6.1 Program Implementation Overview

Implementing the budget means implementing the program; that is, getting the planned work assigned and completed in a timely and economical way that yields quality results, and ensuring that program expenditures are consistent with the President’s budget as modified by the Congress. This is done by implementing the program’s portion of the Energy Efficiency and Renewable Energy (EERE) Annual Operating Plan (AOP) for execution for the current Fiscal Year (FY) (see Chapter 4 on Planning). The AOP is developed by determining the work that needs to be done; the appropriate sources; and the estimated scope, schedule, milestones, and cost. This is accomplished through continuous communication with the field elements, culminating with the submission of Field Work Proposals (FWP).

The program management team comprises cognizant staff from Headquarters (HQ) and the field designated by the Program Manager, and has numerous responsibilities for program implementation. Program implementation involves an apportionment process that makes funds available from the Office of Management and Budget (OMB) to the U.S. Department of Energy (DOE) for obligation. The process is intended to promote the obligation and expenditure of funds in an account that would achieve the most effective and economical use of amounts made available. Figure 6.1–1 on the following page is a comprehensive flow chart that shows the different players and their roles in the program implementation process.
6.1.1 Program Implementation Financial Terms

The following are definitions of some relevant program implementation financial terms:

- **Appropriation**—A law that gives DOE the authority to obligate a specified level of funds from the U.S. Treasury.

- **Budget Authority**—The authority provided by law to incur financial obligations that will result in future outlays for goods and services.

- **Costed**—The value (based on purchase price) of goods and services used, or consumed, within a given period, regardless of when paid.

- **Obligation**—A legally binding agreement that will result in outlays—immediately or in the future. Budgetary resources must be available before obligations can be incurred legally.

- **Obligational Authority**—The sum of budget authority, unobligated balances, offsetting collections, and fund transfers.

- **Outlays**—The actual disbursement of funds.
• **Unobligated Balances**—The cumulative amount of budget authority that is not obligated, and that remains available for obligation under law.

## 6.2 Program Implementation Funding Orders

Due to the breadth of program activities that DOE oversees, it is imperative that the funding and performance commitments made during the Planning and Budget Formulation processes are clearly communicated and understood. Funding Orders provide the basis for this communication, as they place appropriate controls on program funds to ensure that they are disbursed and executed consistently with congressional appropriations.

### 6.2.1 Apportionment

Apportionment refers to a distribution of funds made by OMB of the amount available for obligation in an appropriation or fund account. The distribution makes amounts available for time periods, programs, activities, projects, objects, or combinations thereof. The amounts apportioned limit the obligations that may be incurred.

### 6.2.2 Base Table

The DOE Base Table is prepared annually by the Chief Financial Officer (CFO) upon passage of the appropriation legislation. Prior to the fiscal year, the Base Table is developed in accordance with the information contained in the Conference Appropriation Report and appropriation legislation. It displays budgetary resources available for obligation by the Department at a level of detail consistent with congressional requirements (e.g., Conference Report).

All funds distributed throughout DOE by the allotment and the Approved Funding Program (AFP) are limited by the amounts in the Base Table. The Base Table is submitted quarterly to congressional authorization and appropriations committees having jurisdiction over DOE programs.

### 6.2.3 Allotment

An allotment is an authorization by either the agency head or another authorized employee to subordinate agency employees to incur obligations within a specified amount pursuant to an OMB apportionment or reapportionment action, in accordance with the OMB Circular A–11 Transmittal Memorandum #76, or other statutory authority making funds available for obligation. The allotment is the means by which the Department assigns responsibility under the administrative control of funds provision of Title 31, U.S.C., Section 1514.
The allotment process is also the means by which Department officials are delegated the authority to incur obligations within the amount specified on the allotment. In general, allotments are issued to the CFO (for all program funds at HQ) and to the heads of field organizations that are designated as allottees.

### 6.2.4 Approved Funding Program

The AFP is the basis for the annual execution of programs as approved by Congress. It is the document issued to DOE elements setting forth:

- The funds available for obligation (not to exceed the amount allotted) in each appropriation account; and specifying
- The obligational control levels (established by Congress) applicable to each program, subprogram, or activity.

The AFP process provides a means for distributing program funding authority at a level of detail designed to achieve the optimal efficiency of program management consistent with the budget as appropriated.

### 6.2.5 The Allotment and AFP Process

Together, the allotment and AFP processes distribute all obligation authority made available to DOE for the fiscal year. At each stage of the process, specific controls, ceilings, and limitations are imposed on the use of funds. The two processes are not without their differences, however; the following describes how the AFP and allotment process vary:

- The AFP reflects the obligations that can be incurred for each program. However, the allotment provides the actual authority to incur obligations on behalf of the Department.
- The AFP is the programmatic financial guidance; the allotment is the financial authorization.
- The monthly changes to the AFP provide the basis for preparation of the allotments. The amount shown on the “Advice of Allotment” issued for each appropriation is equal to the total for all program funds included in the AFP for the same appropriation and allottee. This “Advice of Allotment” is electronically generated as part of the AFP.
6.2.6 Flexibility/Change Actions

6.2.6.1 Rescission/Deferral
A rescission cancels existing budget authority before the time when said authority would otherwise cease to be available for obligation. The President requests the rescission. The rescission occurs only if Congress enacts it.

A deferral temporarily withholds, delays, or effectively precludes the obligation or expenditure of budget authority. Program funding levels may be affected by rescissions and deferrals. Secretarial officers may submit proposed rescissions and deferrals to the CFO, who works with OMB for submission to Congress.

6.2.6.2 Reprogramming
Reprogramming is the shifting of funds within an appropriation (that is, within a DOE program), within the same fiscal year, between budget activities and line items. Reprogramming involves:

- A non-statutory administrative arrangement (congressional);
- Requests shall not be presented to Congress except for higher priority items based on unforeseen requirements;
- Reprogramming may be directed by the Congress even though not requested by the Executive Branch;
- Reprogramming is seen by congressional staff as an important oversight tool; and
- Long lead times in preparing the annual budget often necessitate a reprogramming for events that were unforeseen.

6.2.6.3 Reprogramming Procedures
These are procedures spelled out in the Appropriations Reports but not in law:

- Proposed reprogramming actions are not referred to nor acted upon by the full House or Senate; and
- In FY 1994, DOE began to use omnibus reprogramming—one major action covering several requests.
6.2.7 Other Flexibility/Change Actions

6.2.7.1 Appropriation transfers
Appropriation transfers involve the permanent movement of authority between appropriations within specified limitations.

6.2.7.2 Amendments
Amendments refer to the process of revising budget estimates after the budget has been submitted to Congress.

6.2.7.3 Supplementals
Supplementals involve requests for additional budget authority after the beginning of the fiscal year.

6.2.8 Color of Money
The “color of money” illustrates another congressional appropriations restriction on the use of funds in DOE. The color of money refers to three types of funds: operating, capital equipment, and construction. Operating funds, which account for roughly 94% of EERE’s budget, are used for contractual services, primarily for Research & Development (R&D) (including R&D at the national laboratories, for-profit vendors, and non-profit organizations such as academic institutions), federal staffing, overhead, travel, transportation, rent, utilities, and printing. Construction funds, which represent 6% of EERE’s budget, are specified line item construction projects. Approximately 5% - 10% of the operating funds are used for acquisition of equipment, such as national laboratory supplies, construction machinery, vehicles, and similar equipment. These funds may be used for the intended purpose only, and may not be switched to or used for acquisition of government services or goods without the appropriate reprogramming, restructuring, or transfer approvals.

During program execution, unforeseen events or conditions encountered may necessitate changes to the approved program baseline. In this regard, Congress requires the Department to ensure that the appropriate committees are promptly and fully notified whenever a necessary change to the approved funding baseline is required. Accordingly, notification of such changes is provided to Congress through submission of formal reprogramming, restructuring, and appropriation transfer proposals. Heads of Departmental elements must obtain the appropriate concurrence and prepare reprogramming, restructuring, and appropriation transfer proposals.
The DOE guidance that applies to the Program Manager’s budget execution responsibilities includes the following:


  - Base Table Process and Procedures;
  - OMB Apportionment and Treasury Warrant Processes;
  - Approved Funding Program and Allotment Processes; and
  - Changes to the Approved Budget Plan.
6.3 Execution Planning

6.3.1 Identifying the Work to Be Performed

After the Multi-Year Program Plan (MYPP) is updated, the Program Manager begins the annual operations planning process by using the ensuing fiscal year (slice) of the MYPP as the foundation on which to develop the AOP. The Program Manager reviews the program’s goals and objectives. He/she then reviews the near-term milestones and determines the activities required in the upcoming execution year to achieve them. Some of the milestones will be achieved by ongoing project activities from prior fiscal years. Others will require the initiation of new projects. All will require the identification of the applicable funding requirements and the timing of the funding obligations. In each case, the work performer and/or acquisition and/or financial assistance vehicles will be identified and the cost, schedule, and technical requirements specified. EERE’s Project Management Center (PMC)—located at the Golden Field Office (GO) and the National Energy Technology Laboratory (NETL)—and the DOE operations offices offer a wealth of comprehensive program execution expertise gained thorough a long history of successfully implementing and managing complex research, development, demonstration, and deployment activities. The Program Manager can seek input and advice from these field organizations for activities ranging from assisting with the development of program plans and milestones to full project implementation.

6.3.2 Developing the AOP

Together with the performance requirements and the previous year’s AOP, the Program Manager must develop the current year’s AOP to ensure accurate assignment of funds. A final adjustment is made when the appropriations bill is enacted.

6.3.2.1 Spend Plan

The Spend Plan is the principal acquisition and financial assistance planning document, which is used for budget planning, fiscal tracking, and program execution. The approved Spend Plan thus serves as the basis for all planned acquisition and financial assistance actions. The Spend Plan principally identifies the program, project, budget code, type of acquisition or financial assistance, and the dollars.
6.3.2.2 Projects and Measures

Projects and measures link work performance to the funding actions in the Spend Plan by providing a standard format for each EERE organization to plan, track, and report measures and project information.

EERE’s Corporate Planning System (CPS) provides Program Managers, as well as other EERE staff, the ability to monitor the flow of funds through the tool’s ability to create, edit, and manage the technical content of projects and agreements, as well as program and project milestones and program guidance letters. In addition, the CPS provides an audit trail for all system changes, and contains contact information for corporate, field, and DOE national laboratory key points of information. Readers with access to the EERE intranet system can access the CPS at: [http://cps.ee.doe.gov](http://cps.ee.doe.gov). Additional information about the CPS and how it supports the EERE program implementation process will be discussed in more detail in Chapter 8, “EERE Information and Business Management Systems”.

6.3.3 Field Input

The “field” is a generic term that refers to the spectrum of DOE operations offices, field offices, site offices, national laboratories, and technology centers. Generally, the field is responsible for project management including: assigning work; providing technical direction; ensuring satisfactory project progress and completion; and reporting project information to the Program Manager.

Although EERE programs are implemented at nearly 20 DOE field organizations, the focus of EERE program execution is at GO, the National Renewable Energy Laboratory (NREL), and NETL. GO and NETL comprise EERE’s PMC. The PMC integrates project management resources and capabilities with common project management and business practices. GO also administers the contract for the management and operation of NREL, which is the only DOE national laboratory dedicated to energy efficiency and renewable energy technologies R&D.

The principal execution baseline document for implementing work at the national laboratories is the FWP:

- Developed by the national laboratories in response to HQ program guidance;
- Captures entire programs or projects covering more than one fiscal year;
- Represents work and budget proposed by a national laboratory; and
- Includes scope of work, budget, period of performance, and milestones.

Instructions for FWPs are contained in DOE Order 412.1A. DOE Order 412.1A may be retrieved from: [http://www.directives.doe.gov/pdfs/doe/doetext/neword/412/O4121a.html](http://www.directives.doe.gov/pdfs/doe/doetext/neword/412/O4121a.html)

In addition to the approved FWPs for the national laboratories, the Program Manager needs to include in the AOP all other work to be performed through procurement. EERE publishes a consolidated AOP each January.
6.4 The Funding Process

6.4.1 How Does the Planned Work Get Assigned and Funded?

To assign and fund the work, the Program Manager must take the following actions:

- Authorize the work and allocate the funding. Ensure that the documents, or required inputs to them, that authorize the work and allocate the funding are prepared and processed. These documents include the AFP, Program Guidance Letters, Procurement Requests (PR), and Work Authorizations (WA).

- Assign the work and obligate the funding. Ensure that related instruments that assign the work and obligate the government to pay for it are prepared and activated. These include contracts, grants, Cooperative Agreements, and FWPs. Because of the processing lead times required for these instruments, the PRs should be initiated up to 10 months prior to the beginning of the execution year, and WAs up to three months prior. The planning for these instruments should be included in the corporate multi-year procurement plan.

Funding for the field meets up with the obligating instruments through the AFP process, which identifies and aggregates the total field funding for the year, and provides allotments throughout the year. The AFP specifies for each obligating office the amounts approved for obligation for each control level Budget and Reporting (B&R) code. Under each appropriation, the allotment provides the actual total control amount available for obligation. In other words, the AFP determines the amount each program has to spend on individual field activities and the allotments are the incremental checking account deposits to cover current spending. This process is illustrated in Figure 6.4-1.
The AFP process starts with the development of the EERE Spend Plan based on the most current appropriations information. The HQ program office submits WAs for work to be awarded to the national laboratories and PRs for work to be awarded at HQ; and for prime contracts to be awarded by the PMC and operations offices. The Program Manager and the Office of Planning, Budget, and Analysis (PBA) staff review and approve these actions. The PBA Budget Execution Support Team (BEST) staff prepares Program Guidance Letters based on the WAs, PRs, and Spend Plan information. PBA staff certifies the availability of funds based on the CFO’s Base Table and Advice of Allotments. BEST staff obtains the appropriate funding certifications from the field and HQ allottees for funding withdrawals. BEST staff enters the appropriate financial and AFP data in the CFO’s Funding Distribution System (FDS), and prepares Explanation of Changes (EOC) for all funding transfers. The CFO issues approved allotments and AFPs to the appropriate field organizations. The approved Program Guidance Letters, WAs, and PRs are transmitted to the appropriate field and HQ points-of-contact.
6.4.2 The Role of the PMC in Program Implementation

EERE performs its management of projects through the PMC. The EERE PMC provides the following:

- A full service procurement and project management provider;
- Full legal, financial, and environmental authorities and functions;
- Common project management practices employed across all of EERE;
- Contracting Officer (CO) and Contracting Officer’s Representative (COR) responsibilities for all EERE programs; and
- EERE more effectively links its state projects with energy-related work occurring across the states through the market transformation role that the PMC provides.

The PMC consists of two separate organizations: GO, located in Golden, CO; and NETL, with sites located in Pittsburgh, PA and Morgantown, WV. Both organizations employ a workforce of professional engineers, scientists, Project Managers, and specialists, contract and grants specialists, and related matrix support personnel. Each organization also provides direct oversight of the EERE national laboratory at Golden, and NETL at Morgantown, respectively.

The PMC manages a wide range of R&D projects, as well as provides a wide array of networks and contacts with key stakeholders to further the EERE market transformation and deployment objectives. The PMC has strong working relationships with DOE and other national laboratories; universities and other institutions of higher education; state, local and tribal governments; and special interest non-profit groups that promote energy efficiency and renewable energy.

The GO provides direct oversight of NREL. The role that the PMC plays in implementing program objectives is to manage projects for the Program Managers that will involve oversight and management of individual contracts, grants and/or cooperative agreements, as well as measure progress and milestones according to the program’s requirements. The full-service provided by the PMC includes “cradle-to-grave” project management and oversight, with full reporting to the Program Manager in accordance with existing EERE policies and procedures.
6.4.3 Obtaining Work Through HQ

Although the normal and preferred way for work to be obtained is through the PMC, the Program Manager, when advantageous, may submit a PR to the DOE HQ Contracting Office for processing, leading to an award. In this case, the PR is submitted to the Budget Analyst, who processes it through the financial chain to ensure that the funding is allotted and assigned to the specific procurement action. The process does not include the AFP—the mechanism for providing funding to the field.

6.4.4 Timely Execution

Timeliness and thoroughness of program implementation are critical facets of good program management. Businesses recognize that time is valuable and holding money may be costly. In business, operating or investment capital is obtained from shareholders, lenders, or cash flows from business operations.

If funds are not put to use in a timely manner, several undesirable consequences result:

- First, delays in EERE projects and operations push back the work that needs to be done to meet important program goals, objectives, and milestones. These delays impact the benefits and contributions that EERE makes to the nation’s energy portfolio.

- Second, funds sitting idle could be used for some other purpose; and delays in obligating funds will result in reduced costing and increased uncosted obligations at year end; at a minimum, unused funds could earn interest in the interim.

- Finally, unused funds send a message to stakeholders, investors, customers, and other interested parties that the program has no sense of urgency, or that it is being managed in a haphazard manner. This has negative implications for the continued support of the program.

Monitoring and tracking work performance is a key program management responsibility after the work has been assigned and the funds obligated. See Chapter 7, “Analysis and Evaluation,” for details regarding the importance of performance monitoring, and the methods and techniques for carrying it out.
6.5 Procurement Planning

6.5.1 Importance of Advanced Planning

Advanced planning is essential (i.e., spend plans, program and project milestones, and procurement plans). Procurement starts with a well-developed Corporate Multi-Year Procurement Plan. A well-developed plan is structured to assist EERE in executing its overall program in a timely manner, while managing cost effectively. Information contained in the Corporate Procurement Plan can then be transferred into the Spend Plan. Corporate Procurement Plan preparation requires effective integration among three major decision-making support processes. These are:

- Requirements Generation Process;
- Acquisition Management Process; and
- Planning, Program, and Budget Process.

Advanced planning is necessary for acquisition and financial assistance actions in order to do the following:

- Establish the need for contracted work that supports overall program objectives;
- Ensure that all procurements are properly classified as acquisitions or financial assistance;
- Determine the types of procurement action, financial assistance instrument, and acquisition contract that best suit the program’s needs;
- Include the procurement in program planning and provide for funding in the budget request and Spend Plan;
- Initiate the acquisition process early enough to affect the budget process, and initiate the contracted work in a timely manner;
- Ensure fair and open competition that will lead to the selection of the best-qualified contractor and avoid any protest of that selection;
- Effectively allocate scarce resources;
- Provide proactive integration with socioeconomic and environmental safety and health regulations; and
• Maximize the use of commercial items and services suitable to the agency’s needs.

The principal acquisition and financial assistance planning document is the Spend Plan; and it is the Program Manager’s responsibility to ensure that all acquisitions, financial assistance actions, work authorizations, and interagency agreements are properly included. The Spend Plan is the tool of the financial management process that is used for budget planning, fiscal tracking, and program execution. The Spend Plan initiates the program planning process for future year activities and budgets, and provides a management tool to approve and manage the expenditure of fiscal resources in the current fiscal year. The approved Spend Plan thus serves as the documentation basis for all planned procurement actions.

6.5.2 Procurement Planning is Mandated by Law

In order to determine the requirements for a procurement action, a basic understanding of public laws, regulations, and flow-down requirements is necessary. As a result of deficiencies in the procurement planning process, Congress approved the Competition in Contracting Act in 1984. The Federal Acquisition Regulation (FAR) now requires all executive agencies to use “advanced acquisition planning and market research” in preparing for the procurement of goods and services. The requirements for a procurement action start with public laws that are implemented by regulations and incorporated in the terms and conditions of the contractual instrument. The FAR acquisition planning procedures can and should be applied to financial assistance requirements. The hierarchy of these requirements is as follows:

• Public Law;

• United States Code (USC);

• Code of Federal Regulations (CFR);

• FAR Parts 7 and 10;

• 10 CFR 600 Financial Assistance Rules;

• DOE Supplemental Acquisition Regulations (DEAR) Part 7;

• DOE Acquisition and DOE Financial Assistance Letters;

• DOE Supplemental Orders, Directives, and Manuals; and

• DOE Acquisition and Financial Assistance Guides.
6.5.3 EERE Procurement Planning Schedule

The Program Manager needs to consider the lead times for setting all of this in place. Therefore, program execution planning and preparation must be started well in advance of the beginning of the execution fiscal year. A key product in addition to the AOP is the Corporate Procurement Plan. This plan identifies the proposed multi-year acquisition and financial assistance activities that show when they will be prepared and processed. For more details, please refer to the EERE Standard Operating Procedure, Corporate Procurement Plan; it may be accessed on the EERE intranet at: http://eere-intranet.ee.doe.gov/BA/SOPs/Corporate_Procurement_Plan_08_20_07_.pdf.

The procurement planning process is tied to the budgetary process as depicted in Table 6.5-1.

---

Table 6.5-1 Sample Procurement Planning Processes
6.6 The Multi-Year Procurement (Acquisition and Financial Assistance) Process

The Program Manager must use the procurement process to place contracts, financial assistance awards, work authorizations, and obligate funds, as shown in Figure 6.6-1. The success of the program is dependent on acquiring the best contractor or financial assistance recipient to ensure that the program progresses in a timely manner and with the best possible results. A poorly executed procurement can result in problems throughout the performance period of the contract or agreement, which in turn can result in delays for the entire program.

When obtaining work through the procurement process, the Program Manager must have a clear understanding of the regulations governing acquisitions and financial assistance, and comply with them to ensure they have been conducted openly and fairly, in support of public policy, and in a manner in which the government (on behalf of the taxpayer) gets a good deal.

Figure 6.6-1 The Procurement Process
6.6.1 Procurement (Acquisition and Financial Assistance) Instruments

Program Managers have three types of mechanisms available to them by which to obtain work directly from private companies and universities: contracts, grants, and cooperative agreements as illustrated in Figure 6.6-2. The EERE PMC has the authority to implement program work through all of these mechanisms; however, the national laboratories are authorized to use available contracts and Cooperative R&D Agreements, but not grants.

6.6.1.1 Acquisition Instrument

Contracts are used for the purchase of goods or services. Contracts result in goods or services that meet a well-defined government need and require the highest degree of Program Manager oversight. Numerous choices among contract types and contracting methods are available to optimize the contractual relationship and enhance the probability of achieving the desired results.

6.6.1.2 Financial Assistance Instruments

Cooperative Agreements generally fund work that intersects both programmatic interests and the business interest of private companies. They are partnerships in which the costs of performing the work are shared and a significant degree of Program Manager oversight is required.

Grants are vehicles that provide funding to a public or private entity for a valid governmental purpose without requiring specific performance prior to and as a condition of payment; these require the lowest degree of Program Manager oversight.
6.6.1.3 The Selection of Contract Types

For competitive procurement awards, bidders should be familiar with the type of contract selected for the procurement action in order to make realistic and logical business decisions while preparing their proposals. The type of contract determines how the risks and rewards of a specific job are allocated. Although the authority rests with the CO for the final choice of contract type, the Program Manager’s recommendation is the primary factor. Many factors must be considered to make an intelligent decision as to the proper contract type (see Figure 6.6-2 above), including the following:

- The type and complexity of the item or service for which a contract is to be awarded;
- The urgency of the requirement;
- The contract period of performance (the government may assume a greater proportion of the risks with a contract that extends over a long period of time);
- The degree of price competition present;
- The difficulty of estimating performance costs because of the absence of definitive specifications, the lack of production experience, or the uncertainty of technical risk;
- The availability of comparative cost data, firm market prices, or wage levels;
- The technical capability and financial responsibility of the contractor;
• Adequacy of the contractor’s accounting system;
• Concurrent contracts being performed by the contractor; and
• Extent and nature of proposed subcontracting.

6.6.1.4 Selection of Financial Assistance Instruments

Two important distinctions to be made in determining the types of financial assistance awards to be used are: (1) the amount of discretion DOE has in deciding whether or not to award funds, to whom, and how much; and (2) the amount of DOE involvement in the project/award. There are a number of factors to consider in making an intelligent decision in selecting the proper financial assistance instrument, including:

• Will there be substantial involvement by DOE?
• Are funds discretionary or non-discretionary?
• How are funds distributed?
• How much oversight will DOE have?
• How much recipient discretion exists in the use of funds?
• How much obligation does the federal government have?
• What type of program or activity is being carried out?

6.6.2 Procurement Request

The instrument for initiating an acquisition or financial assistance action is the PR. The PR does the following:

• Funds prime contracts, cooperative agreements, and grants (either discretionary or formula);
• Originates at HQ and is processed through the HQ contract or operations office;
• Designates funding source, B&R, dollar value, project, and awardee; and
• Provides complete requirements package to include:
  − Statement of Work (SOW)
  − Required justifications and approvals
As stated earlier, acquisition and financial assistance are the two major components of the procurement process. Each has specific methods, selection factors, and types. The selection of contracts or financial assistance awards depends on the kind of work that is being procured.

Additional information regarding the procurement process may be found in the Procurement Customer Guide at: http://eere-intranet.ee.doe.gov/BA/SOPs/procurement_customer_guide_08_21_07.pdf.

6.6.3 Work Authorization System

The DOE Work Authorization System is the method for accomplishing work at the national laboratories. Its purpose is to establish a work authorization and control process for work pertaining to designated management and operating (M&O) contracts, management and integrating (M&I) contracts, environmental restoration management contracts (ERMC), and other contract types as determined by the Procurement Executive. DOE Order 412.1A specifies the form, content, and use of the Work Authorization System and FWPs. DOE Order 412.1A may be found at: http://www.directives.doe.gov/pdfs/doe/doetext/neword/412/O4121a.html.

A few of the Work Authorization System’s functions include:

- Fund national laboratory M&O contractors;
- Originate at HQ, processed through operations offices;
- Designate funds source B&R, dollar value, project, and work scope; and
- Include approved FWPs or other as detailed backup.

A sample Work Authorization System Form is shown in Figure 6.6-3 on the following page.
Table 6.6-3 Sample Work Authorization System Form

<table>
<thead>
<tr>
<th>1a. Solicitation/Project Title:</th>
<th>1b. Work Proposal Number (if applicable):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Headquarters Program Point of Contact:</td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td>Organization Code:</td>
</tr>
<tr>
<td>3. Headquarters Budget Point of Contact:</td>
<td></td>
</tr>
<tr>
<td>Name:</td>
<td>Organization Code:</td>
</tr>
<tr>
<td>4. Responsible Program:</td>
<td>5. Responsible Secretarial Officer:</td>
</tr>
<tr>
<td>6. Responsible Field Element:</td>
<td></td>
</tr>
<tr>
<td>7a. Site and Facility Management Contractor:</td>
<td>7b. Contractor Point of Contact:</td>
</tr>
<tr>
<td>Name:</td>
<td>Telephone No:</td>
</tr>
<tr>
<td>8. Work Authorization Number: *</td>
<td>9. Revision Number:</td>
</tr>
<tr>
<td>10. Funds Authorized during FY 2007:</td>
<td></td>
</tr>
<tr>
<td>B&amp;R Code</td>
<td>Previous</td>
</tr>
<tr>
<td>11. Performance period covered by funds:</td>
<td>From:</td>
</tr>
<tr>
<td>12. Work Start Date:</td>
<td>13. Expected Completion Date:</td>
</tr>
<tr>
<td>14. Statement of Work:</td>
<td></td>
</tr>
<tr>
<td>15. Reporting Requirements:</td>
<td>(Status reports, scientific or technical information or similar)</td>
</tr>
<tr>
<td>16. Work Authorization Program Official:</td>
<td></td>
</tr>
<tr>
<td>Name (typed):</td>
<td>Signature:</td>
</tr>
<tr>
<td>17. DOE Field Organization Official:</td>
<td></td>
</tr>
<tr>
<td>Name (typed):</td>
<td>Signature:</td>
</tr>
<tr>
<td>18. Contractor’s Authorized Representative:</td>
<td></td>
</tr>
<tr>
<td>Name (typed):</td>
<td>Signature:</td>
</tr>
<tr>
<td>19. DOE Contracting Officer (or delegated representative)</td>
<td></td>
</tr>
<tr>
<td>Name (typed):</td>
<td>Signature:</td>
</tr>
</tbody>
</table>

* The work authorization number will consist of the program code, AFP code, solicitation/project id and the fiscal year.

Figure 6.6-3 Sample Work Authorization System Form
6.6.4 Types of Competitive Acquisition and Financial Assistance Procurements

Most EERE acquisition and financial assistance awards are competitive. DOE uses several types of solicitations and notice instruments. Some are only used for acquisition or for financial assistance, while others may be used for either. Each solicitation usually specifies the type of award to be made. The CO has the authority to select the type of procurement, but the Program Manager’s recommendation is usually adopted. A brief description of each type follows.

6.6.4.1 Acquisition

6.6.4.1.1 Invitation for Bids

An Invitation for Bids (IFB) is used for soliciting bids when detailed specifications concerning the product or service are known and can be described in a very precise way. Requirements solicited under this method are usually for equipment or general supplies. The sealed bidding procedures outlined in the FAR and DEAR are followed under this method. Award is based on price competition and a fixed-price type of contract usually results. All bids are publicly opened and recorded at the time and place specified in the solicitation.

6.6.4.1.2 Request for Proposal

A Request for Proposal (RFP) is used for soliciting proposals in response to a broader SOW than would be found in an IFB. An RFP often incorporates performance specifications rather than detailed design specifications. The evaluation, selection, negotiation, and award are conducted in accordance with the terms of the solicitation document as well as the FAR and DEAR. Either a cost-reimbursement type of contract or a fixed-price type of contract results from this process.
6.6.4.2 Financial Assistance

6.6.4.2.1 Funding Opportunity Announcement

The Funding Opportunity Announcement (also called the solicitation) is a formal written invitation by DOE for interested organizations or individuals to submit applications for a specific project effort or objective by a stated common due date. A solicitation will contain all the information necessary to allow a potential applicant to decide whether to submit an application, understand how applications will be evaluated, and know the recipient’s obligations, including special requirements such as cost sharing. The HQ Procurement Operations Office or any field procurement office may issue the solicitation.

6.6.4.2.2 Notice of Program Interest

The Notice of Program Interest (NOPI) is not a solicitation; rather it is a notice in the Federal Business Opportunities (http://www.Fedbizopps.gov) or the Federal Register to individuals and organizations concerning areas of research, and other areas, in which DOE hopes to receive unsolicited proposals. As such, it is general and is not intended to limit submittal in any way. Proposals received as a result of a NOPI are processed and evaluated as unsolicited proposals.

6.6.4.2.3 Program Opportunity Notice

A Program Opportunity Notice (PON) is a solicitation used principally to solicit competitive proposals relating to non-nuclear energy demonstration projects when there is a stated general objective and an urgent public need, but no definitive SOW, and where varied approaches are desired. PONs may result in the award of contracts, grants, or cooperative agreements, and multiple awards may be made. Each respondent to the PON proposes its own needs.

6.6.4.2.4 Program Research and Development Announcement

The Program R&D Announcement (PRDA) is an announcement used to solicit a broad mix of research, development, and related non-nuclear energy project proposals. While a PON is geared strictly to accelerating the demonstration of projects utilizing existing, commercially available technologies, a PRDA solicits proposals for projects in areas where R&D is required within broadly defined areas of interest, but where it is difficult to describe in detail the nature of the work to be undertaken. Bidders responding to a PRDA solicitation are, in effect, competing for funds to be made available by the Department.
6.6.4.2.5 Broad-Base Solicitation

The EERE Broad-Base Solicitation (BBS), under the administration of the HQ Procurement Operations Office, is issued—if requested by EERE—annually during the first quarter of the fiscal year. The BBS is for EERE information dissemination, public outreach, training, and related technical analysis and technical assistance. This solicitation is a formal written invitation by EERE for organizations or individuals to submit applications for financial assistance in numerous program areas of interest across all sectors. Due dates for the receipt of proposals are staggered based on availability of funding and the anticipated number of proposals to be received.

6.6.5 The Procurement Officials

About half of all EERE technical R&D and other functions are accomplished through contracted work with industry, academia, and other entities. The procurement process (acquisition and financial assistance) is the process by which the efforts for procurement are coordinated and integrated through a comprehensive plan for fulfilling agency needs in a timely manner, and at a reasonable cost. To succeed in conducting and concluding source contracted efforts, it is fundamental and essential to plan for all procurements needed by the DOE, whether the planning be short-range, long-range, or both. Objectives have to be established and decisions made in advance on how to achieve them. Planning should be coordinated, integrated, and performed by a team of all personnel responsible for the acquisition. However, the primary players in the planning process are the Program Manager, field or HQ Project Manager, COR, Contract Specialist, and Resource (budget) Manager.

Authority for various aspects of the procurement process is delegated to the appropriate officials within DOE. Only duly appointed COs and valid General Services Administration (GSA) SmartPay Card (Citibank VISA Government Purchase Card) holders have the authority to: (1) obligate the government; and (2) effect an award of a contract, financial assistance instrument, modification, or a simplified acquisition (i.e., purchases less than $100,000).

Many of the decisions made during the procurement process are joint decisions among the Program (and Project) Manager, the CO and the COR, the Contract Specialist, and source selection or merit review committee members. Program Managers must work as a team with these personnel to avoid unnecessary problems and delays and to determine the best way to achieve the required results. The responsibilities of these key personnel are as follows:
• **Competition Advocate.** Competition Advocates are normally used for procurements; however, the same principles should apply to financial assistance awards. Competition Advocates are responsible for:
  1. promoting the acquisition of commercial items;
  2. promoting full and open competition;
  3. challenging requirements that are not stated in terms of functions to be performed, performance required, or essential physical characteristics; and
  4. changing barriers to the acquisition of commercial items and full and open competition, such as unnecessarily restrictive SOWs and unnecessarily detailed specifications.

• **CO.** The CO has primary authority for entering into, administering, and/or terminating contracts and financial assistance instruments (grants and cooperative agreements), and for making related determinations and findings. It is the CO who has the specific authority to establish binding legal relationships that obligate DOE financially. The CO is responsible for the business management and non-programmatic aspects of the financial assistance process. The CO, with the recommendation of the Program Manager, ultimately selects the method of procurement, type of contract, or financial assistance instrument.

• **COR.** Since the CO is a senior individual, either at HQ or in the field, and usually has authority for numerous contracts at once, many of the details for each contract or financial assistance award are delegated to CORs. The COR does not have authority to alter the scope, price, or terms and conditions of a contract. For R&D contracts, the COR is often the CO’s technical representative. A Project Manager plays this role for financial assistance awards.

• **Contracting Specialist.** During the procurement process, a Contracting Specialist (COS) is usually assigned to assist the COR and the Program Manager. The COS is knowledgeable about all federal acquisition and financial assistance clauses and requirements, and the rules and regulations regarding them. The primary duties of the COS are to aid in developing the procurement request and requirements package prior to the solicitation, assist in the negotiation process, and help prepare/issue contract execution documents, such as modifications.
• **Program Manager.** EERE Program Managers and their HQ staff are responsible for justifying, baselining, and authorizing a set or portfolio of projects to implement specific elements of their program.

• **Project Manager.** EERE Project Managers define work, provide technical direction, ensure satisfaction with project progress, and report to the Program Manager and staff. This function entails working through a CO to obtain goods and/or services for the government, or to provide financial assistance to carry out a public purpose. The Project Manager works with the CO and COS to put in place contracts or financial assistance agreements that obligate the government.

• **Project Officer.** Some projects may have a Project Officer who is responsible for specific parts of a project, generally technical in nature. The Project Officer may serve as a subject matter expert to the project.

• **Source Selection Authority/Source Evaluation Board.** For major projects and major system acquisitions, the formal selection of the winning proposal will be made by the Source Selection Authority, sometimes known as the Source Selection Official. That decision is based on a formal review of proposals by the Source Evaluation Board, also known as the Source Evaluation Panel or the Source Selection Board.

• **Selection Official/Merit Review Committee.** Discretionary financial assistance actions will be awarded through a merit-based selection process. The formal selection of the winning proposal/application will be made by the Selection Official. The Selection Official’s decision is based on a formal review of proposals by the merit review committee.
6.6.6 Roles, Responsibilities, and Relationships in Procurement

EERE roles, relationships, and responsibilities are shown in Table 6.6-1. For more information on acquisition and procurement officials, please see Appendix K: Roles, Responsibilities and Relationships of Program Managers, Project Managers, Contracting Officers, and Contracting Officer’s Representatives.

<table>
<thead>
<tr>
<th>Topic or Issue</th>
<th>Financial Assistance and Acquisition</th>
<th>Financial Assistance Only</th>
<th>Acquisition Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contracting Officer</td>
<td>Program Manager</td>
<td>Project Manager/COR</td>
</tr>
<tr>
<td>Setting and changing project requirements</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Defining acceptability of products and services</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Determining method of evaluating proposals</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Issuing the solicitation</td>
<td>Yes</td>
<td>No</td>
<td>Input</td>
</tr>
<tr>
<td>Interpreting the solicitation/contract</td>
<td>Yes</td>
<td>No</td>
<td>Input</td>
</tr>
<tr>
<td>Changing/modifying the solicitation/contract</td>
<td>Yes</td>
<td>No</td>
<td>Input</td>
</tr>
<tr>
<td>Managing the Technical COR Duties – Providing technical direction (within the scope of the contract)</td>
<td>No</td>
<td>Input</td>
<td>Yes</td>
</tr>
<tr>
<td>Managing the administrative COR Duties</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Providing technical direction (outside the scope of the contract)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Awarding the contract/grant</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Official correspondence regarding the contract / grant</td>
<td>Yes</td>
<td>No</td>
<td>Input</td>
</tr>
</tbody>
</table>

Table 6.6-1 EERE Roles and Responsibilities Matrix
6.7 Other Procurement Considerations

6.7.1 Inherently Governmental Functions

Inherently governmental functions are so intimately related to the public interest and government operations that they must be performed by government employees in order to retain essential control and responsibility. These functions involve exercising discretionary authority and making final value judgments which affect day-to-day or long-term development, execution, and evaluation of government programs.

General Guidelines

- Does the function involve committing the government to a course of action when two or more alternative courses of action exist?
- Would a contractor’s involvement be so extensive or a contractor’s work product so advanced to limit the agency’s (government employee’s) ability to develop or consider other options; i.e., does the reliance on the contractor effectively limit the discretion for a government employee decision?
- Does the function involve a monetary transaction or an entitlement?
- Would the contractor’s performance of the function cause an appearance of private influence? Examples of these functions include drafting/modifying: Congressional testimony; responses to Congressional correspondence; responses to Congressional Q&As; and responses to audit reports from the Inspector General, the Government Accountability Office, or other federal audit entity.

For more information on inherently governmental functions, please see Appendix J: Inherently Governmental Functions.

6.7.2 Support Services

Support service contracts are a significant portion of the Department’s total contracting effort. These types of contracts must be carefully developed and administered to ensure that contractors do not perform inherently governmental functions or personal services. The following are support services types:

- Technical support services;
- Management support services; and
• M&O services.

It is very important that all federal employees are aware of the vulnerabilities unique to the acquisition of support services, especially regarding matters involving the type of work performed by contractors and the working relationship that exists between federal employees and contractor employees.

For more information on support services, please see Appendix M: Support Services.

6.7.3 Role of the National Laboratories

The DOE national laboratories, such as NREL, are Federally Funded R&D Centers (FFRDC), which are primarily government-owned, contractor-operated facilities with the typical contractual mechanism being an M&O contract. The intended use of the national laboratories is described in two parts of the FAR: Part 17.6-Management and Operating Contracts; and Part 35.017-Federally Funded R&D Centers.

The characteristics of DOE national laboratories, as FFRDCs, include:

• They meet long-term research or development needs that cannot be met as effectively by existing in-house resources or other contractors;

• They have a special long-term relationship with DOE;

• The accomplishment of their tasks is integral to the mission and operation of DOE;

• They have access, beyond that which is common to the normal contractual relationship, to government and supplier data, including sensitive and proprietary data, and to employees as well as government-owned, contractor-operated facilities;

• They are required to conduct their business based on their special relationship with DOE, to operate in the public interest with objectivity and independence, to be free of organizational conflicts of interest, and to have full disclosure of their affairs to DOE; and

• They have a long-term relationship with DOE in order to provide the continuity that will attract and retain high quality personnel at the national laboratories.

For more information on role of the national laboratories, please refer to Appendix L: Role of the National Laboratories.
6.7.4 Standards of Conduct

The FAR Part 3 provides detailed guidance on the conduct of government personnel involved in a procurement activity, from the standpoint of avoiding improper business practices and personal conflicts of interest. Standards of Conduct address three major categories of issues: (1) improper business practices such as acceptance of gifts or favors; (2) unauthorized disclosure of procurement sensitive information, or (3) use of undue influence. **These practices could result in criminal prosecution.**

A small minority of contractors and potential contractors are willing to advertise the fact that a favor in the “right hands” will produce business. Whenever a gift/gratuity is offered or delivered to you as a federal employee, it should be returned promptly. If a gift cannot be returned, it should be forwarded to your supervisor along with an explanation.

The Procurement Integrity Act (41 U.S.C 423) prohibits many activities by competing contractors and government procurement officials during the conduct of an acquisition or financial assistance action.

In addition, the Act provides for certification and disclosure provisions applicable to government contractors and government officials; imposes post-employment restrictions on government officials and employees; and provides for criminal, civil, contractual, and administrative penalties for violations of the law.

Employees of DOE are subject to the following:

- Standards of Ethical Conduct for Employees of the Executive Branch at 5 CFR, Part 2635;
- DOE regulation at 5 CFR Part 3301, which supplements the executive branch-wide standards;
- Executive branch-wide financial disclosure regulations at 5 CFR Part 2634;
- Executive branch-wide financial interests regulations at 5 CFR Part 2640; and
- Executive branch-wide employee responsibilities and conduct regulation at 5 CFR Part 735.
6.8 EERE SMS Program Implementation Stage

Through program implementation, EERE uses appropriated funds to implement the programs, projects, and activities justified in the Congressional Budget Request as modified by final appropriations and congressional report guidance. The funds permit EERE, the PMC, field organizations, contractors, and other performers to deliver goods and services in support of the programs. Due to the breadth of program activities and work performers involved, it is critical that the performance commitments made in EERE’s planning and budget formulation process are clearly communicated, understood, and agreed to by the PMC regional offices, field organizations, contractors, and other performers.

The program implementation stage of the SMS is supported by the CPS, EERE’s internal corporate information technology system that aggregates and reports project data across the different program offices. CPS enables EERE managers to create, edit, and manage the technical content of their projects and agreements; to create, edit, and manage program and project milestones; to manage the allocation and the execution of funds; to create, edit, and manage guidance letters; to monitor PMC-initiated fund transfers; and to monitor the flow of funds. CPS provides an audit trail for all system changes, and contains contact information for corporate, field, and national laboratory key points of information. Recognizing the scope and breadth of these activities, CPS can support the EERE manager in maintaining the Quality Assurance/Quality Control of the information through exception reports that indicate areas where updates to projects, agreements, spend plans, and milestones are needed.

Each of the steps in Figure 6.8-1 on the following page is consistent with the Under Secretary of Energy’s October 14, 2005 SMS memo. Table 6.8-1 describes each stage in greater detail. Readers with access to the EERE intranet can view the Under Secretary of Energy’s October 14, 2005 SMS memo at: http://eere-intranet.ee.doe.gov/BA/IBMS/pdfs/SMS_Garman20051014.pdf.
Figure 6.8-1 SMS Program Implementation Stages
Program Implementation Stages/Key Players | Description | Corresponding EERE Process/Product
--- | --- | ---
EERE Annual Operating Plan (AOP) (Sometimes Referred to as a Baseline Plan) (EERE Program Managers) | Execution planning is encompassed in the Annual Operating Plan (AOP) which establishes the baseline for measuring progress over the course of each fiscal year. The AOP contains: (1) Mission and Function, (2) Goals and Objectives, (3) a Project Inventory (including specific technical objectives, personnel and fiscal resources assigned, budget, and a milestones plan), (4) Program Responsibilities (applicable only if unusual situations exist), (5) Controls for Program Execution, (6) Interface with Other Organizations (applicable if such interfaces exist), (7) Spend Plan and (8) Procurement Plan. AOPs will generally be due in the August/September timeframe. These preliminary versions are to be based on the lower of the House and Senate marks. Final versions are due when the FY appropriations are established, often in the December timeframe. | • AOPs will be submitted at the Program Implementation Plan (PIP) level for EERE Programs
• Draft AOPs prepared for the August/September timeframe
• Final AOPs prepared after appropriations
• Additional versions as necessary
• Cost plan
EERE Program Guidance Letters and Procurement Requests for the Initial Approved Funding Program (AFP) Sent to the Field (EERE Program Managers) | The AFP is used to transfer funds to Field organizations for implementing programs. The guidance for the use of the funds is included in program guidance letters, which are prepared by EERE managers at Headquarters and transmitted to DOE Field organizations. | • Program guidance letters are prepared, reviewed, and approved by HQ
EERE Initial AFP, Allotments, and Work Authorizations to DOE Field Organizations (EERE Program Managers, CFO) | Initial AFPs are issued to DOE Field organizations in late-September, and the allotments, which are issued by the Controller’s Office and provide the statutory funding controls, are effective the first day of the fiscal year. Allotments are based on the amount of dollars in the current Approved Financial Plan at the B&R level. The Funds Distribution System automatically calculates the allotments based upon whether or not EERE has an appropriation or is operating under a Continuing Resolution. | • EERE issues Initial AFPs to the field
EERE AFPs, Allotments, and Work Authorizations Updated Monthly as Necessary (EERE Program Managers) | Each month, HQ provides program guidance letters to EERE financial staff for funds certification and funding transfers to be included in the next monthly AFP. | • Monthly funding transfers are initiated by program guidance letters
EERE Performance-based Contracts, Procurements, and Grants Awarded and Work Performed (EERE HQ, Field, Contractors) | EERE performance-based contracts, grants, cooperative agreements, Laboratory Field Work Proposals, and other procurement instruments (including Small Business Awards) are awarded by the cognizant Headquarters and Field organizations (PMC) to permit the continued implementation of EERE’s mission objectives. Program work is performed by a wide range of organizations such as DOE laboratories; industry; colleges and universities; federal, state, and local governments; non-profit entities; and consortia. The work is managed by EERE Program Managers and Field staff to ensure compliance with statements of work and statements of project objectives for achieving the mission objectives of the program. | • PMC and national labs perform these functions for EERE
• Program Work Authorization Directives (WADs) for M&O contractors

Table 6.8-1 SMS Program Implementation Stages
<table>
<thead>
<tr>
<th>Program Implementation Stages/Key Players</th>
<th>Description</th>
<th>Corresponding EERE Process/Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>EERE Final Financial Assistance and Direct Procurement Plan (ASEE, EERE Program Managers)</td>
<td>For EERE R&amp;D, HQ Program Manager/Technology Manager develops a Procurement Plan that defines the work scope, procurement mechanism (i.e., grant, cooperative agreement, or contract), dollar amount, desired procurement office, and desired dates of service.</td>
<td>EERE R&amp;D Procurement Plan</td>
</tr>
<tr>
<td>EERE Capital Assets Critical Decision-3, Start of Construction (EERE Program Managers)</td>
<td>A Critical Decision (CD) is a formal determination or decision at a specific point in a project phase that allows the project to proceed to the next phase and commit resources. CD-3 is for the approved Start of Construction. All construction planning, including final design drawings, are required to be completed and bid packages released by August prior to the fiscal year of the start of construction.</td>
<td>CD-3 completed as required</td>
</tr>
<tr>
<td>EERE Initial Approved Funding Program (EERE Program Managers)</td>
<td>The AFP is used to transfer funds to Field organizations for implementing programs. Providing funds in the Initial AFP ensures the continuity of programs and enhances the ability to make awards sooner. In the absence of final enacted appropriations or even a Conference mark, the more constraining of the House or Senate Appropriations marks will be used.</td>
<td>Initial AFP prepared for EERE Programs</td>
</tr>
</tbody>
</table>

Table 6.8-1 SMS Program Implementation Stages (continued)
References


Federal Acquisition Regulation. An updated version of the Federal Acquisition Regulation may be found at: http://www.acqnet.gov/far/

Federal Business Opportunities. Federal Business Opportunities may be found at: http://www.fedbizopps.gov