

Management System: Project Management

Subject Area: Project Delivery

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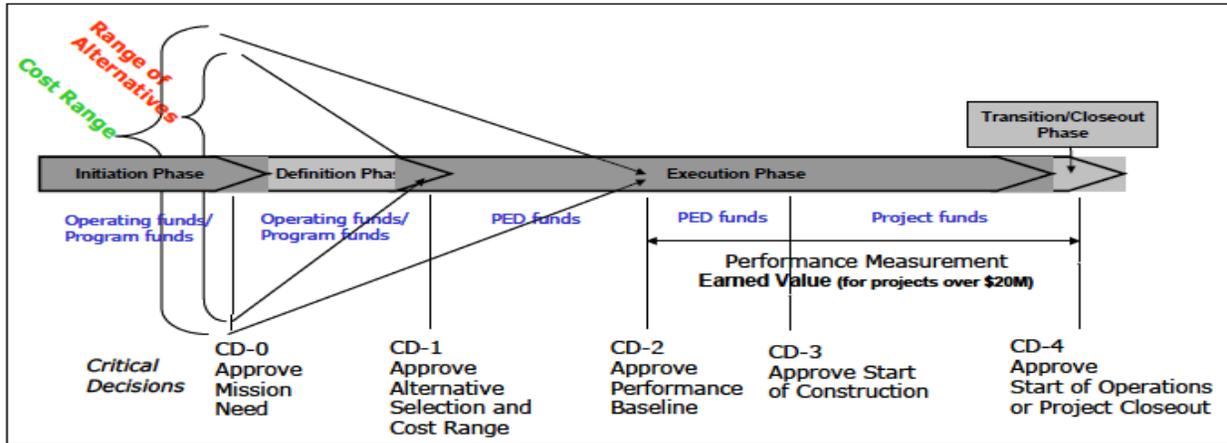
CBC MS Revision: 2 (GENERAL REVISION)

1.0 Introduction

This subject area provides U.S. Department of Energy (DOE), Office of Environmental Management (EM), Consolidated Business Center (EMCBC) procedures and tools for managing the delivery of a project scope, cost and schedule, utilizing project management principles. The application of project management is required for all capital asset acquisitions with a total project cost (TPC) that exceeds \$50 million. Projects that are less than \$50 million should follow this subject area in a tailored approach.

It is important to recognize that a good portion of the Project Management function (e.g., risk management) is carried out continuously over the whole life cycle or in multiple phases and these topics should be addressed in general terms and not strictly associated with a specific phase. EM projects are complex endeavors; in some aspects, EM projects are no different than other large complex construction projects -- where the same tools, methods and techniques are applied to manage them. The difference is that the one-of-a-kind nature of many EM projects, and the cost and schedule risk associated with such projects, requires even more emphasis on the application of appropriate project management tools that allow for the examination and acceptance of “high value” early project innovation and “low value” late project innovation as a means of ensuring the delivery of projects within established cost and schedule baselines. It is anticipated that this subject area will provide the Federal Project Director (FPD) and Integrated Project Team (IPT) members with helpful instructions and examples to start and complete the various projects within the agreed upon baselines that carry out EM's mission.

As shown in the graphic on the following page, all DOE capital assets projects will be regularly reviewed throughout their lifetime. There will be team reviews for critical decision events and peer reviews, as well as continuous monitoring of progress using various project reports and Earned Value Management System (EVMS) reports.



Project Management Phases

This subject area and any subsidiary procedures identified in the following section can also be utilized for the management of EM-funded operations activities at the Small Sites. The EMCBC Director serves as line manager for all Small Sites; as such, EMCBC personnel are expected to perform oversight of work performed at those sites. In addition, the EMCBC Office of Cost Estimating and Project Management Support (OCE&PMS) serves as the local Project Management Support Office (PMSO) for all Small Sites, including those sites with capital asset projects with a TPC under \$100 million (for which the EMCBC Director also serves as the Acquisition Executive [AE]).

Key management responsibilities are identified in DOE Order 413.3B (Program and Project Management for the Acquisition of Capital Assets), Appendix B; the EM Policy & Protocol for Operations Activities; and in the EM Enterprise Requirements System (EMERS), Project Management Functional Area Description (FAD), subsidiary Subject Areas and associated procedures.

2.0 Contents

Procedures	Procedure Content
1. Managing the Project Initiation Phase	<ul style="list-style-type: none"> • Establish the initial cost range. • Identify Safety-in-Design requirements. • Prepare a Mission Need Statement (MNS). • Request cost reviews, as required. • Prepare and submit the Critical Decision-0 (CD-0, Approve Mission Need) package and obtain approval. • Initiate Project Assessment Reporting System (PARS) status reporting and Quarterly Project Reviews (QPR). • Prepare Project Data Sheets and request design

Procedures	Procedure Content
	<p>funds.</p> <ul style="list-style-type: none"> • Commence preparation for the Project Definition Phase.
2. Managing the Project Definition Phase	<ul style="list-style-type: none"> • Continue to submit monthly reports in PARS and the EM Integrated Planning, Accountability and Budgeting System (IPABS) and PARS, as needed. • Continue QPRs. • Prepare Tailoring Strategy (as needed) • Appoint the Federal Project Director (FPD) and establish the Integrated Project Team (IPT). • FPD and IPT prepare the CD-1 (Approve Alternative Selection and Cost Range) prerequisites. • FPD arrange for independent review of Conceptual Design Report. • Develop Acquisition Strategy. • Develop Preliminary Project Execution Plan (PEP). • Prepare and submit CD-1 package and obtain approval. • Begin developing the preliminary design.
3. Managing the Project Execution Phase	<ul style="list-style-type: none"> • Update membership of the IPT. • Initiate and complete Preliminary Design. • Initiate and complete Final Design. • Establish the Performance Baseline (PB) in compliance with the EM Corporate Work Breakdown Structure. • Prepare hazard analysis documentation (e.g., Hazard Analysis Report), as appropriate. • Finalize the Environmental and Permitting Documentation. • Perform re-verification of the Quality Assurance (QA) Program. • Finalize the PEP. • Finalize the Federal and Contractor Risk Management Plans. • Implement the Value Management/Engineering Processes. • Implement the Configuration Management

Procedures	Procedure Content
	<p>Process.</p> <ul style="list-style-type: none"> • Use and validate an Earned Value Management System (EVMS). • Update the Preliminary Security Vulnerability Assessment Report. • Prepare Construction Project Safety and Health Plan. • Submit Funding Request. • Perform Preliminary Design Review. • Perform Final Design Review. • Perform Baseline Validation and Execution Readiness Review. • Conduct Internal Project Review (IPR). • Prepare and submit CD-2/3 (Approve Performance Baseline/Start of Construction) package and obtain approval.
4. Managing the Project Transition/Closeout Phase	<ul style="list-style-type: none"> • Prepare Permitting documentation, as required. • Finalize hazard analysis document, as appropriate. • Prepare Checkout, Testing, and Commissioning Plan, if required. • Prepare a Project Transition to Operations Plan, if required. • Complete any project-required operational documentation. • Perform Readiness Assessment or Operational Readiness Review, as appropriate. • Verify attainment of Key Performance Parameters (KPP) or Project Completion Criteria. • Prepare and submit CD-4 (Approve Start of Operations or Project Completion) package and obtain approval. • Prepare Lessons Learned Report. • Prepare Initial Project Closeout Report. • Prepare Final Project Closeout Report.
5. Risk Management	<ul style="list-style-type: none"> • Prepare the initial Risk Management Plan. • Populate the Risk Register. • Divide risks between Contractor- and DOE-held. • Perform Crystal Ball®, or similar, analysis to

Procedures	Procedure Content
	<p>estimate the necessary contingency.</p> <ul style="list-style-type: none"> • Prepare Risk Mitigation Plans, as necessary. • Regularly review the risk events, and retire them as appropriate.
6. Earned Value Management System (EVMS) Certification, Reporting and Surveillance Requirements	<ul style="list-style-type: none"> • Regularly review Contractor EVMS reports. • Perform certification and surveillance of Contractor EVMS Program for projects with a total project cost (TPC) between \$50 and \$100 million.
7. Fiscal Year Work Plan (FYWP)	<ul style="list-style-type: none"> • Prepare and submit draft annual FYWP consistent with the Contractor Performance Baseline (CPB), the actual funding available, and pertinent EM Program direction. • EMCBC and EM Mission Unit review and comment on draft FYWP. • Site Director and/or FPD endorse, and EMCBC Director approves final FYWP.
8. Essential Steps to Site Transition	<ul style="list-style-type: none"> • Develop Site Transition Plan, or equivalent document, in accordance with applicable terms and conditions (T&C) agreement between EM and the Office of Legacy Management (for closure sites) or the Landlord Program Secretarial Office (for ongoing mission sites). • Request adequate funding for long term surveillance and maintenance (LTS&M) requirements, post-completion of EM legacy cleanup. • Perform site transition readiness review/assessment, per protocol dictated by EM/LM or EM and the Landlord PSO.

3.0 Related Information

3.1 Requirements

- DOE O 413.3B (Program and Project Management for the Acquisition of Capital Asset Projects)
- Policy and Protocol for Office of Environmental Management Operations Activities (EM-2 memorandum dated March 15, 2012)

3.2 References

- DOE G 413.3-5A (Performance Baseline Guide)
- DOE G 413.3-7A (Risk Management Guide)
- DOE G 413.3-9 (Project Review Guide for Capital Asset Projects)
- DOE G 413.3-10A (Earned Value Management System)
- DOE G 413.3-12 (Project Definition Rating Index [PDRI] Guide for Traditional Nuclear and Non-Nuclear Construction Projects)
- DOE G 413.3-20 (Change Control Management Guide)

3.3 Other Documents

- EMCBC Critical Decision and Change Control Management Subject Area and subsidiary Procedures
- EMCBC Project Reporting and Monitoring Subject Area and subsidiary Procedures
- EMERS Project Management Functional Area Description (FAD), subsidiary Subject Areas and associated Procedures

4.0 Definitions

See Section 3.3 above (EMERS Project Management FAD, Section 8.0 [Definitions]).

EMCBC RECORD OF REVISION

DOCUMENT TITLE: Subject Area Description: Project Delivery

If there are changes to the controlled document, the revision number increases by one. Indicate changes by one of the following:

- I Placing a vertical black line in the margin adjacent to sentence or paragraph that was revised.
- I Placing the words GENERAL REVISION at the beginning of the text.

<u>Rev. No.</u>	<u>Description of Changes</u>	<u>Revision on Pages</u>	<u>Date</u>
0	Initial issue		12/16/11
1	General Revision		5/1/13
2	General Revision (to meet CBC MS format requirements)		2/26/15