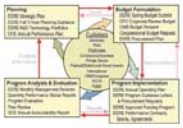
Chapter 5
EERE Budget Formulation



5.1 Budget Formulation Overview

Budget requests are for resources to get the job done.

Budgets are at the heart of program management, particularly within the Office of Energy Efficiency and Renewable Energy (EERE). Our programs are funding programs.[1] EERE's staff does not perform research ourselves, nor do we personally weatherize homes or commercialize new technologies. We provide the following:

Budgets must be convincing and real.

- Funding for contractors to operate our laboratories;
- Funding to universities and industry to perform research;
- Grants to states to pay for weatherization of low-income homes; and
- Cost-sharing and other financial incentives for the commercialization of renewable energy and energy efficiency technologies.

The saying that "the budget is the policy" is very true for EERE. How we allocate our budget each year is a tangible manifestation of our priorities. In our programs, a statement of policy without a budget to back it up is virtually meaningless.

Program Managers need to be credible and strive to obtain all, but not more than they need.

One of the central themes of budget formulation in recent years has been "budget and performance integration." Rather than simply listing or describing the activities to be performed and their associated budgets, budget and performance integration requires that specific performance measures are established so that the budget can be interpreted as the proposed cost to achieve certain objectives or social outcomes. Budget formulation is sometimes referred to as "performance budget formulation" in order to emphasize the importance and of budget and performance integration, as in the October 14, 2005 memo from Under Secretary Garman updating the Strategic Management System (SMS) for the Fiscal Year (FY) 2008 budget cycle. Readers with access to the EERE intranet can view the Under Secretary's memo in its entirety at:

http://eere-intranet.ee.doe.gov/BA/IBMS/pdfs/SMS_Garman20051014.pdf.

[1] *A minor exception is the bit of regulatory power in the Buildings Technology Program over home appliances and heating and cooling systems.*

5.1.1 Budget Formulation Within the Budget Cycle

At a macro level, the annual budget cycle for federal agencies consists of three stages: (1) formulation of the Administration's budget request to Congress, (2) the Congressional appropriations process, and (3) agency execution of the budget as appropriated. The formulation phase itself has many internal phases of review—at the program level, at the Program Secretarial Officer (PSO) level, (i.e., Assistant Secretary, EERE-wide), the Chief Financial Officer's (CFO) office, U.S. Department of Energy (DOE) Secretarial offices, and the White House Office of Management and Budget (OMB). Sometimes it is also useful to think of the Congressional Budget process as part of formulation. Congressional staff certainly think of it as "their turn" at budget formulation.

The DOE, OMB, and Congressional Budget processes require that budget requests be submitted in accordance with a schedule and in a specific format. In recent years those formats have been evolving, with the internal DOE budgets being streamlined during FY 2007 – 2008, and with streamlining of the OMB submission being tried for the first time for FY 2009. (Prior to those budgets, the internal DOE and OMB budgets were essentially complete drafts of the Congressional Budget request.) At each stage, whatever the format, the budget submission is EERE's and presents each program with an opportunity to "sell" their vision and the benefits of their activities to the next set of players in the budget cycle. Every budget is a marketing document, although once the funds are appropriated by Congress, it also becomes the basis for each program's Annual Operating Plan (AOP).

These "marketing documents" may include priority lists, tables of proposed accomplishments, narratives explaining the purpose and need for which the funding is requested, program performance metrics, estimates of the public benefits of the program, explanations of how the next year's budget will differ from the previous one, and specialized supporting requests for personnel, construction, and major Information Technology (IT) projects. Budget justifications should be compelling, while remaining accurate and credible.

The budget formulation process integrates technical program planning, the modeling or estimation of program costs and benefits to set priorities, and the justification for increases or decreases in specific program areas. While understating or underestimating the requirements and benefits are not in the best interest of the program, experience has proven that overestimating or overstating the requirements and benefits are also detrimental. Based on planning, the budget should represent bona fide contributions to the mission and strategic goals and objectives, and should be executable, (e.g., dollars obligated and most of the work performed within the budget year).

5.1.2 Budget Formulation Phases and Objectives

EERE and Program Managers are involved in a series of steps to produce the budget.

The development and flow of required budget request information is depicted throughout the five phases of DOE Budget Formulation in Figure 5.1-1. This information flows simultaneously top-down and bottom-up. Secretarial planning guidance is not always provided, but there is generally a strategic plan in force that sets top-down priorities and departmental goals. EERE's strategic plans must tie to those departmental goals, and Multi-Year Program Plans (MYPP) must in turn tie to the EERE and DOE strategic plans.

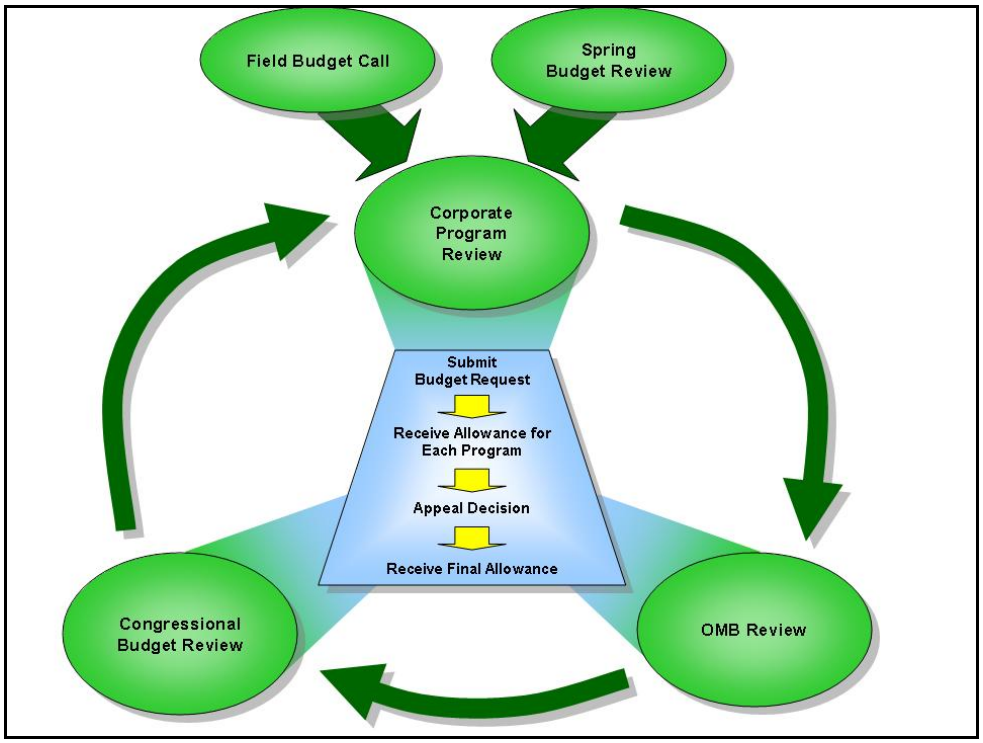


Figure 5.1-1 Budget Formulation Phases

Budgets requests flow from plans.

Budget requests flow through the following phases:

1) Field Budget Call (not a major phase for EERE)—decisions by laboratories, field offices, CFO (for crosscuts), and input to the next phase for EERE;

2) EERE Spring Budget Review—planning, review, and decisions by EERE;

3) Corporate Program Review (CPR)—review and decisions by CFO and the Secretary;

4) OMB—review and decisions by OMB and, if DOE appeals, possibly by senior White House staff; and

5) Congressional Budget—reviews by both authorization and appropriation committees, and decisions by appropriation committees, floor votes, and conference committee.

Each of phases 2, 3, and 4 culminates with EERE preparation of budget "marketing materials" to be submitted for the next phase.

The key objectives of the budget submission process are: accurate pricing, realistic schedule, program/project prioritization and justification in terms of benefits to be realized for the funding requested, tying the budget to realistic and objective performance measures, and compliance with applicable laws and guidance. Priority-setting is a key component, and the criteria for setting priorities may vary from year to year as new Administration or Secretarial initiatives are unveiled. Past priority drivers have included job creation, energy security/petroleum displacement, and climate-change benefits.

5.1.3 Principals of Good Budget Formulation and Defense

5.1.3.1 Justification of Requirement and Benefits

As noted previously, each phase of budget submission can be thought of as marketing or sales materials targeted at the next group of decision-makers in the budget cycle. This mindset is especially important for requested increases and new initiatives. Increases from one year to the next always will be a key area of focus for anyone reviewing a budget.

At every level of budgetary decision, there are competing priorities and opportunities. These may be fairly obvious to EERE staff working on presentation materials for the Spring Budget Review—the competition is just down the hall. At the DOE-wide CPR level, the competition may be in other DOE offices, particularly other applied Research and Development (R&D) programs. At the OMB-Congressional levels, the competition can seem very far afield—when the energy efficiency portions of EERE's budget were in the Interior and Related Agencies appropriation, often a choice had to be made between more funding for conservation programs like Weatherization and more funding for Indian health facilities on the reservations—not an easy choice. Within the Energy and Water appropriation that now funds all of EERE, OMB and the Congressional appropriation committees may be faced with a trade-off between funding for hydropower or ocean-power R&D (not to mention the rest of our programs) and funding for river dredging, levees, and other flood-control projects.

A good budget justification will, without overstating, help the reader understand the nature of the social problems the program will address, and

quantify the public benefits that the program will provide as best it can. Some of those benefits can be quantified by economic modeling, such as the Government Performance and Results Act (GPRA) benefits estimates coordinated by the Office of Planning, Budget, and Analysis (PBA). Other benefits may need to be discussed qualitatively, such as climate-change or energy-security benefits (although PBA is also working on methodologies to quantify those as well). Those benefits need to be compelling enough that decision-makers will believe that the proposed work is worth doing, and will agree with the long-term goals set forth by the program. That is the first task of "justification." The second task is justifying the specific activities and budget levels being proposed, which is addressed in the next subsection.

5.1.3.2 Performance Measurement

The core of budget and performance integration is the development of good short-term and long-term performance metrics. GPRA requires that performance metrics be integrated into budget justifications. Long-term planning involves modeled projections of social outcomes such as dollars or barrels of oil saved, and tons of carbon emissions reduced. These projections are included in the OMB and Congressional submissions as "GPRA benefits." The modeling of those benefits is coordinated by PBA, using technology characteristics provided by each program.

In the mid-term, each program's MYPP establishes technical or cost performance targets that are meaningful in terms of eventual commercialization—a cost of electricity that is competitive with alternative electricity supply options, for instance, or a driving range between refuelings for a hydrogen fuel-cell vehicle that will be acceptable to consumers. The technology pathway to these mid-term goals is used to develop year-by-year technical targets for DOE's JOULE performance-tracking system. Those annual targets are included in the OMB and Congressional Budgets, and give readers a quick overview of the technical progress being made on multiple fronts by each EERE program. They reinforce the decision-makers' understanding that the funding they provide really is providing progress towards a useful goal or outcome.

EERE's Corporate Planning System (CPS) provides Program Managers, as well as other EERE staff, the ability to develop multi-year funding projections for projects and agreements, and assists in the development of multi-year acquisition and spending plans. The CPS is invaluable because it provides EERE with the ability to tie budget to performance by linking program-to-project milestones. Readers with access to the EERE intranet system can access the CPS at: http://cps.ee.doe.gov. Additional information about the

CPS and how it supports the EERE Budget Formulation process will be discussed in more detail in Chapter 8, "EERE Information and Business Management Systems."

5.1.3.3 Honest Priorities

Sometimes, program budget staff will attempt to obtain more funding by putting lower priority programs within their target level, and then putting the high priority programs in the over-target level, thereby hoping to get the higher level of funding. This simple ploy is easily recognizable to any good budget analyst, and is known as "Washington Monumenting," in honor of an attempt by the U.S. Department of the Interior to argue that if their budget were cut it would force them to close the Washington Monument—as if there were nothing less valuable that could be closed instead. Games like this do not endear a program to either OMB or Congress, and generally do not help the program's budget.

5.1.3.4 Accurate Pricing

Pricing must be accurate. At each level of budget review, readers are going to ask, "Does it really cost THIS much to get to the next technical target?" Cost estimates for similar efforts or items should be similar, or there should be a good reason why they are different. With competitively awarded activities, pricing can be assumed to be accurate; for laboratory and non-competitive awards, the program will have to rely on past experience and advice from EERE's Project Management Center (PMC).

A starting point for any program budget is the "out-year mortgage" of existing funding awards for the next budget year. Most awards are for two or three years, and when the award is finalized the annual award amounts are entered into EERE's CPS as part of the program implementation phase. CPS can provide a Program Manager with a summary of the funding that will be necessary just to pay for the multi-year commitments already in place—that is the program's "mortgage" (there is more detail on the capabilities of CPS in Chapter 8). New solicitations, capital equipment purchases, and other initiatives need to be added to build up to accurate pricing of the next year's needs.

5.1.3.5 Consistency in Budgeting

The DOE CFO, OMB, and Congress will all look for consistency in EERE's budget requests. Consistency in budgeting takes many forms, but it does not mean just keeping the budget the same from year to year. Consistency can mean conforming to a previously planned funding profile for an initiative,

even if that profile rises and falls over several years. Consistency can also mean that budget changes match changes in performance metrics and schedules—a proposal to accelerate the timetable to reach a particular target will be expected to cost more per year than the previous slower schedule. If funding is reduced, it should be either because less work is planned or because the work will inherently cost EERE less—it is at a smaller scale, for instance, or perhaps more industry cost-sharing will be required. Consistency also means that similar types of work should be priced similarly. It also can mean that funding and award policies are consistent among activities—for instance, cost-sharing requirements should be similar for similar or competing technologies.

Personnel levels or Full-Time Equivalents (FTEs) also have an impact on perceived consistency of budgets. If a program budget is expanding rapidly but the program and PMC staffing levels are staying flat, that may not be perceived as consistent—either the program had too many people before or it will have too few to do its work properly in the future. If there is a reasonable explanation, such as that the number of grants or cooperative agreements is not changing, only the size of the awards, that should be included in the justification.

For Program Direction funds that pay for staff, travel, support contracts, training, etc., proportionality is very important. If funding for pay, travel, or support changes dramatically but FTEs do not, that will raise questions. Similar questions will be raised if FTEs change but funding requests do not. Budget justification writers need to be sensitive to these apparent inconsistencies and, if there is a logical reason behind an apparent inconsistency, that should be clearly explained in the justification materials.

The format of the OMB and Congressional Budgets includes an “Explanation of Changes” section at the end of each subprogram justification. This is a useful place to include any information a reader might find helpful in understanding why a budget has changed and why those changes are consistent with the program plans and performance metrics.

5.1.3.6 Proper Scheduling and Prior Performance

Proper scheduling is also known as “executability.” Do not budget funds to accomplish more than physical capacity will allow. For example, it does not make sense to request budget authority adequate to fund 50 experiments in a year if the full capacity of the laboratory only allows you to conduct 35 in a year. In general, you should not budget funds before they are required, although there may be reasons to “front-end fund” a particular solicitation, which avoids mortgages. Most of the time, requesting funds that will not be

needed until the following budget year is counterproductive because appropriations are always limited, and the competition for resources even within EERE means that unused funds in one program almost always mean a lost opportunity in another program that could have used them. It is very difficult to use extra funds for a different activity from the one for which they were originally appropriated—it requires a reprogramming request to OMB and Congress, which requires a lot of work and which is often not approved. Reprogrammings are addressed in more detail in Subsection 5.6.4.5 and later in Chapter 6, "Program Implementation."

If budget execution of prior-year funds has left significant uncosted or unobligated balances in a particular program, these items should be taken into account in estimating how much new funding will actually be needed for the next budget year.

If a program's budget is ramping up quickly because of a new initiative, the program needs to make an honest and defensible estimate of how quickly it is really possible to ramp up the activities and thus budget execution. OMB and Congress are often skeptical of initiatives that propose to start a completely new activity from scratch and request tens of millions of dollars in the first year. A good budget justification will explain exactly how the requested funding can all be used (or at least obligated) in a new project's first year.

5.1.3.7 Adherence to Program and Fiscal Guidance

It should go without stating that the budget must reflect budget and programmatic guidance provided by DOE management, as well as program plans.

5.1.3.8 Budget Defense

Throughout the entire budget cycle, higher-level DOE officials or external reviewers such as OMB and Congress are called upon to review, adjudicate, and balance the budget. A well-written justification will anticipate most of their questions and information needs, but there always will be specific questions and needs for briefings or testimony. Additional information for DOE management and for OMB may come in many forms, depending on the year's budget imperatives and political circumstances, and both the EERE programs and PBA need to remain flexible to provide additional information in defense of the budget, often on short notice.

If a significant program reduction is proposed in any of the phases of the process—Spring Review, CPR, or OMB—one of the first steps in defense of the request will be to use EERE's CPS to find out what the minimum "mortgage" for the program will be during the next fiscal year—i.e., how

much funding will be necessary just to fund existing, signed agreements. If a proposed deep cut in the program would bring its budget below that "mortgage" requirement, there is a strong argument for increasing the funding to at least cover the mortgage. The CFO, OMB, and even Congress will usually go along with that argument, because funding insufficient for the mortgage will mean that some existing agreements will have to be modified or stopped, which can cause a myriad of legal problems.

5.1.4 Office of Planning, Budget, and Analysis

PBA is responsible for coordinating:

- The development of the EERE strategic plans and MYPPs that feed into the budget process,
- The analysis and modeling of program benefits, and
- EERE's submissions from each stage of the budget process.

There are program submissions for EERE's Spring Review, EERE's submissions for the DOE Corporate Program Review, the OMB budget, and the Congressional Budget. PBA's legislative team also coordinates much of EERE's defense of the Congressional request, in the form of testimony and Questions & Answers (Q&A).

5.2 Field Budget Call

In the fall, typically around mid-November, the CFO releases its "call" or guidance to DOE field offices and laboratories to assemble their budget recommendations to the programs. In EERE this is not a major factor in budget formulation because the most important aspects of the field budget materials are construction and IT project proposals, and, since EERE is "landlord" to only one laboratory, the National Renewable Energy Laboratory (NREL), those are usually limited. For the same reasons, EERE generally does not send its own guidance to the national laboratories and field offices, although it could, relying instead on the generic CFO guidance. Another reason is EERE's own internal schedule for planning and initial budget formulation. EERE's Spring Budget Review (SBR) or other spring planning exercise is generally held in March or April, and the field budgets are due usually in mid-March. The field budgets either arrive after the spring planning has begun, or right before—which is not enough time for the programs to consider the recommendations.

It is therefore important for EERE program officials to talk with their laboratory partners and with the DOE field offices they work with to identify any construction proposals or research initiatives well in advance of EERE's SBR. The programs should initiate this conversation in early February, right after the Congressional Budget request has been submitted.

5.3 EERE Spring Budget Review

Preparation of a new fiscal year budget begins in earnest with EERE's SBR, sometimes referred to as the "Budget Summit." This is often planned for March, but frequently happens in April. Depending on the experience level of EERE's political leadership, the SBR may simply focus on new initiatives and significant changes from the previous year, or it may also serve as a "dog and pony show" for the programs to explain what they do, and why, to new political leadership.

Programs are typically asked to present, in a succinct manner, graphs showing progress on key program metrics, summary funding tables, and information on how the technologies being developed (for R&D programs) or deployed (for deployment programs) fit into the current and projected energy markets. Two examples of presentation slides (from the Vehicles and Hydrogen programs, respectively) are depicted in Figures 5.3-1 and 5.3-2.

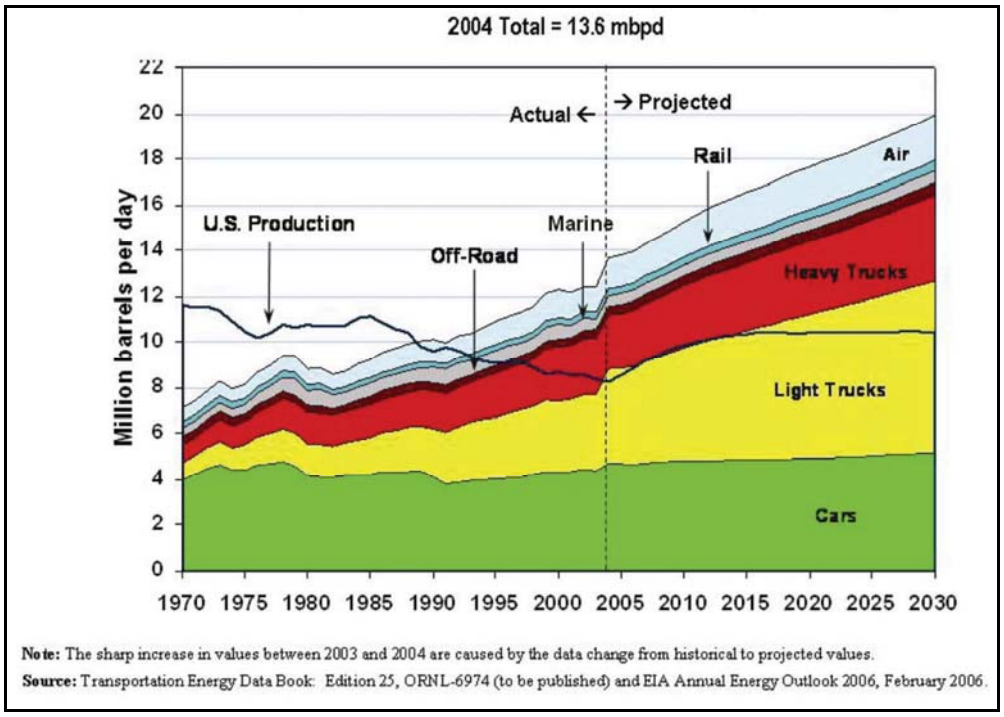


Figure 5.3-1 Transportation Petroleum Use by Mode (1970 – 2030)

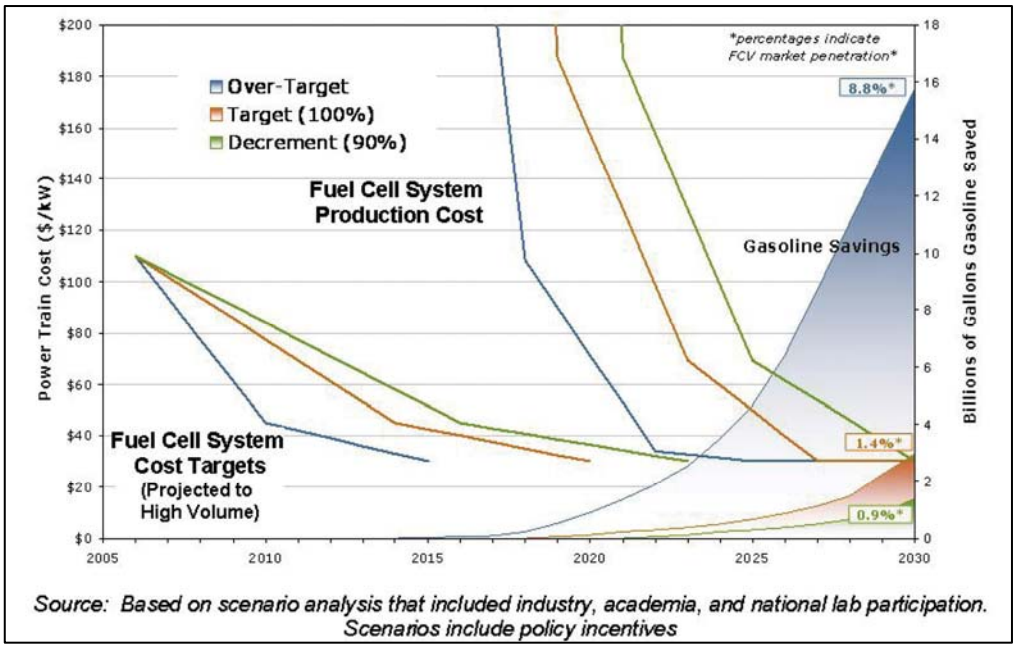


Figure 5.3-2 Reduction in Gasoline Use Due to Hydrogen FCV Market Penetration and Technology Cost Reduction

Because one of the principal deliverables for the CPR is a priority-ranked listing of funding elements for all of EERE's programs, developing that list is one of the principal outputs of the SBR. Each program is asked to present its own priority listing, and then PBA works with the Deputy Assistant Secretaries and the Assistant Secretary to merge all the activities into an Integrated Priority List (IPL). An example of a single program's priority list is depicted in Table 5.3-1 on the following pages.

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	FY 09 IPL Element Increment	Decision Unit Cumul-ative Dollars	FY 09 Congres-sional Control Cumulative Dollars
Vehicle Technologies	Advanced Combustion Engine R&D	Continue R&D of advanced efficient and clean combustion regimes and engine operating modes increase engine efficiency from 30% to 50%.	1	1 of 17	+33,600	+33,600	33,600
		Impact: If not funded, development of clean, efficient diesel engines and advanced low-temperature combustion regimes will be significantly delayed, since the private sector by itself has not funded much development in the areas that DOE addresses. Similarly, optimization of engines for alternative fuels will be significantly delayed. Most of the program's potential petroleum reductions in trucks and buses will not be achieved because the largest gains will come from advanced engine development.					
Vehicle Technologies	Fuels Technology	Critical enabler for increased fuel economy via advanced engines and direct displacement of oil by renewables.	2	2 of 17	+13,122	+13,122	46,722
		Impact: If not funded, the advanced combustion R&D above may not be commercialized. Many of the advanced engines will require modifications or optimizations to commercially available fuels, and those modifications will not be developed without this funding.					
Vehicle Technologies	Hybrid Electric Systems	R&D on advanced vehicle technologies for both passenger and commercial vehicles that could achieve significant improvements in fuel economy without sacrificing safety, the environment, performance, or affordability. Emphasis is on batteries, motors, and power electronics for advanced hybrid electric and plug-in hybrid electric vehicles. Also conduct systems analyses and simulation studies for both passenger and commercial vehicles, component evaluations, and testing to establish needs, goals, and component/vehicle performance validation. This element contributes to the 21st Century Truck Partnership, FreedomCAR and Fuel Partnership, and the President's Advanced Energy Initiative.	3	3 of 17	+45,900	+45,900	92,662
		Impact: If not funded, development of the key components of the next several generations of hybrid vehicles will be significantly delayed, which would eliminate the primary pathway by which conventionally fueled vehicles could reduce their petroleum consumption and greenhouse gas emissions. DOE development of effective batteries for plug-in hybrid vehicles (PHEVs) would also be stopped, halting that component of the Advanced Energy Initiative. The necessary hybrid systems would not be in place for commercialization of fuel-cell vehicles either, so the primary goals of the Hydrogen program would also be jeopardized.					
Vehicle Technologies	Materials Technology	Develop a portfolio of lightweight materials that can lead to up to 50% weight reduction in passenger vehicles. Develop materials and low cost processing techniques for producing automotive grade carbon fiber. Develop propulsion materials that can enable more efficient engines and high efficiency electric drive system components.	4	4 of 17	+24,403	+24,403	117,025
		Impact: If not funded, little research would be performed by industry alone on lightweight structural materials, eliminating a major potential pathway to petroleum savings and greenhouse gas reductions. These materials could contribute up to half of the potential petroleum savings in advanced hybrid and plug-in hybrid vehicles, and they will also be important to the commercialization of fuel-cell vehicles.					
Vehicle	Education	Focuses on target audiences with a critical	5	5 of 17	+4,000	+4,000	121,025

Table 5.3-1 Example of a Priority List for Spring Budget Review

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	FY 09 IPL Element Increment	Decision Unit Cumul-ative Dollars	FY 09 Congres-sional Control Cumulative Dollars
Technologies		role in the development and use of alternative fuels, including hydrogen, and energy-efficient vehicle technologies. Activities include education and outreach to the public, first responders, and fleets.					
		Impact: If not funded, deployment of hydrogen and potentially other advanced fuels and even some advanced PHEV batteries could be slowed by lack of acceptance by regulators and first-responders. For hydrogen, development of a broad-based, long-term market for the technologies will also be slowed.					
Vehicle Technologies	Safety, Codes and Standards	Facilitates the development and harmonization of the codes and standards and minimizes the knowledge gap in the safe use of hydrogen and other alternative fuels. Activities include support for the underlying research to provide the technical basis for the development of scientifically sound codes and standards in hydrogen and other alternative fuel applications.	6	6 of 17	+12,500	+12,500	133,525
		Impact: If not funded, deployment of hydrogen fuel and fuel-cell vehicles would be significantly delayed by the lack of industry device and safety standards. Without science-based standards, nearer-term deployment of stationary (distributed energy) fuel cells will also face significant deployment barriers.					
Vehicle Technologies	Technology Integration	Facilitates market transformation to new technologies and renewable fuels through education and deployment activities including ethanol and biodiesel deployment, vehicle competitions, and transportation-technology related university curriculum development.	7	7 of 17	+14,600	+14,600	148,125
		Impact: If not funded, fewer engineering students will be well-prepared to work in advanced automotive technologies, regional and corridor-based alternative fuels deployment efforts will not be supported, and the adoption rate of ethanol and biodiesel is likely to fall significantly.					
. . .							
Vehicle Technologies	Hybrid Electric Systems	Accelerate development of plug-in hybrid vehicle technologies to accelerate the reduction of technology cost for both HEV and PHEV vehicles. New aggressive cost targets would allow faster and deeper penetration of both types of vehicles accelerating the reduction of transportation oil use and the decrease of CO2 emissions. Cost reductions include lithium-ion battery cost (HEV and PHEV) and the electric power train. Further accelerate development plans for the next generation of advanced (post-lithium) batteries, which should extend the all-electric range and improve the performance of future generations of PHEVs and the development of the +200 mile electric vehicle. Accelerate early PHEV demonstrations, and the development of technologies, procedures, and policies needed to effectively i... ...rs of PHE...	11	11 of 17	+65,000	+65,000	213,125

Table 5.3-1 Example of a Priority List for Spring Budget Review (continued)

5.3.1 Considerations for Priority Lists

A little more discussion of priority lists may be useful, because there often seems to be a great deal of confusion as to how to construct them. There are several basic rules of thumb to keep in mind:

- Each element in the list (i.e., each row in the table) should fund a collection of activities that logically fit together and can be tied to specific accomplishments or milestones.

- Each element can represent some or all of a particular line in the program's budget structure, but it does not have to tie to a single budget line. It could represent funding for an initiative that requires coordinated funding in several different budget lines. For example, in FY 2007, the Vehicle Technologies (VT) program was directed to add $10 million to begin a new initiative to accelerate development of plug-in hybrid vehicles. That initiative would appropriately be a single Priority List line, even though the funds were actually going to be split between the budget lines for battery R&D, power electronics, and systems analysis.

- Granularity—the size of the increments—is important. Usually they should be between about 2% to 20% of the program's total budget, except for really big initiatives. If the elements are too small, they may not be tied to significant outcomes that will be meaningful to people reviewing the list. If they are too big, they encompass too much work and defeat the purpose of having a priority list that allows incremental funding rather than an "all or nothing" approach.

- Remember that the fundamental principle is that senior management should be able to draw a line anywhere on the list and have an effective and balanced program using just the elements above that cutoff. (This really applies only after the list has totaled 90 percent of the target budget levels [i.e., to the last 10 percent of the target funding and all of the over-target requests]). For example, if a Program Manager is told that he or she can have the first 2 over-target elements in the priority list, totaling $20 million, and his or her reaction is, "Well, if you're going to give me $20 million over-target, I'd actually spread it differently...," then the priority list was not properly broken out.

5.4 DOE Corporate Program Review Budget

The CPR is the Department's summer process in which program budgets are submitted to the CFO and reviewed by DOE senior management, resulting in the budget decisions and allocations that are subsequently submitted to OMB. The CPR was first introduced as a streamlined internal DOE budget review in the summer of 2006 for review of the FY 2008 budget. It was described by the Deputy Secretary as "bridging the gap between the Department's overarching strategic vision and the more detailed budget justifications." The CPR differs substantially from the previous Corporate Review Budget (CRB) process that it has replaced. The CRB reviewed an entire draft of the OMB/Congressional Budget justification, while the CPR focuses on priority rankings, issue papers, political sensitivities, and other high-level decision factors.

During the same timeframe as the CPR (June or July), the Secretary and CFO will receive a letter from OMB setting forth the "target" budget level for the agency, and sometimes highlighting Presidential initiatives that need to feature prominently in the Department's budget request to OMB. The target level may or not be the same as what was projected in the previous budget's out years. In other words, the FY 2009 OMB target guidance could be different from the FY 2009 projection in the FY 2008 Congressional Budget.

The CPR Budget brings together the budget requests from the DOE PSOs for review and approval by the DOE CFO, the Under Secretary, and the Secretary. CFO staff reviews the submissions to ensure that they include all of the requested information in consistent formats that can be merged and compared across the different Departmental PSOs. The core materials include an IPL like the ones used in EERE's SBRs, but including all of a PSO's programs, so that EERE's IPL reflects the Assistant Secretary's relative priorities across all of EERE's programs. Core program activities (at 90% of the target budget level) are generally shown without ranking, and then all other increments that build to EERE's target level and over-target request are shown with priority rankings (see Table 5.4-1). The integrated priority lists are used explicitly during the CPR process to balance requirements and make trade-offs between PSOs to optimally support Departmental and Administration priorities.

Depending on the policy environment each year, the CPR may include input from the Department's policy office or other groups that would like to influence the Secretary's priorities. For example, the FY 2009 CPR has been extended to include new analysis and even new budget proposals that are specifically focused on the potential climate-change benefits of DOE programs, and the policy office is briefing the Deputy Secretary on which

DOE offices and programs they believe offer the most climate-change benefit relative to their funding levels.

The CPR results in Program Decision Memoranda, which establish how much of each PSO's budget will be requested within the target provided by OMB, and how much (if any) will be presented as an "over target" request to OMB.

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	Decision Unit Cumulative Dollars	FY 09 IPL Element Increment	FY 09 Congressional Control Cumulative Dollars
Wind Energy	Technology Viability / Distributed Wind	R&D and outreach activities to develop vibrant market for small wind turbines connected to the Nation's distribution network, allowing average Americans to help shape the nation's energy future. Opens market and allows larger regional acceptance of wind technologies, specifically in rural areas. By 2015 expand by approximately five-fold the number of distributed wind turbines deployed in the U.S. market, approximately 11,000 turbines. Progress towards 20 percent of electrical energy from wind. Major Solicitation: Solicitation for partnerships to develop a mid-size distributed wind turbine. This is key to meeting program goal for distributed wind, to expand by five-fold the installations of distributed wind turbines by 2015.		**2 of 5**	896,746	+3,500	10,500
Wind Energy	Technology Viability / Large Turbine Technology R&D	Joint Industry CRADAs and lab-based R&D major initiatives will decrease Large Turbine Technology cost and improve reliability and field performance. Progress toward reaching 2012 goal of wind energy at 3.6 cents/kWh in low wind resource sites. Provide necessary technology leading to 100 GW of wind installations by 2030 (GPRA-based estimate). New FY 2009 effort: purchase & install large utility scale turbine to enable demonstration of state-of-the-art technology and provide funding for deferred maintenance to the National Wind Technology Center put off for years due to reduced budgets. Support program activities specifically requested by industry partners and wind industry CEO forum to improve wind turbine reliability and performance, and lower capital and maintenance costs by: 1) detailed testing and analysis of drive trains and blades, 2) develop advanced component technologies, 3) increase capacity factors using larger rotors, taller towers, and advanced control systems; and 4) implement improvements in commercial systems through leveraged collaborative partnerships. Develop advanced wind energy technology and novel concepts to lower turbine capital, installation and operation cost, expand market potential and improve the economic viability of low wind resources by: 1) improved understanding of the wind resource and conversion technology; 2) advanced material usage and technology application; 3) address wind farm under-performance in complex terrain and multiple arrays, and 4) partner with industry to bring wind turbines with high reliability and improved performance to the market, primarily through the implementation of advanced components		3 of 5	924,246	+27,500	38,000
		Major Solicitations: 1) Land-based CRADA to improve reliability and performance of land-based utility scale turbines. This is key to meeting the 2012 COE target of 3.6 cents/kWh. 2) Off-shore CRADA to improve the cost and performance of shallow water offshore utility scale turbine, beginning in 2010, following a go/no go decision. This is key to meeting the 2014 COE goal for shallow water offshore of 7 cents/kWh			924,246		
Hydrogen Technology	Distributed Energy Fuel Cell Systems	Improve reliability in electric power generation and reduce greenhouse gas emissions. Increase system electrical efficiency to make progress toward 2015 target of 40%. Continue stationary fuel cell R&D project focused on improving system durability to make progress toward 2015 target of 40,000 hours. Deploy system to facilitate market transformation		1 of 17	929,246	+5,000	5,000
Hydrogen Technology	Fuel Cell Stack Component R&D	Stack Components increases effort to reduce platinum catalyst loading through alloy technology and innovative methods to disperse and arrange catalyst material on the catalyst support. Expands effort to mitigate catalyst support degradation from corrosion.		2 of 17	938,646	+9,400	14,400
Hydrogen Technology	Fuel Cell Stack Component R&D	Focuses on material and component development for polymer electrolyte membrane fuel cell systems through R&D projects with industry, National Laboratories, and academia. The major R&D efforts aim to decrease the cost and improve the durability of membranes, catalysts, and membrane electrode assemblies as well as cell hardware and gas diffusion media. Focuses on 2015 system cost target of $30/kW and durability target of 5000 hours.		3 of 17	994,946	+56,300	70,700
Hydrogen Technology	Hydrogen Storage R&D	In addition to funding R&D for 3 materials Centers of Excellence (CoE) and multiple independent projects, R&D investment through a 4th engineering CoE will be expanded to complement materials science activities and enable the development of practical system components. Expand investment in Freedom Prize to encourage acceleration of accomplishments towards DOE's goals. Focuses on 2010 and 2015 targets to enable technology readiness for greater early market penetration.		4 of 17	1,001,546	+6,600	77,300
Hydrogen Technology	Hydrogen Storage R&D	Focuses on R&D of advanced materials for low pressure hydrogen storage by funding Centers of Excellence (CoE) and multiple independent projects in metal hydrides, sorbents and chemical hydrogen storage. Continue annual solicitation to elicit promising concepts and new ideas for storage materials. Accelerate research to tailor materials for optimum operating temperatures and pressures. Also investigate material safety issues and mitigation strategies for vehicular applications. R&D directly addresses the critical technical challenge of effectively and safely storing hydrogen on-board vehicles to achieve a driving range of greater than 300 miles and to meet consumer expectations for early market transformation. Focuses on 2010 targets to enable partial market penetration of hydrogen fuel cell vehicles.		5 of 17	1,055,146	+53,600	130,900

Table 5.4-1 Example of an Integrated Priority List submitted for the Corporate Program Review

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	Decision Unit Cumulative Dollars	FY 09 IPL Element Increment	FY 09 Congressional Control Cumulative Dollars
Geothermal Technology	EGS—Enhanced Geothermal Systems	Breakthrough analysis published in January 2007 by an MIT-led panel shows the potential for EGS to contribute 100,000 MWe to the Nation's energy supplies in contrast to today's 2800 MWe of installed geothermal power plants. In response to this study, EERE is currently assessing the opportunity identified by MIT and is preparing a new geothermal "business plan" that, while focused ultimately on longer term, high risk R&D, will also provide near and mid-term benefits to the existing U. S. geothermal industry. Cost-shared R&D will address the advanced reservoir engineering required to form and manage an underground reservoir, with emphasis on fundamentals such as resource characterization, fracture analysis, and fluid flow in fractured media. This technology development will rely on multiple field experiments, performed in partnership with industry. Experiments will focus initially on operating fields, progress to the fringes of fields, and eventually include undeveloped prospects. A dedicated site for risky, but essential technology development will be incorporated into the research effort. Cost-shared R&D will similarly be conducted in EGS-related drilling and energy conversion. For drilling, relevant technology from allied industries will be evaluated for applicability to EGS. For conversion systems, emphasis will be placed on technologies determined to have the greatest likelihood of reducing the cost and raising the efficiency of EGS. Preliminary analysis shows that super-critical CO^2, acting as an EGS reservoir working fluid, may have heat and mass transport capabilities somewhat superior to water, with the added advantage of sequestering a portion of the CO^2. Further analysis and initial R&D will be done on CO^2 as a working fluid. EGS will help to meet DOE's strategic goals by increasing energy diversity and reducing the environmental impact of energy use. (For further information see attached White Paper).		1 of 2	1,070,146	+15,000	15,000
		Impact: The very large amount of geothermal resources in the United States that are currently uneconomic will not be converted into economic resources and will be unavailable for power generation. The United States will loose its lead in the geothermal technology sector. Also, we will lose the opportunity to establish a public/private partnership for development of EGS technology.			1,070,146		
		Decrement (90% of Target) Total				**+1,070,146**	
Hydrogen Technology	Transportation Fuel Cell Systems	Initiate new R&D efforts to improve fuel cell system water management to improve thermal management efficiency, and operating life. **Impact:** Humidity and water control are emerging as major issues in maintaining a proper internal operating environment for fuel cells. If not funded, this key aspect of fuel cell systems will not be addressed, potentially leading to suboptimal fuel cell designs in the program's target time-frame.	1.0	6 of 17	1,071,146	+1,000	131,900
Weatherization and Intergovernmental Activities	State Energy Program/State Energy Program Special Projects	State Energy Program Competitive Special Project grants enable states to initiate innovative energy efficiency and renewable energy planning and program activities. Project focus is on market transformation activities, increasing investment capital for clean energy projects, and creating financially self-sustaining resource base for state programs. Highlights: • Foster and expand innovative state and local solutions • Annual energy cost savings of $300M • Implement state-based Energy PolicyAct 2005 (EPAct) initiatives Impact: Loss of savings from high yield energy deployment projects. Major Solicitation: Outyear funding for Major Solicitations: $98M	2.0	1 of 7	1,096,146	+25,000	25,000
Weatherization and Intergovernmental Activities	State Energy Program/State Energy Program Formula Grants	State Energy Program (Formula) The State Energy Program provides financial and technical assistance to states, enabling state governments to target their own high priority energy needs and expand clean energy choices for their citizens and businesses. The program emphasizes improving state energy emergency preparedness, strategic planning, and encouraging implementation of EPAct 2005. Impact: 1) destroys core capability of many State Energy Offices; and 2) limits ability of some States to participate in high yield competitive initiatives.	3.0	2 of 7	1,121,146	+25,000	50,000
Weatherization and Intergovernmental Activities	International Renewable Energy/Asia Pacific Partnership	The Asia Pacific Partnership (APP) encourages clean energy technology deployment among six countries: Australia, China, India, Japan, South Korea, and the United States. These countries represent about half of the world's economy, population, and energy use. Highlight: Program metrics TBD in FY 07. Impact: Higher Asian energy consumption results in higher world energy demand	4.0	3 of 7	1,128,646	+7,500	57,500
Program Support	Technology Advancement and Outreach	Partnerships with Industry and NGOs. In support of EPAct provisions supporting the dissemination of information energy efficiency and renewable energy technologies, TAO seeks additional partnerships with corporations, trade associations and other government agencies to promote EERE technologies; leverage resources of partners to deploy EERE technologies. Without additional funding leveraging opportunities will be lost.	5.0	3 of 8	1,130,146	+1,500	14,051
Program Support	Technology Advancement and Outreach	Web site Redesign and Enhancement/Electronic and Internet Outreach. Upgrade the EERE Web site through redesign to include more interactive components, streaming video, and user friendly capabilities. Develop, maintain and utilize a podcast, webinar and webcast program to proactively promote EERE technologies through internet technology.	6.0	4 of 8	1,131,283	+1,137	15,188

Table 5.4-1 Example of an Integrated Priority List submitted for the Corporate Program Review

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	Decision Unit Cumulative Dollars	FY 09 IPL Element Increment	FY 09 Congressional Control Cumulative Dollars
Solar Energy	Solar Heating and Lighting	The Solar Heating & Lighting activities will focus on research and field test solutions for providing solar energy to a home. Currently water heating accounts for 14% of the residential energy use, space heating 31%, and electricity the balance. An important objective is collaborating with the Building Technologies program to integrate solar technologies into Zero Energy Homes (ZEH). It will include research and development on hybrid photovoltaic-thermal (PV-T) collector systems, including the integration of solar water and/or space heating elements with PV modules and systems for the building-integrated environment. Impact: None Major Solicitations: TBD based on requirements from Buildings Program for solar heating & lighting equipment.	7.0	6 of 11	1,136,283	+5,000	140,020
Vehicle Technologies	Materials Technology	Enhance carbon fiber materials development and automotive supplier R&D partnership, fully fund HTML with microscope replacement, and fully fund propulsion materials R&D. This will accelerate progress toward the goal of reducing passenger vehicle weight by up to 50 percent. Impact: Carbon-fiber materials have the potential to revolutionize many aspects of materials technology and applications (even beyond automobiles), and in vehicles alone they have the potential to achieve dramatic weight reductions in both structural and non-structural components. If not funded, the program's goal of 50% weight reduction will have to rely on more conventional materials, and will likely not be met.	8.0	9 of 17	1,148,783	+12,500	210,725
Facilities and Infrastructure	Project Engineering and Design	Project Engineering and Design: Establish a standing pool of project engineering and design (PED) funds consistent with DOE Order for more accurate budget-quality scope, schedule and cost baselines; reduces time and cost of capital asset acquisition. Amount is small percentage (less than 2%) of Facilities and Infrastructure planned for next three fiscal years. All DOE Secretary Offices with buildings except EERE have substantial PED funds.	9.0	2 of 7	1,150,783	+2,000	11,982
Hydrogen Technology	Systems Analysis	Focuses on assessing technology progress towards meeting the goals of the President's Hydrogen Fuel Initiative and AEI to reduce dependency on imported oil and greenhouse gas emissions. Addresses the evaluation requirements by completing critical models for market transformation, and analysis for near-term program support. Focuses on the well-to-wheels analysis of the near-term hydrogen pathways with the impact of hydrogen quality and the integration with the electrical sector. Includes analysis of fuel cell cost and program element risk activities. Impact: The Systems Analysis activity provides the analytic and modeling framework for projecting benefits of hydrogen technologies and for making trade-offs to optimize environmental and energy security benefits and economic competitiveness. If not funded, the remaining Hydrogen activities would lack guidance for strategic decisions and trade-offs that will need to be made over the next 5-10 years.	10.0	7 of 17	1,157,496	+6,713	138,613
Weatherization and Intergovernmental Activities	Tribal Energy Activities	Tribal Energy Activities builds partnerships with Tribal governments to help assess Native American energy needs. Highlight: Restructure program to concentrate on providing model contracts for power purchase agreements. Impact: 1) reduction may be viewed as discriminatory; 2) historically Congressional and Tribal State stakeholders react strongly and negatively to proposed funding reductions	11.0	4 of 7	1,158,496	+1,000	58,500
Facilities and Infrastructure	NREL / Science and Technology Facility / SERF	SERF/STF Research Equipment Initiative: Recapitalizes (i.e., replaces existing equipment essential for ongoing R&D that is at or near lifetime end) and completes multi-year effort to outfit the new Science and Technology Facility (STF) in support of the Solar America Initiative (part of the President's Advanced Energy Initiative).	12.0	3 of 7	1,171,496	+13,000	24,982
Hydrogen Technology	Transportation Fuel Cell Systems	Perform R&D on early market auxiliary power units and portable power fuel cell systems to make progress toward 2010 targets. Impact: The use of fuel-cell Auxiliary Power Units (APUs) in trucks can significantly reduce idling and its associated fuel consumption and emissions. The truck industry has shown some interest in fuel-cell APUs as a result of cost-shared projects by DOE, but if this core R&D is not funded, this market for early introduction of fuel cells, — and the fuel-use and environmental benefits — could be delayed indefinitely.	13.0	8 of 17	1,174,996	+3,500	142,113
Hydrogen Technology	Transportation Fuel Cell Systems	Develop and test early market auxiliary power units and portable power fuel cell systems that benchmark product performance and establish concept viability. Also partially addresses requirements of EPAct Section 782. Impact: The use of fuel-cell Auxiliary Power Units (APUs) in trucks can significantly reduce idling and its associated fuel consumption and emissions. The truck industry has shown some interest in fuel-cell APUs as a result of cost-shared projects by DOE, but if fuel-cell APU prototype development and testing is not funded, this market for early introduction of fuel cells, — and the fuel-use and environmental benefits could be delayed indefinitely.	14.0	9 of 17	1,179,096	+4,100	—

Table 5.4-1 Example of an Integrated Priority List submitted for the Corporate Program Review

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	Decision Unit Cumulative Dollars	FY 09 IPL Element Increment	FY 09 Congressional Control Cumulative Dollars
Ocean Energy	Research, Development & Testing	This multi-year effort will conduct technology characterization, resource assessment, and industry partnerships to facilitate the understanding of ocean energy technologies while positioning the U.S. industry to take advantage of the findings in new market products. This activity would directly support DOE program goals to increase energy diversity and improve energy infrastructure. Ocean technologies are not currently a DOE tracked activity. Specifically these activities would include ocean energy resource assessment and validation, assessment and modeling of today's technologies, assuming a "Go at the Go/No decision point in 2010 or 2011, development of design, deployment and survivability guidelines in accordance with international certification efforts, prototype development through industry partnerships, and field testing of deployed prototypes will commence. Funding would also be used to provide core/critical staff, consolidate knowledge, showcase existing technology, and develop an industry support strategic plan. Supports DOE Goals 1.1, 1.2 and 1.3 through targeted research and development of low cost energy technologies that diversify energy sources, reduces fuel imports and creates a more flexible energy infrastructure based on renewable technologies. Impact: As a new program, there would be no impact in terms of FTEs or goals. However, not funding this effort will delay the United States entry into the growing ocean energy technology industry and allow European efforts to advance relatively, putting the U.S. efforts further behind. Major Solicitation: Solicitation for Technology develop partnerships for ocean technologies beginning in 2010 through 2013.	15.0	1 of 2	1,182,096	+3,000	3,000
		Total at Target (100%) CFO Target				**+1,182,096**	
Program Direction	Salaries and Benefits, Support Services,	This amount will be re-aligned with final Over-Target decisions. Impact: The impact of not receiving this funding is that EERE will not be able to ramp-up staff efforts directly related to supporting the increased workload generated by the President's energy initiatives, in effect negating any Over-Target funding which may be approved for those initiatives.	17.0	5 of 5	1,188,852	+6,756	121,289
Vehicle Technologies	Technology Integration	Expand the deployment activities in Technology Integration to include school-based education and outreach for renewable fuels, and expand real-world data collection on alternative fuel and advanced technology vehicles, working both with clean cities and other deployment partners. Supports the President's "Twenty in Ten" Initiative. Impact: The President's "20 in Ten" initiative will require an aggressive outreach and deployment effort to reach its goals. This effort goes well beyond anything the Department has attempted before to promote alternative fuels and advanced technology vehicles. If not funded, the Department's deployment efforts in support of "20 in Ten" will not exceed the level of support given when past goals were much more modest. Major Solicitation: A major solicitation is anticipated for FY 2009 for data collection/demonstration activities with nearly production-ready vehicles.	20.0	10 of 17	1,203,852	+15,000	225,725
Vehicle Technologies	Hybrid Electric Systems	Accelerate development of plug-in hybrid vehicle technologies to support recent aggressive PHEV introduction plans proposed by manufacturers. Increase development and testing of lithium-ion batteries to reduce their cost and increase their affordability, support early PHEV demonstrations, and develop the technologies, procedures, and policies necessary to effectively integrate large numbers of PHEVs into utility grids. Accelerate development plans for the next generation of advanced (post-lithium) batteries, which should extend the all-electric range and improve the performance of future generations of PHEVs. Impact: Plug-in hybrids have substantial potential to reduce petroleum use in support of the "Twenty in Ten" goal. PHEV technology can also be combined with alternative-fuel engines to create a double petroleum-reduction effect. If this increment is not funded, PHEV technologies will progress at their current slower rate and will make only modest petroleum-reduction contributions during the next ten years, with their biggest contributions coming after that. Major Solicitation: A significant new solicitation is anticipated for FY 2009 to support technology validation/learning demonstrations of PHEVs.	21.0	11 of 17	1,231,852	+28,000	253,725
Vehicle Technologies	Technology Introduction /Technology Validation	Fully fund Hydrogen learning demonstrations to planned levels (FY 2008 level) to continue meeting contractual obligations. Impact: This funding will allow DOE to complete its current contractual obligations for hydrogen Technology Validation and will also allow the initiation of a Phase II solicitation for next-generation fuel-cell vehicles and fueling stations. If not funded, next-generation technologies will not be field-validated, raising the risk that the private sector will not commercialize them and leaving some uncertainty about whether the R&D programs have achieved their goals. Major Solicitation: After current contractual obligations are met, a significant new solicitation for "next generation" fuel cell vehicles and hydrogen fueling systems is anticipated in 2010 or 2011.	22.0	12 of 17	1,246,852	+15,000	268,725

Table 5.4-1 Example of an Integrated Priority List submitted for the Corporate Program Review

Congressional Control	IPL Element (Decision Unit)	IPL Element Description	Priority Number	Package Number	Decision Unit Cumulative Dollars	FY 09 IPL Element Increment	FY 09 Congressional Control Cumulative Dollars
Industrial Technologies	Industrial Market Transformation/ Industrial Technical Assistance (formerly IOF Crosscut/ Industrial Technical Assistance)	Expand the Save Energy Now (SEN) to support DOE's Efficiency Campaign through increased program activities with industrial end-users, including data centers, to foster continuous improvement in industrial facilities. Develop information and hold events to raise awareness of positive benefits of reducing industrial energy use and greenhouse gas emissions. Increase plants assessments of small- & medium-sized industry participants. Expand plant certification effort which is a progressive, performance-based recognition path for improved energy management practices, and continue DOE's Domestic Supply Chain Partnership to reduce energy consumption in manufacturing supply chains. Work with Manufacturing Extension Partnerships (MEP) of the Department of Commerce and DOE's university-based Industrial Assessment Centers to deliver best practices, analytic tools, energy assessment and training. Impacts: The potential estimated energy benefits from this activity, contributing to the EPAct 2005 goal (Section 106) of 2.5%/yr reduction in energy intensity, are 435 TBtu/year in the year 2020 ($4 Billion equivalent in energy expenditures in 2005 dollars). This is about 8% of the total energy savings needed to reach the EPAct goal.	23.0	5 of 11	1,259,852	+13,000	58,920
Solar Energy	Major Initiative: Concentrating Solar Power / (Accelerating Development of CSP Intermediate Load Plants)	This initiative will make CSP a cost-competitive intermediate load power source, targeted at 5-7¢/kWh, by 2015 (moved up from 2020). This puts CSP on the same timetable as PV and thus allows it to fully support the goals of the President's Solar America Initiative. Specifically, the program will work to develop lower-cost trough system designs and manufacturing supply chains for 100-500MW power plants, investigate heat transfer fluids that would enable operation above 500°C (up from 391°C), and improve integration between the solar field and the power block. It will also accelerate permitting, siting, and other deployment needs including improved resource assessment and forecasting capabilities. Impacts: Not funding this initiative will impede the acceleration of CSP technology development, preventing the benefits from being realized until after 2020 Major Solicitations: CSP Storage/Trough Mfg/Advanced Concepts Phase 2 Major Initiative: Concentrating Solar Power Initiative and AEI	24.0	7 of 11	1,279,852	+20,000	160,020

Table 5.4-1 Example of an Integrated Priority List submitted for the Corporate Program Review

5.5 OMB Request

OMB has a number of broad responsibilities relating to management and control of EERE's portion of the President's budget.

5.5.1 Relationship between the OMB and EERE

Figure 5.5-1 shows the change in Total Government Debt for each of the last seven presidential terms brought about by economic conditions and the Administration's attitudes toward spending and the debt.

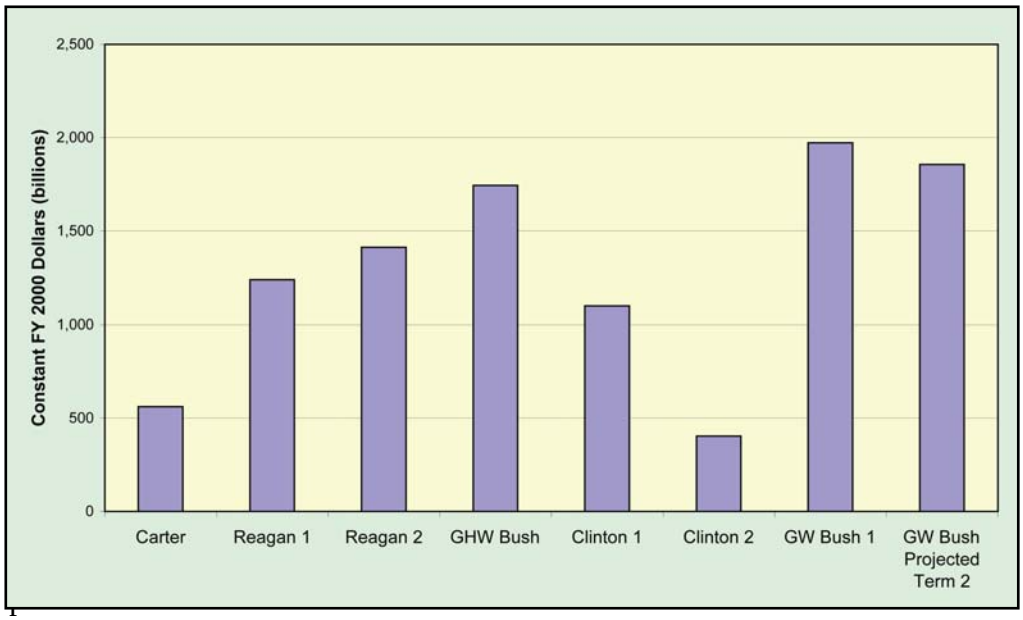


Figure 5.5-1 Deficits Accumulated by Presidential Term

Each administration is sensitive to the deficits (or surpluses) that affect the debt and OMB, as a major mission responsibility, is concerned about mitigating the deficit. In carrying out this responsibility, OMB needs to be assured that EERE's programs are consistent with an appropriate government role (i.e., that EERE is not engaged in activities better left to the purview of industry or Non-Governmental Organizations, and that EERE's spending yields significant benefits to the taxpayer); that is, EERE programs are yielding a "bang for the buck." Beyond that, when dealing with an individual OMB Budget Examiner, it is worth keeping in mind that this type of macro concern, and an awareness of the total federal deficit, is much more on the minds of OMB staff than of most DOE staff.

In reviewing EERE's budget exhibits, OMB is watchful for specific deficiencies in justification and presentation that give rise to doubts about either the need for the program or EERE's ability to execute it. First, OMB

needs to see that each program element proposes performance in quantifiable and measurable terms; that is, each intended program/project milestone, output, and outcome is stated objectively. OMB examines each proposal carefully to ensure that benefit claims are honest and realistic. Additionally, OMB views program budgets in the context of performance over time, taking care that the program is continually moving the technology forward. In this regard, the program must specify "on- and off-ramps and interchanges" to ensure that appropriate adjustments are being made to keep the program on track and that stalled program elements are being redirected or discontinued. Programs that are stalled or "spinning wheels" are said to be in the "Perpetual Program Syndrome." Additionally, OMB looks to ensure that EERE has set program priorities appropriately in terms of need and risk.

OMB is also alert to "empire building" or apparent efforts on the part of the program to grow for the sake of getting bigger either by requesting questionable new elements or unwarranted additional funding for existing elements.

OMB is looking to ensure that EERE is appropriately applying cost-sharing requirements to its projects depending on the stage of technology maturity. As the technology progresses from basic research to development and demonstration, the cost share by industry generally should be increased. Finally, OMB reviews budget proposals to ensure that work that is normally performed by industry where adequate market conditions exist is not subsidized by DOE.

5.5.2 Other OMB Roles

OMB is responsible for review and clearance of the President's budget prior to its being forwarded to Congress. Once Congress begins its deliberations, all testimony and responses to congressional Q&As must be forwarded through OMB for review and clearance to assure that they are consistent with the Administration's priorities.

Integral to performing its budget reviews, OMB conducts Program and Rating Assessment Tool (PART) reviews to ensure that programs have conducted thorough analysis and planning, considering and responding to all elements of the PART algorithm and conducting special studies to support their claims.

OMB also collaborates with other elements of the Executive Office of the President, including the Office of Science and Technology Policy, the Council of Economic Advisors, the Council of Environmental Quality, and the Domestic Policy Council, to ensure that programs are in compliance with Administration policy, direction, and guidance.

Once the Congressional Budget is formulated and appropriation legislation enacted, OMB assigns or "apportions" the appropriations to the departments and agencies of the executive branch. OMB has other roles besides budget control—the "M" (Management) in OMB—and the following bullet points sometimes impact EERE as well:

- The OMB Office of Federal Procurement Policy manages all of the federal procurement and acquisition policies with which DOE must comply.
- The OMB Office of Federal Financial Management is responsible for the Administration's compliance with the CFO Act and for ensuring that agencies implement the right types of financial controls for their budget execution.
- OMB's Office of Information and Regulatory Affairs (OIRA) reviews all agency IT plans for consistency with various Administration IT policies as well as the reasonableness of the IT budget estimates. OIRA is also responsible for implementing the Paperwork Reduction Act and for reviewing all agency requests for information from citizens and corporations as well as agency regulations, such as EERE's appliance efficiency standards. In this context, EERE programs sometimes need OMB's approval to conduct surveys or issue efficiency regulations. OIRA's bias is always to question whether the information or regulation is needed; however, at least in the case of surveys, this information is generally of interest to EERE's Budget Examiner, so EERE programs can use their examiner to help persuade OIRA to permit the information-gathering activities.

5.5.3 Defend EERE's Budget to OMB

After the Department transmits the annual budget request to OMB, the focus is directed towards budget defense. Just as EERE had to defend the budget request during the Department's CPR, and just as it will need to ultimately defend the budget to the Congress, EERE must now defend its requested allocation of resources to OMB.

The OMB Budget Examiner plays a key role in reviewing EERE's budget vis-à-vis the macro and detailed concerns. The OMB Budget Examiner conducts one or more detailed, comprehensive reviews of EERE's budget request. Frequently, additional supporting information is requested and it is common for the Examiner to request written responses to detailed questions. Often the OMB Examiner is accompanied by the OMB Branch Chief of the Energy

Branch, the OMB Director of the Energy, Science and Water Division, and others. If there are vulnerabilities or weaknesses in EERE's budget, it is highly unlikely that OMB will overlook them.

The focus of OMB's review of EERE's budget may vary from year to year depending on individual examiner and Branch Chief concerns and larger Administration budget or science and technology policy concerns that have been communicated to OMB. At times there has been a strong focus on the appropriate government role in technology development and on aggressively seeking industry cost-sharing. In recent years there has been a focus on OMB's R&D Investment Criteria (RDIC) and on near- and mid-term performance metrics embodied in DOE's JOULE system and OMB's PART. OMB's budget review covers both the quality of the metrics—how well they reflect program progress—and the relationship between the requested budget and any changes being proposed in the annual JOULE or PART targets (and, of course, consistency between JOULE and PART).

OMB's decisions on DOE's budget request are provided in the OMB "Passback," which usually occurs the Monday after Thanksgiving. The Passback includes allowances for resources and programmatic guidance and supporting rationale for the OMB decisions. Subsequently, EERE must quickly formulate appeals, as part of the Departmental appeals process, for any OMB decision with which EERE disagrees. New, more detailed and well-presented information can result in OMB's approval of an appealed activity. Ultimately, some appeal decisions may be made by senior advisors to the President—there is often a "triumvirate" composed of some combination of the President's Chief of Staff, the head of the Council of Economic Advisors, the Director of OMB, and the Secretary of the Treasury. The final decisions provided by OMB form the basis for the Congressional Budget Request.

5.6 Congressional Budget Process

The Congressional Budget Process is divided among committees: the Budget Committees, the authorization committees, and the appropriation committees. The national budget issues are covered by the Budget Committees through their budget resolutions and reconciliation bills as depicted in Figure 5.6-1 below.

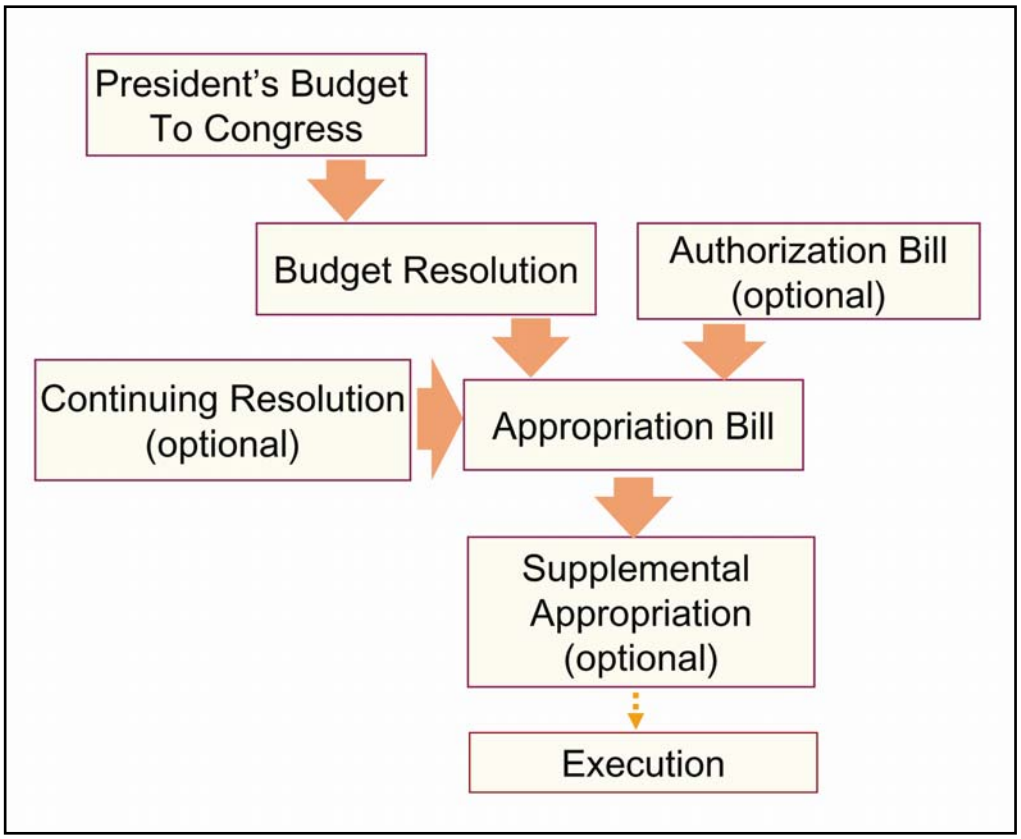


Figure 5.6-1 Congressional Budget Process

The authorization committees and appropriation committees compete for the control of what is done in each program. The authorizers are nominally responsible for assigning new roles and responsibilities to various agencies and programs. The appropriators have the final say on exactly how much money will be spent in each program account.

5.6.1. Budget Committees

The function of the Budget Committees is to recommend, for House and Senate action, a concurrent budget resolution that establishes congressional targets for each committee for overall levels of spending and revenues. These committees also monitor congressional spending actions.

The Budget Committees do not actually review DOE budgets. Instead, they look at macro-level data such as national economic forecasts, interest on the debt, and total federal funding. Based on this information, they determine ceilings for spending and revenues at this same macro level. Congress as a whole approves these levels in a concurrent budget resolution. These ceilings provide targets for each of the congressional committees to use in writing their reports on authorization and appropriation. A concurrent budget resolution is not binding as law because it does not require the signature of the President to take effect. It is, however, a congressionally self-imposed limitation. The Budget Committees monitor the work of the appropriation committees to try to ensure they do not exceed their assigned funding ceiling. Interestingly, while the appropriation committees try to keep each of the subcommittees in line with the budget resolution, if the individual bills aren't passed and the budget goes to an omnibus bill or full-year Continuing Resolution (CR), Congress is no longer bound by the budget resolution and everything is on the table.

5.6.2. Authorizing Committees

Authorizing Committees are standing House or Senate committees with legislative jurisdiction over the establishment, continuation, and operations of federal programs or agencies.

Authorization bills are defined as substantive legislation proposed by a committee of jurisdiction (other than the House or Senate Appropriations Committees) that establishes and continues the operation of a federal program or agency either indefinitely or for a specific period, or that sanctions a particular type of obligation or expenditure within a program. Usually the two functions go hand-in-hand; in other words, an authorization bill will have a section on a particular type of activity (i.e., solar energy R&D) and that section will contain one or more paragraphs describing what activities are to be undertaken, and another paragraph setting forth authorized funding levels for a period of several years.

It is normal practice to pass an authorization bill every few years for each agency, which authorizes maximum levels of funding for appropriations and which may require an agency to undertake new activities or to stop old ones. It is not uncommon for an authorization bill to contain some sections that authorize activities without authorizing a specific amount of funding—sometimes funding is authorized as "such sums as are necessary" and sometimes funding is not mentioned. In either case, the bill is essentially deferring to the appropriations committees for those items.

Appropriations are legally "self-authorizing," however, the authorization bills are often treated by the appropriators more as general guidance than as binding.

The jurisdiction of Authorizing Committees may overlap (i.e., multiple committees may claim jurisdiction for a specific bill or program, particularly when new initiatives are beginning). For existing programs, in most cases the Authorizing Committees work out some agreement as to the division of oversight. For instance, in the House, EERE's R&D activities fall under the Science and Technology Committee, but state grant programs that have little to do with R&D, such as the Weatherization Assistance Program, fall under the House Energy and Commerce Committee.

EERE is within the jurisdiction of the following congressional Authorizing Committees:

- Senate Committee on Energy and Natural Resources;
- House Committee on Science and Technology (jurisdiction for all EERE research, development, and selected deployment activities); and
- House Energy and Commerce Committee.

EERE authorizing legislation includes:

- Solar Energy Research, Development, and Demonstration Act of 1974, as Amended;
- Federal Energy Administration Act of 1974, as Amended;
- Non-nuclear Energy Research and Development Act of 1974, as Amended;
- Energy Policy and Conservation Act (EPCA), as Amended;
- Energy Conservation and Production Act (ECPA), as Amended;
- Electric and Hybrid Vehicle Research Development and Demonstration Act of 1976, as Amended;
- Department of Energy Organization Act (1977), as Amended;
- National Energy Conservation Policy Act (NECPA) and Federal Photovoltaic Utilization Act, as Amended;
- Powerplant and Industrial Fuel Use Act of 1978, as Amended;

- Energy Tax Act of 1978, as Amended;
- Methane Transportation Research Development and Demonstration Act of 1980, as Amended;
- National Appliance Energy Conservation Act of 1987;
- Alternative Motor Fuels Act of 1988, as Amended;
- Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989, as Amended;
- Clean Air Act Amendments of 1990, as Amended;
- Global Change Research Act of 1990;
- Department of Energy Metal Casting Competitiveness Research Act of 1990, as Amended;
- Solar Wind, Waste, and Geothermal Power Production Incentives Act of 1990;
- Energy Policy Act of 1992, as Amended;
- National Climate Program Act of 2002, as Amended; and
- Hydrogen Future Act of 1996, as Amended.

5.6.3 Appropriation Committees

The U.S. Constitution gives Congress the power to levy taxes, to finance government operations through appropriations, and to prescribe the conditions governing the use of those appropriations. That power is referred to as the congressional "power of the purse." It derives from various provisions of the Constitution, particularly article I, section 9, clause 7, which provides that "no money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law."

Thus, once the President submits his budget request, the congressional phase begins. Since the constitutional power of the purse is vested solely in Congress, the President's budget request is just that—a request. Congress may choose to adopt, modify, or ignore the President's budget proposals when adopting its budget resolution and when enacting appropriations and other laws.

An agency may not draw money out of the Treasury to fund agency operations unless Congress has appropriated the money to the agency. At its most basic level, this means that it is up to Congress to decide whether to provide funds for a particular program or activity and to fix the level of that funding. Although the Constitution does not provide detailed instructions on how Congress is to do so, Congress has and continues to implement its power of the purse in two ways: through the enactment of laws that raise revenue and appropriate funds, including annual appropriations acts, and through the enactment of "fiscal statutes" that control and manage federal revenue and appropriations.

Appropriations bills are developed by the House and Senate Appropriations Committees and their appropriations subcommittees. Each subcommittee has jurisdiction over specific federal agencies or programs and is responsible for one of the general appropriations bills. There are currently 12 subcommittees (and thus appropriation bills) in the House and Senate. EERE's entire budget now falls under the Energy and Water subcommittees and appropriation bills. The jurisdiction of appropriations committees does not overlap, therefore, no other appropriations subcommittee has jurisdiction over EERE programs. The Constitution requires that all revenue (tax) bills originate in the House; by custom, the House also originates appropriations measures.

The House Energy and Water Appropriations Subcommittee and the Senate Energy and Water Development Appropriations Subcommittee have jurisdiction over EERE's appropriations.

5.6.4 EERE Appropriations Legislation

EERE programs are primarily impacted by the following types of appropriations actions:

- Energy and Water Development Appropriations Act;
- CR(s);
- Rescission;
- Supplemental Appropriations;
- Reprogramming (additional statutory authority is not usually required); and
- Transfer Authority.

5.6.4.1 Appropriation Act

An appropriation act is a statute, under the jurisdiction of the House and Senate Committees on Appropriations, which generally provides legal authority for federal agencies to incur obligations and to make payments out of the Treasury for specified purposes. An appropriation act fulfills the requirement of article I, section 9, of the U.S. Constitution, which provides that "no money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law." Major types of appropriation acts are regular, supplemental, deficiency, and continuing. Regular appropriation acts are all appropriation acts that are not supplemental, deficiency, or continuing.

Currently, regular annual appropriation acts that provide funding for the continued operation of federal departments, agencies, and various government activities are considered by Congress annually. From time to time, supplemental appropriation acts are also enacted. When action on regular appropriation bills is not completed before the beginning of the fiscal year, a CR may be enacted in a bill or joint resolution to provide funding for the affected agencies for the full year, up to a specified date, or until their regular appropriations are enacted.

5.6.4.2 Continuing Resolution

A CR is an appropriation act that provides budget authority for federal agencies, specific activities, or both to continue in operation when Congress and the President have not completed action on the regular appropriation acts

by the beginning of the fiscal year. Enacted in the form of a joint resolution, a CR is passed by both houses of Congress and signed into law by the President.

A CR may:

- Be enacted for the full year, up to a specified date, or until regular appropriations are enacted;
- Usually specifies a maximum rate at which funding obligations may be incurred based on levels specified in the resolution (e.g., the resolution may state that obligations may not exceed the current rate or must be the lower of the amounts provided in the appropriation bills passed in the House or Senate); and
- If enacted, cover the entire fiscal year, and will usually specify amounts provided for each appropriation account.

5.6.4.3 Rescission

A rescission is legislation enacted by Congress that cancels the availability of budget authority previously enacted before the authority would otherwise expire.

- The Impoundment Control Act of 1974 (2 U.S.C. § 683) provides for the President to propose rescissions whenever the President determines that all or part of any budget authority will not be needed to carry out the full objectives or scope of programs for which the authority was provided. Rescissions of budget authority may be proposed for fiscal policy or other reasons. All funds proposed for rescission must be reported to Congress in a special message. Amounts proposed for rescission may be withheld for up to 45 calendar days of continuous session while Congress considers the proposals. If both houses have not completed action on a rescission bill rescinding all or part of the amount proposed by the President for rescission in his special message within 45 calendar days of continuous session, any funds being withheld must be made available for obligation.
- Congress also may initiate rescissions. Such congressional action occurs for various reasons, including changing priorities, program terminations, excessive unobligated balances, offsets, and program slippage.

5.6.4.4. Supplemental Appropriation

Supplemental appropriation involves appropriating funds in addition to those already enacted in an annual appropriation act. Supplemental appropriations provide additional budget authority, usually in cases where the need for funds is too urgent to be postponed until enactment of the regular appropriation bill. These are known as "emergency supplementals," although close inspection of most emergency supplemental bills will reveal many items whose urgency is dubious at best. Emergency supplementals are not subject to the budget and deficit control rules that apply to normal appropriations, so they are a favorite channel for both the Administration and Congress to provide funding in excess of what would be permitted by previously agreed budget discipline.

5.6.4.5 Reprogramming

Reprogramming is the shifting of funds within an appropriation or fund account to use them for purposes other than those contemplated at the time of appropriation, and/or the shifting of funds from one object class to another within an appropriation or from one program activity to another.

While a transfer of funds involves shifting funds from one account to another, reprogramming involves shifting funds within an account. Generally agencies may shift funds within an appropriation or fund account as part of their duty to manage their funds. Unlike transfers, agencies may reprogram without additional statutory authority. Nevertheless, reprogramming involves some form of "notification" to the congressional appropriations subcommittees, Authorizing Committees, or both. Sometimes committee oversight of reprogramming actions is prescribed by statute and requires formal notification of one or more committees before a reprogramming action may be implemented.

Reprogramming should not be employed to initiate new programs or to change program, project, or activity allocations specifically denied, limited, or increased by Congress in appropriation acts or reports. In cases where unforeseen events or conditions are deemed to require such changes, proposals must be submitted in advance to the committees for their concurrence and be fully explained and justified.

5.6.4.6 Transfer Authority

Transfer authority is statutory authority provided by Congress to transfer budget authority from one appropriation or fund account to another. The implementation of EERE program funds assessed each year for the Small Business Innovation Research and Small Business Technology Transfer programs are implemented through an appropriations transfer.

5.6.5 Roles and Responsibilities of Legislative Team & DOE/EERE Partners

The Congressional/Legislative team is a subgroup within PBA. The goals of the team include the following: 1) act as a focal point for EERE congressional affairs, 2) reduce the burden created by congressional activities on EE-1 front office and EERE program and budget staff, 3) assure that EERE speaks with one clear, consistent, and informed voice to Congress, 4) increase congressional awareness of EERE program goals and benefits, and 5) increase EERE awareness of congressional activity and how it affects EERE programs. The team is involved in preparing congressional hearings, responding to congressional inquiries, identifying and tracking earmarks, and interfacing with Appropriations Committees staff.

To facilitate consistent and effective EERE testimony at congressional hearings, the team reviews, drafts, and clears testimony; prepares witnesses for briefings and hearings; and reviews and edits transcripts.

For congressional inquiries, the team drafts responses to official questions for the record and unofficial inquiries before involving EERE staff. It also maintains a Q&A tracking system to ensure that answers are delivered in a timely and consistent manner, and maintains a database of congressional inquiries and official source documents to increase process efficiency and consistency in EERE responses.

With respect to congressional “earmarks,” the team identifies “earmarkees” and their congressional sponsors, and tracks EERE earmarks and provides the status of earmarks to inquirers. The team also assists the EERE PMC in the processing and award of earmarks and works with congressional staff to resolve issues relating to the processing and awarding of earmarks. The team also interfaces with appropriation committees by facilitating information exchange between EERE program and budget staff in coordination with EERE management, and keeps staff informed of important developments in EERE programs.

For all other congressional activity, the team handles routine congressional requests and inquiries through its interface with DOE congressional liaisons and CFO staff, and keeps EERE management informed of EERE-related developments in the House and Senate by monitoring related activities.

5.7 Performance Budget Formulation Stage

The key SMS steps in the FY 200(X+2) budget formulation process are shown below in Figure 5.7-1. The process is designed to provide budget guidance as early as possible, to make major issues and concerns highly visible, to enable EERE management to make decisions in an efficient and timely manner, and to deliver a performance-based budget to the CFO on schedule. Budget formulation relies heavily on information derived from the planning process activities, especially the EERE Strategic plan and the multi-year program planning guidance.

Each of the steps in the diagram below is consistent with the Under Secretary of Energy's October 14, 2005 SMS memo. Table 5.7-1 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.

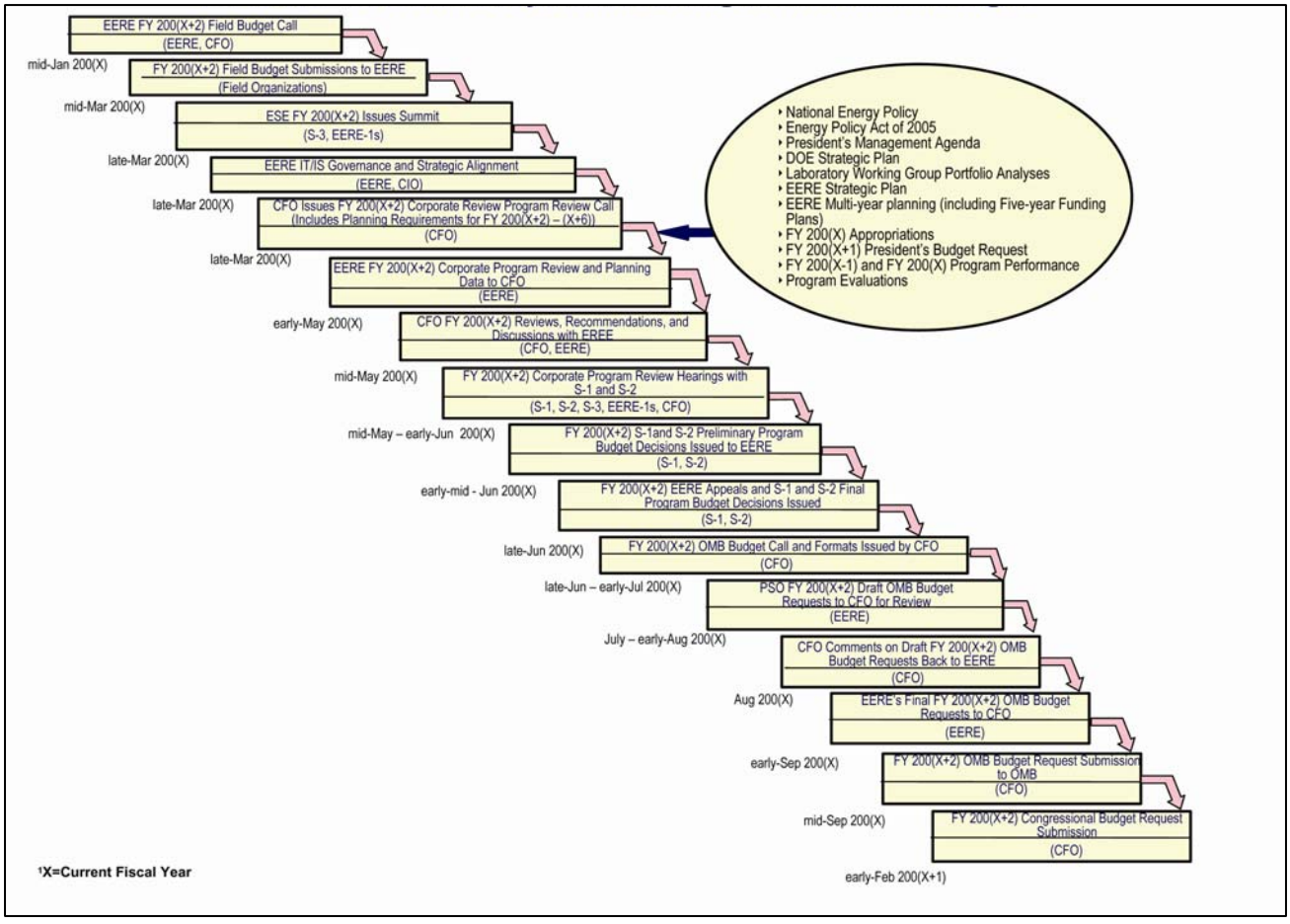


Figure 5.7-1 FY 200(X1 2) EERE Performance Budget Formulation Stages

Performance Budget Formulation Stage/ Key Players	Description	Corresponding EERE Process/Product
EERE Field Budget Call (CFO)	CFO issues call to Field organizations with programmatic guidance for preparation of their budget submissions.	• Field Budget Call is issued by the CFO • Field consults with Deputy Assistant Secretaries to identify priorities
Field Budget Submission to EERE (Field Organizations)	Field organizations prepare and submit their budget proposals to EERE. Field work proposals are transmitted to National Energy Technology Laboratory using the Electronic Proposal Management Application (ePMA).	• Field budget requests to HQ from field organizations (PMC).
ESE Issues Summit (S-3, ASEE)	The Under Secretary for ESE will chair a one-day Issues Summit with all ESE PSOs. The attendees will identify, discuss, and hopefully resolve crosscutting planning and budget issues that exist between	• Programs provide input as applicable and required
EERE IT/IS Governance and Strategic Alignment (EERE, CIO)	Assure IT budget requests are included in the DOE IT capital planning process (eCPIC, OMB schedule 53 and 300), support the EERE Strategic Plan, and are aligned with the DOE Enterprise Architecture. Assure that all EERE IT/IS investment decisions consider information systems security costs and are based on sound risk management principles.	• EERE submits IT plan to the CIO Office
CFO Issues Corporate Program Review (CPR) Call Including Planning Requirements for next five years (CFO)	CFO Issues Corporate Program Review (CPR) Call Including Planning Requirements for next five years (multi-year budget guidance).	• AS/EERE and staff hold priority ranking meetings • Programs prepare CPR Requests
EERE Corporate Program Review and Planning Data to CFO (EERE)	EERE conducts budget and staffing-level impact analyses, ensures that funding levels and performance planning commitments for field integration programs are practical and feasible, and prepares CPR and planning data for next five years for submittal to CFO.	• Draft/Final EERE CPR submissions to CFO • Briefing materials prepared
CFO Reviews, Recommendations, and Discussions with ASEE (CFO, EERE)	CFO reviews EERE's budget and planning data and develops recommendations for the CPR Hearings. CFO will discuss its recommendations and positions with EERE prior to the Hearings.	• EERE prepares Budget Briefing package based on CFO template. Includes: • Priorities • Discussion of Programs • Budget Table • Critical Milestones (linked to budget)
Corporate Program Review Hearings with S-1 and S-2 (S-1, S-2, S-3, ASEE, CFO)	CPR Hearings are held with the Secretary, Deputy Secretary, Under Secretary, CFO, and PSOs. Topics include RDIC and BPI standards to ensure that corporate level budget and staffing decisions link to past performance and the expected benefits of future work. CFO confirms that EERE's budget: • Conforms with planning decisions; • Is performance-based; • Is justified in the context of performance goals, objectives, and targets; and • Is consistent with other planning documents, such as Program Plans, Human Capital Plans, Capital Asset Plans, etc.	• EERE prepares updated Budget Briefing package based on CFO review

Table 5.7-1 SMS Performance Budget Formulation Stages

Performance Budget Formulation Stage/Key Players	Description	Corresponding EERE Process/Product
S-1 and S-2 Preliminary Program Budget Decisions Issued to EERE (S-1, S-2)	Secretary and Deputy Secretary make recommendations and issue preliminary Program Budget Decisions (PBD) to EERE.	• EERE prepares adjusted Budget Tables based on PBDs
EERE Appeals and S-1 and S-2 Final Program Budget Decisions (PBD) Issued (S-1, S-2)	Secretary and Deputy Secretary address EERE budget appeals and issue final PBDs for EERE to complete the preparation of its draft OMB budget request.	• CPR preliminary PBDs and Appeals Process
OMB Budget Call and Formats Issued by CFO (CFO)	CFO issues OMB Budget Call and formats	• ASEE and staff address funding issues • Programs prepare OMB Request
EERE Draft OMB Budget Requests to CFO for Review (EERE)	EERE prepares its OMB Budget Request.	• EERE OMB Budget Requests submitted to CFO
CFO Comments on Draft OMB Budget Requests Back to ASEE (CFO)	CFO provides EERE final comments on its draft OMB Budget Request.	• EERE incorporates CFO comments into OMB Budget Request
EERE Final OMB Budget Requests to CFO (EERE)	EERE submits its final OMB Budget Request to CFO.	• EERE Final OMB Budget Requests submitted to CFO
OMB Budget Request Submission to OMB ** (CFO)	CFO submits Department's OMB Budget Request to OMB. Programs provide testimony, answer Q&As, and appeal OMB marks as required in defense of their request and in response to the OMB Passback.	• Programs provide testimony and answer Q&As as required • OMB Passback and Appeals Process
Congressional Budget Request Submission ** (CFO,DOE)	EERE submits its Congressional Budget Request to CFO for inclusion in the Department's Congressional Budget Request. DOE submits its Congressional Budget Request to Congress through OMB. The CFO coordinates this submission. Programs provide testimony, answer Q&As, and appeal Congressional marks in defense of their request. Draft AOP prepared.	• EERE CBRs submitted to CFO • Programs provide testimony, answer Q&As, and appeal Congressional marks as required • Field prepares draft AOP based on Congressional Budget Request
** *The various activities associated with the OMB and Congressional Budget Request Submission phases are identified in Table 5.7-2 on the following page.*		

Table 5.7-1 SMS Performance Budget Formulation Stages (continued)

Performance Budget Formulation Stage/Key Players	Description
OMB Budget Request Submission to OMB Processes	
OMB Hearings on EERE Budget (OMB)	OMB conducts hearings on the EERE budget request (September – October).
OMB Passback Decisions (OMB)	OMB decisions on DOE's—and EERE's—budget request(s) are submitted along with allowances for resources and programmatic guidance and supporting rationale for the OMB decisions (November – early December).
EERE Appeals to CFO for Review (EERE, CFO)	EERE appeals the OMB Passback decisions to the CFO (several days after the Passback: November – December).
CFO Appeals Sent to OMB (CFO, OMB)	CFO submits EERE budget defense appeals to OMB (about 1 week after the Passback: late November – early December).
Final OMB Decisions Provided to DOE (OMB)	OMB considers the DOE's—and EERE's—Passback appeal and makes a final determination/decision in regards to the budget request (early December).
Call for CBR (CFO)	CFO calls for Congressional Budget Request (early – mid December).
Draft Congressional Budget to CFO (EERE, CFO)	EERE drafts its Congressional Budget request for the CFO to review (mid to late January).
Comments on CBR (CFO)	CFO provides comments on the EERE Congressional Budget request (mid to late January – about 1 week after the draft is due).
CPR Submission	
CFO Submits Final Budget to Congress (CFO)	The Congressional Budget and Impoundment Control Act of 1974 requires that the President submit the budget to Congress on the first Monday in February (early February).
Press Briefings & Congressional Staff Briefings (DOE)	DOE conducts press briefings to coincide with Congressional Staff briefings (the same day that the budget is sent to the Hill).
Prepare Congressional Testimony (EERE, S-1)	Congressional testimony is prepared for the Assistant Secretary for EERE and the Secretary of Energy (mid January).
Prepare for Budget Hearings (EERE)	Brief and prepare the Assistant Secretary for EERE and DOE Senior Management for Congressional hearings on the budget (early March).
Prepare Responses to Questions from Hearings (EERE)	Prepare responses to questions from congressional hearings on budget (early – late March).
Prepare Issue Papers, Fact Sheets, and Other Materials (EERE)	Prepare issue papers, fact sheets, appeals of appropriations marks, and other materials to support the Budget (January – July).

Table 5.7-2 OMB and Congressional Budget Request Submission Activities

References

The following reference includes a high-level Glossary of Budget Terms:

Office of Management and Budget. (2007) Analytical Perspectives, Budget of the United States Government, Fiscal Year 2008. *The Budget System and Concepts*, Fiscal Year 2008. United States Federal Government, USA. Retrieved from: http://www.whitehouse.gov/omb/budget/fy2008/pdf/concepts.pdf

The following reference includes a detailed glossary of terms provided by GAO:

General Accountability Office (2005). GAO-05-734SP: *A Glossary of Terms Used in the Federal Budget Process*. United States Federal Government, USA. Retrieved from: http://www.gao.gov/new.items/d05734sp.pdf

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