

## Management System: Project Management

# Subject Area: Critical Decision and Change Control Management

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## 1.0 Introduction

This Subject Area (SA) identifies the procedures for managing the Office of Environmental Management (EM) Consolidated Business Center (EMCBC) Critical Decisions (CD), baseline changes, and other actions requiring approval by the Acquisition Executive (AE).

Critical Decisions are key project milestones, approved by the AE or the Secretarial Acquisition Executive (SAE), that identify the exit point from one phase of the project and entry into the succeeding phase. Each decision marks an increase in commitment of resources and is based on a successful and complete preceding phase (see Table 1-1 below).

DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets, defines a Major Systems Project as any project or system of projects with a Total Project Cost (TPC) greater than or equal to \$750 million or a project so designated by the Office of the Secretary. Other projects (or Non-Major Systems Projects) have a TPC less than \$750 million.

DOE Order 413.3B also establishes the requirements for approval of critical decisions and for baseline management, and it details the roles and responsibilities of EM management and staff for capital asset projects with TPC over \$50 Million. DOE Order 413.3B also states that the principles set forth in the Order apply to all capital asset projects, including capital asset projects with TPC less than \$10 Million using a tailored approach.

This SA outlines the steps for completing Critical Decisions for both Major Systems Projects and Non-Major Systems Projects for capital asset projects at the Small Sites, where the EMCBC Director serves as the line manager. The AE authority for Small Sites projects is tied to the TPC; the EMCBC Director serves as AE for all Small Site capital asset projects with a TPC under \$100 million. The AE authority for Small Sites projects with a TPC greater or equal to \$100 million resides at a higher level than the EMCBC Director.

This SA is consistent with requirements defined in the EM Enterprise Requirements System (EMERS), Project Management Functional Area Description (FAD), subsidiary Subject Areas and associated procedures.

**NOTE:** The EMCBC Director, at his/her discretion, may also choose to utilize this SA and associated procedures, including the procedure for the EMCBC Acquisition Advisory Board (CBCAAB), to review DOE O 413.3B “equivalent” Critical Decisions as well as baseline change proposals for EM-funded Operations Activities at the Small Sites. The EM requirements for managing operations activities are defined in an EM-2 memorandum dated March 15, 2012 entitled “Policy and Protocol for Office of Environmental Management Operations Activities.”

**Table 1-1. Project Phases and Corresponding Critical Decisions**

<b>Project Phase</b>	<b>Critical Decision</b>
Initiation—There is a need that cannot be met through other than material means.	CD-0, Approve Mission Need
Definition—The selected alternative and approach is the optimum solution.	CD-1, Approve Alternative Selection and Cost Range
Execution—Definitive cost, scope, and schedule baselines have been developed.	CD-2, Approve Performance Baseline
Execution (continued)—Project is ready for implementation. The phase continues until nearing completion.	CD-3, Approve Start of Construction (for EM projects, CD-3 is commonly combined with CD-2)
Transition/Closeout—Project is ready for turnover or transition to operations.	CD-4, Approve Start of Operations or Project Completion

Most projects or operations need to evolve as they progress to meet unplanned conditions, expectations, or regulations. Projects are best defined by their scope, schedule and cost, and one or all will be changed to meet the new conditions. Changes to project baselines must be approved by the AE, and possibly higher levels. Each project must establish, in the Project Execution Plan (PEP), the appropriate change approval thresholds and practices.

The CBCAAB will also serve as a Change Control Board (CCB) to advise the EMCBC Director on baseline change proposals and the integration of same with any associated contract changes. As appropriate, the EMCBC Director will approve, endorse, or adjust proposed baseline changes.

As authorized in DOE O 413.3B, there are four levels of approval authority, each with its own Acquisition Advisory Board (AAB).

<b>Critical Decision Authority Level</b>	<b>Total Project Cost (TPC) Thresholds</b>
<b>Secretarial Acquisition Executive (SAE)</b>	Deputy Secretary of Energy (S-2) ≥ \$750M (Major Systems), or as designated by the SAE. Further delegation is allowed. Assisted by the Energy Systems Acquisition Advisory Board (ESAAB). SAE procedures maintained by MA-63.
<b>Under Secretaries (US)</b>	Under Secretary for Management and Performance (S-5) ≥ \$400M and < \$750M, or as designated by the US. Further delegation is allowed.
<b>Program Secretarial Officer (PSO)</b>	Assistant Secretary for Environmental Management (EM-1) ≥ \$50M and < \$100M, and up to \$400M with delegation from US. Further delegation is allowed, except for CD-0. Assisted by the EM Acquisition Advisory Board (EMAAB). Implementing procedures maintained by EM-53.
<b>Office Manager</b>	Director, EM Consolidated Business Center < \$100M, by delegation from EM-1. No further delegation allowed. Assisted by the CBCAAB. Implementing procedures under this SA.

The Energy Systems Acquisition Advisory Board (ESAAB) is chaired by the Deputy Secretary of Energy (the SAE). The ESAAB is composed of senior-level managers from various DOE program and staff offices. The ESAAB Secretariat is the SAE's principal point-of-contact relating to project management. The Office of Acquisition and Project Management (APM [MA-60]) serves as the ESAAB Secretariat.

The Under Secretary (US) for Management and Performance serves as the AE for actions below the SAE but above the Program Secretarial Officer (PSO [EM-1]).

The Environmental Management Acquisition Advisory Board (EMAAB) is an advisory body to EM-1 and reviews and makes recommendations for AE approval of critical decisions for "non-Major Line Item Construction and Capital Asset Projects" within EM-1's authority. The EMAAB will also convene to review and make recommendations on: (1) Non-major System Projects before forwarding them to the Under Secretary, and (2) Major System Projects before forwarding them to the SAE for final Decision.

The CBCAAB is chaired by the Director of the EMCBC, as the delegated AE for Small Sites projects with a TPC under \$100 million. The AE is the approving official for CDs pertaining to

Non-Major Systems Projects within the authorized delegation parameters. The role of the CBCAAB is to advise the AE in the CD and baseline change proposal approval process. The CBCAAB was appointed by the Director of the EMCBC and is composed of senior-level managers from various EMCBC program and staff offices. The CBCAAB Secretariat is the AE principal point-of-contact relating to project management. The Assistant Director of the EMCBC Office of Cost Estimating and Project Management Support serves as the CBCAAB Secretariat.

This SA also identifies the EMCBC procedure for certification of Federal Project Directors (FPD) under the DOE Acquisition Career Management Program (ACMP) module of the Project Management Career Development Program (PMCDP), as well as certification of Operations Activity Managers (OAM) under the EM OAM Competency Policy dated September 2013.

## 2.0 Contents

Guidance for obtaining each Critical Decision, implementation of the CBCAAB, and certification of FPD/OAM personnel is listed below:

**NOTE:** Timeframes noted within the following CD procedures should only be considered as starting points for the appropriate level of AAB review, especially with regard to Major Systems Projects. Budget cycles, senior management schedules, and finalization of prerequisite documents, etc., can significantly affect planning and actual AAB meeting dates and subsequent AE decision dates.

Procedures	Procedure Content
1. Critical Decision 0, Approve Mission Need	<ul style="list-style-type: none"> <li>• Determine CD Approving Official</li> <li>• Estimate the Cost and Schedule Range</li> <li>• Approve Mission Need Statement, with APM endorsement if needed.</li> <li>• EMAAB CD-0 Approval Process</li> </ul>
2. Critical Decision 1, Approve Alternate Selection and Cost Range	<ul style="list-style-type: none"> <li>• Determine CD Approving Official</li> <li>• Timeline for Obtaining CD-1</li> <li>• Prerequisites for Obtaining CD-1</li> <li>• Approve Acquisition Strategy</li> <li>• Optional Conceptual Design Review</li> <li>• CBCAAB CD-1 Approval Process (or recommendation to higher level AAB for approval)</li> </ul>
3. Critical Decision 2/3, Approve Performance Baseline/Start of Construction	<ul style="list-style-type: none"> <li>• Determine CD Approving Official</li> <li>• Timeline for Obtaining CD-2/3</li> <li>• Prerequisites for Obtaining CD-2/3</li> <li>• Performance Baseline External Independent Review (EIR) or Integrated Project Review (IPR).</li> </ul>

Procedures	Procedure Content
	<ul style="list-style-type: none"> <li>• CBCAAB CD-2/3 Approval Process (or recommendation to higher level AAB for approval)</li> <li>• Exception (CD-2a/3a Exemption)</li> <li>• Exception (Phased CD-2)</li> </ul>
4. Critical Decision 4, Approve Start of Operations or Project Completion	<ul style="list-style-type: none"> <li>• Determine CD Approving Official</li> <li>• Timeline for Obtaining CD-4</li> <li>• Prerequisites for Obtaining CD-4</li> <li>• Project Completion Review</li> <li>• CBCAB CD-4 Approval Process (or recommendation to higher level AAB for approval)</li> <li>• Exception (Phased CD-4)</li> </ul>
5. CBCAAB	<ul style="list-style-type: none"> <li>• FPD briefs CBCAAB members on proposed CD and/or baseline change proposal (BCP) for projects where AE authority resides with the EMCBC Director</li> <li>• CBCAAB deliberations include responsible Contracting Officer, as appropriate, for proposed BCP that require contract modification</li> <li>• CBCAAB recommends approval of CD and/or BCP for projects where AE authority resides with the EMCBC Director (or forwards recommendation for approval to higher level AAB for consideration)</li> </ul>
6. FPD Certification	<ul style="list-style-type: none"> <li>• FPD candidates complete certification requirements mandated by the PMCDP</li> <li>• EMCBC Director endorses PMCDP application (application is subsequently reviewed/approved or rejected by the PMCDP Board at DOE Headquarters)</li> <li>• OAM candidates complete certification requirements mandated by the EM OAM Competency Policy (to date, there is no DOE certification program for OAM personnel)</li> </ul>

See also DOE G 413.3-9 (Project Review Guide for Capital Asset Projects) for review requirements at each Critical Decision, and DOE G 413.3-12 (Project Definition Rating Index [PDRI] Guide for Traditional Nuclear and Non-Nuclear Construction Projects) for review guidance of either EM for remediation work or traditional construction projects. The PDRI is a project management tool designed to increase the likelihood of project success by improving project scope definition, specifically by identifying deficiencies in scope definition early during the front-end planning process.

## **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)
- DOE O 361.1B (Acquisition Career Development Program [ACMP], Chapter IV, Project Management Career Development Program [PMCDP])
- Office of Environmental Management Operations Activities Manager Competency Policy (EM-2 memorandum dated November 26, 2013)

### **3.2 References**

- DOE G 413.3-5A (Performance Baseline Guide)
- DOE G 413.3-9 (Project Review Guide for Capital Asset Projects)
- 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 Project Delivery Subject Area and subsidiary Procedures
- EMCBC Project Reporting and Monitoring Subject Area and subsidiary Procedures
- EMERS Project Management 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: Critical Decision and Change Control Management

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.

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<b>Rev. No.</b>	<b>Description of Changes</b>	<b>Revision on Pages</b>	<b>Date</b>
0	Initial Subject Area		12/16/11
1	GENERAL REVISION		8/1/12
2	GENERAL REVISION		5/1/13
3	GENERAL REVISION (to meet CBC MS format requirements)		2/26/15