

Management System: [Project Management](#)

Subject Area: Critical Decision (CD) Management

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Issue Date: 8/1/12

Revision: 1

1.0 Introduction

This Subject Area (SA) provides the procedures for managing Office of Environmental Management (EM) Critical Decision (CD) projects with a Total Project Cost (TPC) greater than \$50 million. This SA is consistent with the Department of Energy (DOE) requirements listed in Section 5.

This SA outlines the steps for completing Critical Decisions for both Major Systems Projects and Non-Major Systems Projects. A Major Systems project is defined as any project or system of projects with a Total Project Cost 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) are defined as having a Total Project Cost less than \$750 million.

CDs are key project milestones, approved by the Secretarial Acquisition Executive or Acquisition Executive, 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 (Table 1-1 below).

Table 1-1. Project Phases and Corresponding Critical Decisions

Project Phase	Critical Decision
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	CD-2, Approve Performance Baseline

schedule baselines have been developed.	
Execution—Project is ready for implementation.	CD-3, Approve Start of Construction
Transition/Closeout—Project is ready for turnover or transition to operations.	CD-4, Approve Start of Operations

The Energy Systems Acquisition Advisory Board (ESAAB) is chaired by the Secretarial Acquisition Executive (Deputy Secretary of Energy). In addition the SAE also approves the site selections for new sites and is the designated baseline change authority for Major Systems Project deviations. The Secretarial Acquisition Executive is the approving official for all CDs pertaining to Major Systems projects. The SAE also approves disposition of projects and Performance Baseline changes at the Secretarial Acquisition Executive approval level upon Performance Baseline deviations. The role of the ESAAB is to advise the Secretarial Acquisition Executive in the CD approval process. The ESAAB is composed of senior-level managers from various DOE program and staff offices. The ESAAB Secretariat is the Secretarial Acquisition Executive’s principal point-of-contact relating to project management. The [Office of Engineering and Construction Management \(OECM\)](#) serves as the ESAAB Secretariat.

The Environmental Management Acquisition Advisory Board (EMAAB) is an advisory body to the Program Secretarial Officer and reviews and makes critical decisions for “non-Major Line Item Construction and Capital Asset Projects” within the Program Secretarial Officer’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 (EMAAB Equivalent Board) is chaired by the Director of the EMCBC as the delegated Acquisition Executive. The Acquisition Executive 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 Acquisition Executive in the CD 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 Acquisition Executive’s principal point-of-contact relating to project management. The CBC’s Office of Cost Estimating and Project Management Support serve as the CBCAAB Secretariat.

2.0 Contents

Guidance for obtaining each Critical Decision is listed below:

NOTE: Timeframes noted within the following CD procedures should only be considered as starting points for the ESAAB process, especially with regard to Major Systems Projects. Budget cycles, senior management schedules, and finalization of prerequisite documents, etc., can significantly affect ESAAB planning and actual meeting dates. The following procedures refer to all ESAAB dates as "anticipated."

Procedures	Procedure Content
1. Critical Decision 0, Approve Mission Need	<ul style="list-style-type: none"> • Determine CD Approving Official • Approve Mission Need Statement • ESAAB CD-0 Approval Process • PARS Monthly Status Reporting • Quarterly Reporting
2. Critical Decision 1, Approve Alternate Selection and Cost Range	<ul style="list-style-type: none"> • Determine CD Approving Official • Timeline for Obtaining CD-1 • Prerequisites for Obtaining CD-1 • Approve Acquisition Strategy • Optional Conceptual Design Review • ESAAB CD-1 Approval Process
3. Critical Decision 2, Approve Performance Baseline	<ul style="list-style-type: none"> • Determine CD Approving Official • Timeline for Obtaining CD-2 • Prerequisites for Obtaining CD-2 • Performance Baseline External Independent Review (EIR) • ESAAB CD-2 Approval Process • Exception (CD-2 Exemption) • Exception (Phased CD-2) • PARS Monthly Project Performance Reporting
4. Critical Decision 3, Approve Start of Construction	<ul style="list-style-type: none"> • Determine CD Approving Official • Timeline for Obtaining CD-3 • Prerequisites for Obtaining CD-3 • Independent Project Review (IPR) • ESAAB CD-3 Approval Process • Exception (Phased CD-3)
5. Critical Decision 4, Approve Start of Operations	<ul style="list-style-type: none"> • Determine CD Approving Official • Timeline for Obtaining CD-4 • Prerequisites for Obtaining CD-4 • Project Completion Review • ESAAB CD-4 Approval Process • Exception (Phased CD-4) • Project Closeout Report

See [DOE G 413.3-9 Project Review Guide for Capital Asset Projects](#) for project review requirements at this CD and [DOE G 413.3-12 Project Definition Rating Index Guide for Traditional Nuclear and Non-Nuclear Construction Projects](#) for 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 Exhibits/Forms

- [Energy Systems Acquisition Advisory Board \(ESAAB\) Procedures](#)
- [Capital Asset Project Critical Decision Approval Process \(EMAAB\)](#)
- [CBCAAB Procedure](#)
- [External Technical Reviews for the Environmental Management \(EM\) Program](#)
- [OECM External Independent Review Standard Operating Procedure](#)
- [Mission Need Statement \(CD-0\) \(Example\)](#)
- [DOE G 413.3-5 U.S. DEPARTMENT OF ENERGY PERFORMANCE BASELINE GUIDE](#)
- [DOE G 413.3-16 Project Transition/Closeout](#)
- [DOE G 413.3-15 Guide for Project Execution Plans](#)

4.0 Related Information

- [Project Delivery Subject Area](#)
- [Project Reporting Subject Area](#)
- [Project Assessment and Reporting System](#)

5.0 Requirements

Document	Title
DOE O 413.3	<i>Program and Project Management for the Acquisition of Capital Assets</i>

6.0 Definitions

[Definitions.](#)