

U. S. Department of EnergyOffice of Chief Financial Officer Office of Engineering and Construction Management

Report to the Committees on Appropriations of the U.S. Congress

The U. S. Department of Energy Implementation Procedures For the Use of External Independent Reviews and Project Engineering and Design Funds

December 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	1
BACKGROUND	1
PART I - OVERVIEW OF INDEPENDENT REVIEWS	3
PROCEDURES FOR DEVELOPING AN EIR	6
PART II - OVERVIEW OF PROJECT ENGINEERING AND DESIGN FUNDS	9
SIMPLIFIED PROCESS FOR A DESIGN-PROCURE-BUILD OR A DESIGN-BUILD PROJECT	12
REFERENCES	15

EXECUTIVE SUMMARY

The Fiscal Year 2001 Energy and Water Development Appropriations House Report directs the Department of Energy (DOE) to submit a report to Congress that identifies and documents the process it will use in determining which projects will require an External Independent Review (EIR) and at which phase of a project that review should be conducted. The Department also is directed to identify and report on how Project Engineering and Design (PED) funding will be incorporated into the development of its projects.

The Department instituted DOE Order 413.3, "Program and Project Management for the Acquisition of Capital Assets," on October 13, 2000. The Order provides project management direction for the acquisition of capital assets for DOE, including the National Nuclear Security Administration (NNSA). The requirements for EIRs and PED funds are included in the Order.

Types of Projects: The Department's projects fall into two basic categories:

<u>Major System (MS) Projects</u>: Any project or system of projects with a Total Project Cost (TPC) of \$400M or greater, or any Other Project so designated by the Secretary or Deputy Secretary, due to its size, significance, level of complexity, or importance to national security.

Other Projects: A project with a TPC less than \$400M, not designated MS, including line item projects, general plant projects, capital equipment, and information technology, whether funded by capital or operating funds. These projects include construction and environmental projects. Although most environmental projects do not involve extensive construction, their importance, complexity, and size require sound management under the same principles and guidelines as DOE's construction projects.

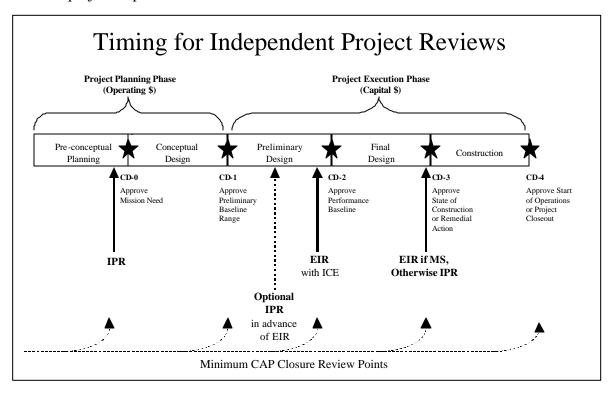
The Department, through DOE Order 413.3, has defined a hierarchy (linked to project size and complexity) of Acquisition Executives (AE) with Critical Decision (CD) authority. Project reviews shall be conducted by the AE prior to Critical Decision (CD) points in a project's life cycle. A CD is a formal determination, at a specific point in a project phase, which allows the project to proceed to the next phase and to commit resources. CDs for the acquisition of capital asset projects include the following:

- CD-0, Approve Mission Need
- CD-1, Approve Preliminary Baseline Range (Based on Conceptual Design Report)
- CD-2, Approve Performance Baseline (Based on Preliminary Design)
- CD-3, Approve Start of Construction; and
- CD-4, Approve Start of Operations or Project closeout.

Mandatory independent reviews shall be conducted on all projects over \$5M

Performance Baseline EIRs, including Independent Cost Estimates (ICE) shall be performed prior to CD-2. This detailed review of the entire project re-validates mission need, validates the proposed technical, cost, and schedule baseline, and assesses overall status of the project management and control system. The program office may request a Performance Baseline Review be performed earlier than typically scheduled when the baseline has been established and the project will benefit from an accelerated schedule, such as for a design-build project.

Execution Readiness EIRs shall be performed on all Major Systems projects prior to Start of Construction, CD-3. An Execution Readiness Independent Readiness Review (IPR) must be conducted by the respective Acquisition Executive for Other Projects over \$5M, prior to Start of Construction, CD-3. Both the Execution Readiness EIRs and IPRs are general reviews of a project that may range from an abridged review of specific areas to a comprehensive review of the entire project. At a minimum, this review must verify readiness of the project to proceed into construction or remedial action.



Project Engineering and Design funds are capital "design only" funds for preliminary and final designs. PED funds are not used for construction, long-lead procurements or major items of equipment. The objectives for the use of PED funds are to:

- Improve the probability of an accurate Performance Baseline for the project.
- Establish the Performance Baseline after the Preliminary Design is completed.

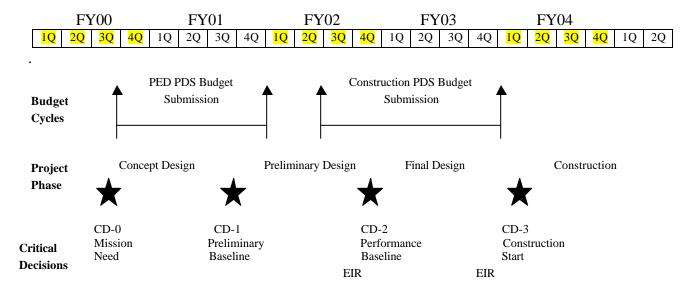
• Improve the DOE's Planning, Programming & Budgeting process for the acquisition of capital assets.

Beginning with Fiscal Year 2002, all Program Offices will be required to request PED funds to initiate new design projects from that date forward. PED funds will be used for projects that have an anticipated construction start in Fiscal Year 2004 or later.

The Critical Decision process plays an important role in the PED process, as it does in the EIR process.

- All projects must have CD-1 approval before starting Preliminary Design.
- A Preliminary Project Data Sheet (PDS) will be prepared during Preliminary Design phase and used as a basis for field budget submission.
- CD-2 Performance Baselines must be approved prior to final budget submission for a new start construction project.
- CD-3, Start of Construction, must be approved prior to release of construction funds by the Program Secretarial Officer (PSO)

PED Process for Traditional Projects



PED processes for other methods of project planning and design are described in the report.

The report was prepared by the Office of Engineering and Construction Management (OECM).

INTRODUCTION

The FY 2001 Energy and Water Development Appropriations House Report directs the Department of Energy (DOE) to submit a report to Congress that identifies and documents the process it will use in determining which of its projects will require an External Independent Review (EIR), and at which phase of a project that review should be conducted. The Department also is directed to identify and report on how Project Engineering and Design (PED) funding will be incorporated into the development of its projects. This report is submitted in compliance with those directions.

BACKGROUND

The FY 1998 Energy and Water Development Conference Report directed DOE to contract with an impartial independent organization to review and assess its overall management structure and processes for identifying, managing, designing, and constructing facilities. Subsequently, DOE contracted with the National Research Council (NRC) to review the policies, procedures, and practices used to identify, plan, design, and manage its projects.

External Independent Reviews: Following its study, the NRC developed and published a report that included extensive recommendations for improving DOE's oversight and management of its projects. A key element within that report recommended DOE's use of external independent reviews (EIRs). EIRs use outside experts; unbiased, but knowledgeable of project technologies and construction methods, and familiar with the type of project being constructed. The NRC outlined recommendations for: project selection, review content, and the capabilities of independent reviewers; formalization of procedures for continuing independent, non-advocate reviews; and implementation of the findings and recommendations resulting from those reviews. The report also recommended development of comprehensive guidelines for the pre-conceptual and conceptual phases of a project, where opportunities for cost and schedule improvement The NRC stated, and DOE concurs, that rigorous external are at their highest. independent reviews to establish valid project definition, including cost, schedule, and scope of work baselines in the pre-conceptual and conceptual phases, are vital to successful project execution and cost control.

Project Engineering and Design Funds: The NRC recommended that a higher percentage of a project's design needed to be completed prior to establishing that project's baselines, and prior to DOE seeking authorization and appropriations from Congress. The NRC left the plan for developing the required design content, at the point of adequate definition, entirely up to DOE. As a result, DOE developed a project engineering and design (PED) process and requested advance funding from Congress to

assist programs in advancing their project designs to a 30-35% level prior to seeking funding. Congress made available initial PED funds in the FY 2001 appropriation.

The EIR and PED procedures, developed and described in this report, conform with NRC recommendations. The Department is well along on its design and implementation of procedures for the planning, programming, budgeting and execution of capital asset projects, also described in this report. This work is being directed by the Office of Engineering and Construction Management (OECM), which DOE established in response to its self-studies and to the NRC recommendations. These policies and procedures apply to projects at the Department of Energy. Also, they have been adopted by, and apply to projects at, the National Nuclear Security Administration (NNSA). Each DOE and NNSA Program Secretarial Office (PSO) is working with OECM to create internal procedures for developing priorities, budgets and management of the PED fund accounts.

Types of Projects: The Department's projects fall into two basic categories:

<u>Major System (MS) Projects</u>: Any project or system of projects with a Total Project Cost (TPC) of \$400M or greater, or any Other Project so designated by the Secretary or Deputy Secretary, due to its size, significance, level of complexity, or importance to national security. A project also may be classified MS in response to recommendations from the appropriate PSO or head of a Departmental office.

As Secretarial Acquisition Executive (SAE), the Deputy Secretary of Energy as senior manager responsible and accountable for all project acquisitions, may delegate Acquisition Executive (AE) authority for Other Projects to the PSOs.

The PSOs, including the Deputy Administrators for NNSA serve as the AE for Other Projects that are not designated as MS projects.

Other Projects: A project with a TPC less than \$400M, not designated MS, including line item projects, general plant projects, capital equipment, and information technology, whether funded by capital or operating funds. These projects include construction and environmental projects. Although most environmental projects do not involve extensive construction, their importance, complexity, and size require sound management under the same principles and guidelines as DOE's construction projects.

DOE Order 413.3 Program and Project management for the Acquisition of Capital Assets, October 13, 2000, establishes mandatory procedures, definitions and management processes for DOE, including NNSA. The requirement for EIRs and PED funds are included in the Order.

PART I

OVERVIEW OF INDEPENDENT REVIEWS

The major purposes for conducting independent project reviews include obtaining unbiased, expert, and knowledgeable assessments: to ensure that project planning and execution are on track; to surface issues; and to validate that the project will satisfy mission requirements. These reviews provide pertinent information for management to use in making required decisions, and in demonstrating and confirming a project's accomplishments at various stages. For example, review reports provide valuable information that is useful to the Acquisition Executive (AE) and the Energy Systems Acquisition Advisory Board (ESAAB) for their project assessments.

Objectives: The objectives for conducting independent reviews at various stages of a project are to:

- Support the Critical Decision Process
- Identification and resolution of issues at the earliest time, lowest level; and lowest cost
- Validate the Performance Baseline
- Ensure readiness to proceed to a subsequent project phase;
- Confirm functional integration of project products.

Critical Decision Points: Project reviews shall be conducted prior to Critical Decision (CD) points in a project's life cycle. A CD is a formal determination, at a specific point in a project phase, which allows the project to proceed to the next phase and to commit resources. CDs for capital asset acquisitions include the following:

- CD-0, Approve Mission Need
- CD-1, Approve Preliminary Baseline Range (Based on Conceptual Design Report)
- CD-2, Approve Performance Baseline (Based on Preliminary Design)
- CD-3, Approve Start of Construction; and
- CD-4, Approve Start of Operations or Project closeout.

Types and Timing of Reviews: The NRC stressed the necessity and benefits derived from internal independent reviews, independent cost estimates, external independent reviews, as well as other types of studies of the Department's projects.

Independent Project Reviews (IPRs): Non-proponent reviewers <u>inside</u> the Department conduct IPRs. To ensure objectivity, IPR team members are <u>not</u> drawn from the responsible program office, related contractors from the project

office, or from a related funding program. Reviews may use laboratory, contractor, university, or other expertise from organizations not directly funded by or related to the program/project office being reviewed.

The Deputy Secretary as the Secretarial Acquisition Executive (SAE), the PSO, the operations/field office manager, program managers, or Federal project managers, may authorize or conduct IPRs as required. The PSO or operations/field office manager may request IPRs for any project, including MS, as part of the oversight process. Regardless of the level initiating an IPR, the PSO or operations/field office manager notifies OECM of its intent to conduct a review. OECM is an invited observer for all planned reviews. OECM coordinates its extent of participation on a case-by-case basis with the appropriate organization.

Independent Cost Estimates (ICEs): ICEs shall be used primarily to verify project cost and schedule estimates and to support the CD-2 process in establishing project performance baselines. ICEs are part of the Performance Baseline EIR, although an ICE can be combined with any EIR or IPR for efficiency. ICEs may be requested at other times and for other reasons. OECM serves as DOE's agent, working through appropriate contracting officers, to establish contracts for ICEs. These estimates are documented in formal reports submitted by OECM to the SAE/AE. The Federal project manager is responsible to reconcile each ICE with the estimate derived by the program office. ICEs shall be conducted and reported in a manner consistent with EIRs.

External Independent Reviews (EIRs): Reviewers <u>outside</u> the Department conduct EIRs. OECM selects an appropriate outside business or consulting firm to contract with for such reviews, excluding the Department's M&O/M&I contractors. Selection of reviewers, contract management, contact with the contracting officer, and dialogue with the EIR contractor on contract issues are in the sole purview of OECM. All EIRs are managed by OECM and will be documented in the electronic data repository, currently under development. The following review components are planned and coordinated with the appropriate line manager:

- Specific review scope and objectives of the EIR
- Organizations/personnel to be reviewed
- Identities of contracted reviewing organization and review team members
- Selection of an appropriate review team
- Risk areas to be reviewed at greater levels of detail

The PSOs provide coordination for the EIR contractor on site, resolve issues of schedule and access while on site, gather and provide requested and proffered information to the reviewer, and respond to the reviewer on errors of fact or needed clarification. The support office, however, does not provide direction to the reviewer as to the content of the reviewer's report. Line management,

including the Deputy Secretary, PSO, or a program or project organization within the PSO, may request an EIR. EIRs also may be initiated in response to an external requirement. However, reviews, studies, or investigations conducted by the General Accounting Office or DOE's Office of the Inspector General are not considered EIRs for DOE purposes.

A tailored approach shall be used to determine a review's level-of-detail. Simpler areas with low risk of project impact require less scrutiny than areas that are highrisk, potentially costly, or where problems seem to be developing. External technical reviews are used to determine if complex issues exist, and how to resolve those. For example, if a project design is new, untried, and technically unproven, with no existing standards to judge against, then a review by appropriately trained and knowledgeable experts is in order. Technical reviews also include reviews of the contractor's project control system.

Mandatory independent reviews shall be conducted on all projects over \$5M

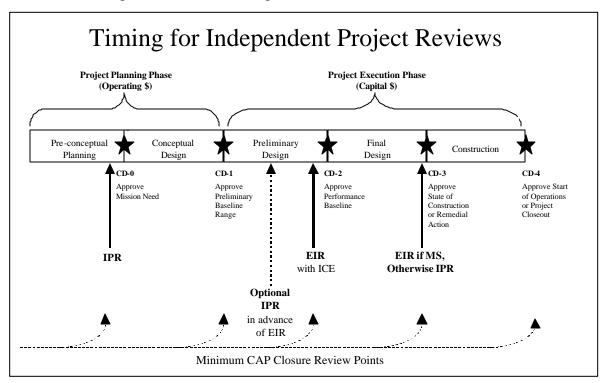
Mission Validation IPRs shall be performed prior to CD-0, Approve Mission Need. It is a limited review to validate the mission need and funding request.

Performance Baseline EIRs, including ICEs shall be performed prior to CD-2. This detailed review of the entire project re-validates mission need, validates the proposed technical, cost, and schedule baseline, and assesses overall status of the project management and control system. The program office may request a Performance Baseline Review be performed earlier than typically scheduled when the baseline has been established and the project will benefit from an accelerated schedule, such as for a design-build project.

Execution Readiness EIRs shall be performed on all MS projects prior to Start of Construction, CD-3. An Execution Readiness IPR must be performed by the appropriate AE for Other Projects over \$5M, prior to Start of Construction, CD-3. Both the Execution Readiness EIRs and IPRs are general reviews of a project that may range from an abridged review of specific areas to a comprehensive review of the entire project. At a minimum, this review must verify readiness of the project to proceed into construction or remedial action.

Other Project Reviews: Opportunities exist throughout a project's life where reviews can enhance project execution. Examples include design reviews, environmental assessments, safety analysis reviews, and operational readiness reviews. The non-advocate experts who conduct these reviews are able to bring value-added, credible academic and industry expertise and resources to a project, significantly broadening the project manager's viewpoint. Reviews help determine if a project will fully perform its intended functions, meet its established requirements, and if it is correctly defined. Reviews also are used to determine a project's current condition. Reviews are integral to the project, should be planned in advance, and used to complement line organization responsibilities.

Ad Hoc (**For Cause**) **Reviews:** A PSO, or a program or project manager, with concurrence from the program office, may request Ad Hoc Reviews. Review objectives and team participants will be developed by the requesting program office to meet the specific needs of the requestor.



PROCEDURES FOR DEVELOPING AN EIR

For each EIR, OECM conducts a review planning meeting to assemble background information for review team members, and to identify key field and headquarters project points of contact. They map out the review's proposed scope with program managers and field project managers. They identify subject matter expertise required for the review committee. OECM will identify and arrange for appropriate personnel to staff each review team, in consultation with the requesting organization. The resulting Review Plan forms the basis for each project review and guides the team. Each Review Plan is structured similarly, but its content is specifically tailored to the individual project.

Review Team: OECM is DOE's agent for the design, contracting, management of external independent reviews, and monitoring progress on the remedial work resulting from the review reports.

Selection of the Contractor: OECM will select, award and fund a contract to a contractor to conduct the upcoming review. The contract may include multiple reviews, but the contractor will select the individual team members on a review-by-review basis.

Report: The contractor team lead will consolidate findings and recommendations into a final report. The team lead has authority to edit individual findings and recommendations for readability, but will not change the report's meaning or context. The team lead will issue the report to OECM, who will subsequently provide it to the program office.

Post-Review Requirements: A project review is of limited use to DOE, or its project managers, unless it is studied, understood, and its recommendations are evaluated, acted upon, and completed.

Corrective Action Plan: The program team lead must develop an initial corrective action plan (CAP) responding to the review's recommendations. The CAP should specifically reference relevant review comments. The CAP then is completed by the field, which supplies a discussion and establishes a schedule as to how issues identified in the review will be addressed and resolved. The projected resolution date will trigger reminders from OECM's document handling system, under development, when updated CAP information is expected. The completed CAP is transmitted electronically by the field to the PSO, who includes it in the PSO Memorandum to OECM. The project completed CAP must:

- List the "recommendation" for each "finding" from the review
- Provide a discussion of the required action
- Propose start and end dates for the corrective action
- Identify the office to which the corrective action has been assigned
- Include an open or closed status remark

Program Secretarial Officer Memorandum: The PSO is responsible for conducting a factual accuracy analysis of all findings and recommendations identified

in the review. In this analysis, the PSO provides OECM a written report stating concurrence or rejection of the review. This memorandum will be filed with OECM two weeks after completion of the review, or one week prior to the ESAAB review, whichever is sooner.

Open Items: With the memorandum, the PSO provides an outline of CAP completion and resolution dates. The PSO submits the CAP to OECM in electronic form within two weeks of finalization of the review's report, or one week prior to the project's ESAAB review, whichever is sooner. Open CAP actions can only be closed by OECM.

Updates: The PSO updates the CAP as issues are addressed by the project and submits an electronic copy to OECM and the project management support office. OECM will track issues in its automated central tracking system, which is under development. The support office shall have access to OECM's automated central tracking system.

Corrective Action Plan Closure Review: The CAP closure review, conducted by the review team lead, ensures that issues raised during prior reviews have been adequately resolved before the project can move to the next stage of implementation. The CAP review also identifies those issues that may not satisfy applicable Federal regulations, DOE Orders, or agreements with regulatory agencies.

PART II

OVERVIEW OF PROJECT ENGINEERING AND DESIGN FUNDS

Objectives: Project Engineering and Design (PED) funds are capital "design only" funds for preliminary and final designs, formerly called Title I and Title II designs. PED funds are not to be used for construction, long-lead procurements or major items of equipment. PED fund requirements are developed from historical data or parametric estimates. The objectives for the use of PED funds are to:

- Improve the probability of an accurate Performance Baseline for the project.
- Establish the Performance Baseline after the Preliminary Design is completed.
- Improve the DOE's Planning, Programming & Budgeting process for the acquisition of capital assets.

Key Planning Milestones: The Critical Decision process plays an important role in the PED process, as it does in the EIR process.

Mission Need: CD-0, determines if the capital asset is required and the date by which it should be in operation. That requirement date, together with the project's risk assessment, projected construction uncertainties, equipment lead time, funding constraints, and other related issues, will lead DOE in establishing planning, programming, and budgeting for PED and construction funds. Administration and DOE budget priorities may affect prioritization of a project's PED and construction funding profiles. The performance baseline's validation and CD-2 approval must receive DOE approval in time for the construction project data sheet (PDS) budget submission to OMB.

Account Management: The annual CFO Budget Formulation Handbook will establish the PED budget formulation and submission requirements. Requests for PED funds to initiate new design projects throughout all program elements within DOE will start in the FY 2002 budget submission.

- PED budget requests will include projects that will achieve CD-0 before the PED budget submission to OMB.
- PED budget requests will include funds necessary to complete project Preliminary and Final Designs.
- Budget requests subsequent to the FY 2002 request will include PED funds to initiate new design projects and to continue or complete the design for a project initiated as a PED project.

- The budget amount requested will depend on projected funding requirements, length of design period and budget guidance.
- The PED Project Data Sheet (PDS) will identify anticipated projects for PED funding.
- PED funds for Preliminary and Final design will be released by the PSO upon CD-1 approval by AE.
- After release of PED funds by the PSO, any movement of funds between design projects requires PSO approval and notification of OECM. All changes must be reported in subsequent PED requests.
- New projects not previously identified may be initiated after CD-1, if funds are available in the PED fund and the PSO approves. Subsequent budget requests must be adjusted to reflect the transfer of funds and the initiation of a new design project. The PSO must notify Congress (via the CFO) before initiating the Preliminary Design for the new project.

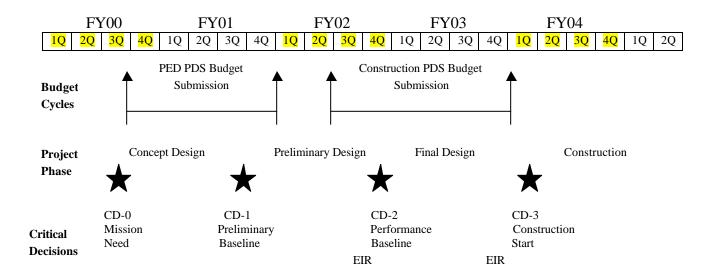
Transition to PED: Beginning with FY 2002, all PSOs will be required to request PED funds to initiate new design projects from that date forward. PED funds will be used for projects that have an anticipated construction start in FY 2004 or later.

- The Offices of Defense Programs and Environmental Management initiated use of PED funds on a limited basis in FY 2001.
- No procedural changes are required for projects currently funded for design and construction prior to FY 2002.

PED Procedures for a Design-Procure-Build Process: The term Design-Procure-Build refers to the traditional delivery method where design and construction are sequential and are contracted for separately with two contracts and two contractors. Requests for Proposals (RFP) or Invitation for Bids (IFB) may be used as the procurement method for the construction contract.

- All projects must have CD-1 approval before starting Preliminary Design.
- A Preliminary Project Data Sheet (PDS) will be prepared during Preliminary Design phase and used as a basis for field budget submission.
- CD-2 Performance Baselines must be approved prior to final budget submission for a new start construction project.
- CD-3, Start of Construction, must be approved prior to release of construction funds by the PSO.

Traditional Design-Procure-Build



Example -- PED FY 2002 and Construction FY 2004:

- CD-1 approved by the AE in 4th Quarter FY 2001
- PED funds available for design in 1st Quarter FY 2002
- Preliminary Design complete in 3rd Quarter FY02
- EIR completed in 4th Quarter FY 2002
- CD-2 and Performance Baseline approved by AE in 4th Quarter FY 2002
- PDS for construction funds submitted in FY 2004 budget request
- Final Design completed in 4th Quarter FY 2003
- CD-3 approved by the AE in 4th Quarter FY 2003
- Advertise construction contract 4th Quarter FY 2003
- Award construction contract in 1st Quarter FY 2004 or when funds available.

Example -- PED start during FY 2002 and Construction in FY 2004.

- PED funds requested for FY 2002
- CD-1 approved by AE in 2nd Quarter FY 2002
- Preliminary Design starts in 3rd Quarter FY 2002
- Preliminary Design completed, EIR & CD-2 approved by AE in 1st Quarter FY 2003

- PDS for FY04 construction start submitted in October 2002
- Final Design complete, CD-3 approved by AE in late FY 2003 or FY 2004
- Advertise contract

Simplified Process For A Design-Procure-Build or Design-Build Project

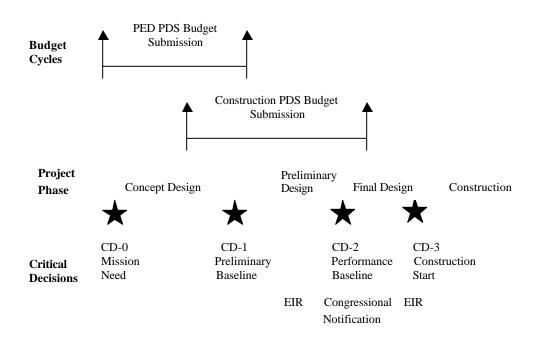
Some types of projects can be engineered, designed and ready for construction contract award within one fiscal year, or in the following fiscal year. These are typically conventional construction projects such as infrastructure rehabilitation projects. Requiring programming for construction funds in this class of projects to follow the PED process described above, could create a delay of up to 12 months between completion of design and receipt of construction funds. To avoid such a wasteful and unnecessary delay, the following process enables submission of a construction budget request in time to start construction after completion of the Final Design and CD-3 approval. The Acquisition Strategy and Plan must indicate the project's acquisition method as the traditional design-procure-build process or as a Design-Build process. DOE may utilize either approach in situations where mission need, cost savings, and other efficiency factors indicate this Simplified Process is warranted.

Design-Build means combining design and construction within a single contract with one contractor. Design-Build contracts are typically firm-fixed price contracts. Design-Build projects should not involve undefined complex systems integration or undefined NEPA requirements that might delay the project. The project scope must be fully defined, functionally and technically, with performance specifications.

- Mission Need and Acquisition Strategy developed at CD-0 will reflect the strategy to complete the design and have the project ready for construction in the same fiscal year or the following fiscal year.
- PED PDS will indicate that a Construction PDS will be submitted with a Preliminary Baseline and will indicate the fiscal year the construction is anticipated to commence.
- Construction PDS may be submitted in the same fiscal year as the PED PDS for the project if the AE confirms the project will be ready for construction in the same fiscal year.
- An EIR is performed during the design to confirm the project can be executed
 within the Preliminary Performance Baseline submitted in the Construction
 PDS. The PSO will notify Congress (via the CFO) to report the approved
 Performance Baseline.
- The PSO will release the construction funds after CD-3 approval by the Acquisition Executive.

Simplified Process

FY00	FY01	FY02	FY03	FY04	
1Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q 1	Q 2Q 3Q 4Q	1Q 2Q 3Q 4Q	1Q 2Q



Example – PED in FY 2002 and Construction Start in FY 2003

- CD-1 approved by AE by 4th Quarter FY 2001.
- PDS for FY 2003 construction start submitted in October 2001 based on the Preliminary Performance Baseline approved by the AE. The PSO will perform an Independent Project Review (IPR) to validate the Preliminary Performance Baseline.
- Start Preliminary Design in 1st Quarter FY 2002
- Preliminary Design completed, EIR and CD-2 approved by the AE in the 2nd Quarter FY 2002 (March 2002). PSO must notify Congress (via the CFO) to report the approved Performance Baseline.
- Final Design completed and CD-3 approved by the AE in late FY 2002 or early FY 2003.
- Advertise contract
- Award contract in FY 2003.

Example -- Design-Build PED in FY 2002 & Construction in FY 2003

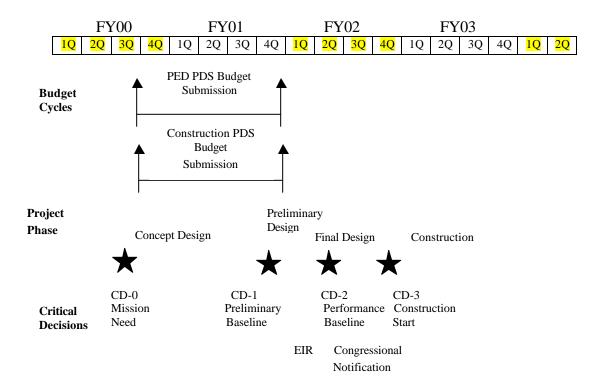
- CD-0 decision to proceed as a Design-Build acquisition strategy
- FY 2002 PED funds request identifies the acquisition method as a Design-Build project with construction funds required in FY 2003.
- CD-1 approved by the AE in August 2001. Preliminary Performance Baseline developed and validated by the PSO using an IPR.
- PED funds available for Preliminary Design and Design-Build RFP package in 1st Quarter FY 2002
- PDS for FY 2003 construction start submitted based on the Preliminary Performance Baseline approved at CD-1 by the AE.
- Start Preliminary Design in 1st Quarter FY 2002
- Complete Preliminary Design and Design-Build RFP package in 3rd Quarter FY 2002
- Conduct EIR in 4th Quarter FY 2002
- Advertise Design-Build RFP in 4th Quarter FY 2002.
- CD-2 approved by AE in 4th Quarter FY 2002
- Award Design-Build contract in 1st Quarter FY 2003. PSO must notify Congress (via the CFO) within 30 days after the award of the contract to confirm the Performance Baseline.
- The Design-Build contractor completes the design and initiates construction during FY 2003.

If the approved Acquisition Strategy and Plan indicates the project can be designed and ready for construction in the same fiscal year, the Construction PDS will be submitted at the same time as the PED PDS. The PSO will notify Congress (via the CFO) before awarding the construction contract to verify the Performance Baseline.

The procedures same as described in example, except FY 2002 Construction PDS is submitted in Oct 2000 or 1st Qtr FY 2000.

Simplified Process

PED and Construction Funds Requested in the Same Fiscal Year



REFERENCES

DOE Policy 413.1, Program and Project Management Policy for the Planning, Programming, Budgeting, and Acquisition of Capital Assets, June 10, 2000.

DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets, October 13, 2000.

Draft DOE Program and Project Management Volume I (Manual) and II (Practices), October 2000.

DOE Budget Formulation Handbook