.

Figure II-14 Strategic Petroleum Reserve Permanent Capacity

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET										
STRATEGIC PETROLEUM RESERVE OIL ACQUISITION AND TRANSPORTATION 1/										
Fi scal Year	Quarter	Fill	Pri ce	Quarterly Cost	Outl ay	Outlay Carry- over	Obliga- tions			
1983		361. 0			8, 546. 864	204. 166	10, 041. 550			
1984	First Second Third Fourth	14. 7 22. 1 22. 1 9. 2	30. 70 30. 72 30. 74	451. 00 678. 47 678. 91 282. 91						
		68. 1		2, 091. 19	2, 157. 00	138. 356	1, 069. 64			
1985	First Second Third Fourth	13. 2 13. 2 13. 2 13. 3	30. 76 30. 77 30. 79 30. 82	406. 03 406. 16 406. 43 409. 91						
1986	ļ ļ	52. 9		1, 628. 53	1, 668. 32	98. 566	2, 050. 29			
1987										
1988										
1989										
1990										
1991	V									
Fi scal Year	Quarter	Uncos Obligati		Budget Authority	Cumulati Fill		els on c, EOY			
1983		2, 030). 309	10, 041. 550	361. 0		5. 1			
1984	First Second Third				375. 7 397. 8 419. 9					
	Fourth	556	5. 3	650. 00	429. 10) 18	3. 1			

1985 	First Second Third Fourth			442. 3 455. 5 468. 7	
		817. 4	1, 889. 55	482. 0	26. 5
1986					
1987					
1988					
 1989 					
1990					
1991	\				

- 1/ Provide for each proposed funding level: the Program Planning Level, OMB Target and the Decremental Level.
- 2/ Use OMB oil prices currently in effect plus SPR add-on, provide copy of add-on with submission.

Figure II-15 Strategic Petroleum Reserve Oil Acquisition and Transportation

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET										
	SPR FACILITIES DEVELOPMENT									
	Pri or	Years	FY 1	9PY	FY 1	9CY	FY 1	9BY	FY 1	9BY+1
	B/A	OBS	B/A	OBS	B/A	OBS	B/A	OBS	B/A	OBS
 Phase I										
Bryan Mound	1, 000	800	100	80	100	80	100	80	100	80
West Hackberry	1,000	800	100	80	100	80	100	80	100	80
Bayow Choctaw	1,000	800	100	80	100	80	100	80	100	80
Sulphur Mines	1,000	800	100	80	100	80	100	80	100	80
Weeks Island		800	100	80	100	80	100	80	100	80
St. James,	1, 000	800	100	80	100	80	100	80	100	80
Termi nal Total	6, 000	4, 800	600	480	600	480	600	480	600	480
Phase II										
Bryan Mound	1,000	800	100	80	100	80	100	80	100	80
West Hackberry	1,000	800	100	80	100	80	100	80	100	80
Bayow Choctaw	1, 000	800	100	80	100	80	100	80	100	80

Total	3,000 2,	400 30	00 240	300	240	300 2	240 30	00 240)
Phase III Bryan Mound West Hackberry Bayow Choctaw Big Hill New Orleans	1, 000 1, 000 1, 000 1, 000 1, 000	800 10 800 10 800 10 800 10 800 10	80 80 80 80 80 80	100 100 100 100 100	80 80 80 80	100 100 100 100 100	80 10 80 10 80 10 80 10	00 80 00 80 00 80 00 80)))
 Total	5, 000 4,	000 50		500	400		400 50)
Non-Phase Sulphur Mines Bryan Mound West Hackberry Bayow Choctaw Big Hill New Orleans Weeks Island St. James, Terminal	500 500 500 500 500 500 500	400 5 400 5 400 5 400 5 400 5 400 5	60 40 60 40 60 40 60 40 60 40 60 40 60 40	50 50 50 50 50 50 50	40 40 40 40 40 40 40	50 50 50 50 50 50 50 50	40 5 40 5 40 5 40 5 40 5 40 5		
Total 	4,000 3,	200 40	00 320	400	320	400 3	320 40	00 320)
Pri	or Years	FY 1	9PY	FY 1	9CY	FY 1	19BY	FY 19	9BY+1
B/A	OBS	B/A	OBS	B/A	OBS	B/A	OBS	B/A	OBS
Site Totals Bryan Mound 3,5 West 3,5 Hackberry	00 2, 800	350	280 280	350 350	280 280	350 350	280 280	350 350	280 280 280
Bayow 3,5 Choctaw			280	350	280	350	280	350	280
Big Hill 1,5 New Orleans 1,5 Sulphur 1,5 Mines	00 1, 200	150	120 120 120	150 150 150	120 120 120	150 150 150	120 120 120	150 150 150	120 120 120
Weeks Island 1,5 St. James, 1,5 Terminal			120 120	150 150	120 120	150 150	120 120	150 150	120 120
· ·	00 14, 400	1, 800	1, 440	1, 800	1, 440	1, 800	1, 440	1, 800	1, 440
	FY 19BY	+2 FY 19	BY+3 F	/ 19BY		ture 17 ears		otal	į
	B/A OBS	 S B/A	OBS B	 /A OB	 S B/ <i>F</i>	 A OBS	B/A	OE	 BS
Phase I Bryan Mound West Hackberry Bayow Choctaw Sulphur Mines Weeks Island St. James,	100 80 100 80 100 80 100 80 100 80	100 100 100 100 100	80 10 80 10 80 10 80 10	00 8 00 8 00 8 00 8	0 0 0 0 0 0		1, 70 1, 70 1, 70 1, 70 1, 70	00 1, 3 00 1, 3 00 1, 3 00 1, 3	360 360 360 360 360 360

Termi nal Total	600	480	600	480	600	 480	 	 	10,	200	8,	160
Phase II Bryan Mound West Hackberry Bayow Choctaw	100 100 100	80 80 80	100 100 100	80 80 80	100 100 100	80 80 80	 		1, 1,	700 700 700	1,	360 360 360
Total	300	240	300	240	300	240				100	4,	080
Phase III Bryan Mound West Hackberry Bayow Choctaw Big Hill New Orleans	100 100 100 100 100 500	80 80 80 80 80	100 100 100 100 100 500	80 80 80 80 80	100 100 100 100 100 500	80 80 80 80 80 	 	 	1, 1, 1,	700 700 700 700 700 700	1, 1, 1, 1,	360 360 360 360 360
Non-Phase Sul phur Mi nes Bryan Mound West Hackberry Bayow Choctaw Big Hill New Orleans Weeks Island St. James, Termi nal	50 50 50 50 50 50 50	40 40 40 40 40 40 40 40	50 50 50 50 50 50 50	40 40 40 40 40 40 40 40	50 50 50 50 50 50 50	40 40 40 40 40 40 40 40	 			850 850 850 850 850 850 850		680 680 680 680 680 680 680
Total	400 FY 19	320 RV+2	400 EV	320 19BY+	400	320 FY 19I	 RV⊥/I	Futui Yeai	re 1/	800		440 otal
	 B/A	 OBS	 B/A			гт тэг В/А	0BS	 B/A	 OBS	 B/A		0BS
Site Totals Bryan Mound West Hackberry Bayow Choctaw Big Hill New Orleans Sulphur Mines Weeks Island St. James, Terminal Total SFD Fund	350 150 150 150 150 150	280 280 280 120 120 120 120	35 35 35 15 15 15 15	0 2 0 2 0 1 0 1 0 1 0 1 0 1	80 80 80 20 20 20 20 20		280 280 120 120 120 120 120				50 50 50 50 50 50	4, 760 4, 760 2, 040 2, 040 2, 040 2, 040
1/ Use if requi										SU, 0	UU	24, 4 ŏ l

DEPARTMENT OF ENERGY FY 19BY INTERNAL REVIEW BUDGET

SPR NON-PHASE SPECIFIC FUNDING 1/

	(Dolla	rs in	Thousa	nds)					
			Years		9PY	FY 19BY		FY 19BY	
Si te	Functi onal Category	B/A	OBS	B/A	OBS	B/A	OBS	B/A	0BS
New Orlean:		100	100	25	25	25	25	25	25
	Engineering Capital Improvement			5 10	5 10	5 10	5 10	5 10) 1(
	Subtotal	160	160	40	40	40	40	40	40
Bryan Moun	d Operating & Maintenance	100	100	25	25	25	25	25	2
	Engineering Capital Improvement			5 10	5 10	5 10	5 10	5 10	1
Total Non-Phas Speci fi c	Subtotal	160	160	40	40	40	40	40	4
эрссттс	Operating & Maintenance	1, 000	1, 000	250	250	250	250	250	25
	Engineering Capital Improvements	100 500	100 500	50 100	50 100	50 100	50 100	50 100	5 10
	Total	1, 600	1, 600	400	400	400	400	400	40
	Functi onal	FY	19BY+2	F	Y 19E	3Y+3	FY	19BY+	4
Si te	Category		A OBS		 8/A			. OB	
New Orlean:		2			25	25			!5
	Engineering Capital Improvement	s 1			5 10	5 10	5 10		5 0
	Subtotal	4	0 40		40	40	40		.0

	Operating & Maintenance	25	25	25	25	25	25		
 	Engineering Capital Improvements	5 10	5 10	5 10	5 10	5 10	5 10		
 Total Non-Phas	Subtotal	40	40	40	40	40	40		
Specific	Operating &	250	250	250	250	250	250		
	Mai ntenance								
j	Engi neeri ng	50	50	50	50	50	50		
	Capital Improvements	100	100	100	100	100	100		
	Total	400	400	400	400	400	400		
1/ Provide for each proposed funding level: the Program Planning Level, OMB Target and the Decremental Level.									

Figure II-17 Strategic Petroleum Reserve Non-Phase Specific Funding

5100.5 OFFICE OF MANAGEMENT AND BUDGET - BUDGET PROCESS

DOE-5100.5 OFFICE OF MANAGEMENT AND BUDGET - BUDGET PROCESS

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

ORDER DOE 5100.5 7-21-83

SUBJECT: OFFICE OF MANAGEMENT AND BUDGET - BUDGET PROCESS

1. PURPOSE. To outline requirements and procedures for the preparation and submission of the Department of Energy (DOE) budget for the Office of Management and Budget (OMB).

2. REFERENCES.

a. DOE 1360.1, ACQUISITION AND MANAGEMENT OF AUTOMATED DATA PROCESSING

EQUIPMENT AND RESOURCES, of 8-9-78, which establishes policy and procedures for the acquisition and management of automated data processing equipment and resources.

- b. DOE 2200.1, ACCOUNTING POLICY AND PRACTICES, of 11-9-79, which establishes the policy, principles, objectives, and responsibilities for DOE.
- c. 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.
- d. OMB Circular A-11, "Preparation and Submission of Budget Estimates," which details the OMB requirements for budget formulation.
- 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.

WILLIAM S. HEFFELFINGER Director of Administration