

Management System: [Project Management](#)

Subject Area: [Critical Decision \(CD\) Management](#)

Critical Decision 2, Approve Performance Baseline

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## 1.0 Applicability

This procedure applies to all Program Office staff and Federal Project Directors seeking baseline approval of a project.

## 2.0 Required Procedure

Upon completing the Definition Phase, CD-1, the project enters the Execution Phase where the focus is on further defining the selected alternative, developing preliminary design, arriving at a high confidence baseline, and generating the complete Project Execution Plan, all of which support a request for funds in the DOE budget. This part of the Execution Phase culminates with the development of the Performance Baseline, which is presented for Critical Decision 2, Approve Performance Baseline.

The Performance Baseline defines the cost, schedule, performance, and scope commitment to which DOE will execute the project. Approval of the Performance Baseline marks the beginning of performance tracking. It also enables the project to be included in the next DOE Corporate Review Budget along with its cost, schedule, and scope baselines, as supported by its baseline Budget Authority funding profile.

Requirements related to obtaining CD-2 are as follows:

<b>Step 1</b>	Determine Critical Decision Approving Official.
<b>Step 2</b>	Review the Energy Systems Acquisition Advisory Board (ESAAB) Timeline for obtaining CD-2 (refer to Attachment 2 of the <a href="#">ESAAB Procedures</a> ).

<p><b>Step 3</b></p>	<p>The Federal Project Director, in cooperation with the Program Office, completes the following prerequisites (See page A-9 of <a href="#">DOE O 413.3</a>) for obtaining CD-2 Approval:</p> <ul style="list-style-type: none"> <li>• Preliminary Design</li> <li>• Establishment of an Earned Value Management System</li> <li>• Final <a href="#">Project Execution Plan</a> with a Performance Baseline</li> <li>• Performance Baseline External Independent Review (EIR) by OECM for project with a Total Project Cost greater than or equal to \$100 million or Program Independent Project Review (IPR) for projects with a TPC less than \$100 million.</li> </ul> <p>See <a href="#">DOE G 413.3-9 Project Review Guide for Capital Asset Projects</a> for project review requirements at this CD and <a href="#">DOE G 413.3-12 Project Definition Rating Index Guide for Traditional Nuclear and Non-Nuclear Construction Projects</a> 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.</p>
<p><b>Step 4a</b> <i>Projects with a TPC greater than or equal to \$100M</i></p>	<p>Perform the Baseline External Independent Review.</p> <ol style="list-style-type: none"> <li>a. Approximately six months prior to the required EIR (but no later than October of the fiscal year during which the EIR will start), the Program Manager notifies Project Assessment (EM-53) of the EIR need. (Refer to the <a href="#">EIR Process Memorandum</a>.)</li> </ol> <p><b>NOTE:</b> The EIR onsite review should be scheduled no less than two months from the anticipated CD-2 ESAAB meeting; more time should be allowed if possible.</p> <ol style="list-style-type: none"> <li>b. Project Assessment (EM-53) coordinates with OECM to define the scope, cost, scheduled, and required qualification of the EIR team members.</li> </ol> <p><b>NOTE:</b> The EIR is performed by an OECM contractor.</p> <ol style="list-style-type: none"> <li>c. The EIR team conducts the review, closing with an outbrief to the Site Project Team.</li> <li>d. OECM forwards the <a href="#">External Independent Review</a> and validation memorandum to the Program Office.</li> </ol> <p><b>NOTE:</b> The primary purpose of the EIR report is to support the OECM validation of the Performance Baseline and to provide reasonable assurance that the project can be successfully executed.</p>

<p><b>Step 4b</b>  <i>Projects with a TPC less than \$100M</i></p>	<p>Conduct Program Independent Project Review.</p> <ul style="list-style-type: none"> <li>• The EMCBC establishes a review date with and issues a charge memorandum to Project Assessment (EM-53) approximately eight weeks prior to the anticipated review date.</li> <li>• Project Assessment (EM-53), in coordination with the Program Manager and Federal Project Director, develops a review agenda and assembles a review committee.</li> <li>• The review is conducted, and findings, comments, and recommendations are shared with the EMCBC, Federal Project Director, and Site Management and Contractors at a closeout briefing at the conclusion of the review.</li> <li>• The Federal Project Director then ensures that all findings and recommendations resulting from the review are appropriately addressed within the recommended timeframe.</li> </ul> <p><b>NOTE:</b> The final review report is provided to the Program Office within 60 days of the review.</p>
<p><b>Step 5</b></p>	<p>Execute ESAAB CD-2 Approval Process.</p> <p>Refer to Steps 6 - 8 for Major Systems Projects CD Approval Process. Refer to Steps 9 - 12 for Non-Major Systems Projects CD Approval Process.</p>
<p><b>Step 6</b>  <i>Major Systems Projects</i></p>	<p>Prepare for the Pre-ESAAB Meeting.</p> <ol style="list-style-type: none"> <li>a. When the CD-2 prerequisites (Step 3) are completed, the Program Office requests that Project Assessment (EM-53) schedule a Pre-ESAAB meeting with OECM.</li> </ol> <p><b>NOTE:</b> The Pre-ESAAB serves as a dry-run of the Secretarial Acquisition Executive ESAAB meeting with the Deputy Secretary of Energy. The purpose of the Pre-ESAAB is to resolve comments and issues prior to the formal ESAAB meeting.</p> <ol style="list-style-type: none"> <li>b. The Federal Project Director and EM Line Manager prepare a draft presentation and submit it to Project Assessment (EM-53) one week prior to the Pre-ESAAB for dissemination to the Pre-ESAAB members. The Pre-ESAAB briefing is usually presented by the Program Associate Director, Program Manager, or Federal Project Director.</li> </ol>

<p><b>Step 7</b> <i>Major Systems Projects</i></p>	<p>Brief Senior Management.</p> <p>In parallel with scheduling a Pre-ESAAB meeting, the Program Office schedules a meeting with the Under Secretary and/or the Director/Principal Deputy Director, and Project Assessment (EM-53).</p> <p><b>NOTE:</b> The purpose of this meeting is to brief senior-level management on the project's request for CD-2 and to determine the manager (the Under Secretary, Director/Principal Deputy Director, Program Associate Director, or Federal Project Director) who will make the presentation at the Secretarial Acquisition Executive ESAAB meeting. The Program Office usually tries to schedule this briefing several days prior to the Pre-ESAAB meeting as a courtesy to senior management and to receive senior management's perspective/comments on the draft presentation.</p>
<p><b>Step 8</b> <i>Major Systems Projects</i></p>	<p>Obtain Secretarial Acquisition Executive ESAAB Review/Approval of CD-2. After briefing Senior Management and completing the Pre-ESAAB meeting:</p> <ol style="list-style-type: none"> <li>a. The Program Office works with the Pre-ESAAB board members to resolve issues and answer inquiries prior to the Secretarial Acquisition Executive ESAAB meeting.</li> <li>b. When inquiries and issues are resolved to the extent possible and the briefing is finalized, the Program Associate Director forwards the finalized presentation to the ESAAB Secretariat and requests the Secretarial Acquisition Executive ESAAB meeting for CD-2 be scheduled. Include the following individuals in the distribution: <ul style="list-style-type: none"> <li>o Deputy Assistant Secretary, Project Assessment (EM-53), Federal Project Director</li> <li>o All others deemed appropriate by the Program Office</li> </ul> </li> <li>c. The OECM confirms the Program's readiness to continue with the Secretarial Acquisition Executive ESAAB meeting.</li> <li>d. The ESAAB Secretariat contacts the Program Office with the Secretarial Acquisition Executive's next available meeting date, which is normally within two-to-three weeks of the request.</li> <li>e. Prior to the ESAAB meeting, the Program Office will: <ul style="list-style-type: none"> <li>o Determine who will make the CD-2 presentation at the ESAAB meeting (the presentation is usually given by either the Under Secretary, the Director/Principal Director, or in some cases the Program Office Associate Director, or Federal Project Director).</li> <li>o Determine the individuals who will participate in the Secretarial Acquisition Executive ESAAB meeting (usually limited to five seats).</li> </ul> </li> </ol>

	<ul style="list-style-type: none"> <li>○ Advise Project Assessment (EM-53) of the date of the ESAAB meeting.</li> <li>○ Provide OECM with 20 color copies and 10 black and white copies of the final presentation at least one-half hour prior to the ESAAB meeting.</li> <li>○ Provide a laptop computer (for use with the projector) and electronic copy of the current presentation at the ESAAB meeting.</li> </ul> <p>f. After the Secretarial Acquisition Executive ESAAB meeting, the Program Office prepares a draft of the approval memorandum in consultation with OECM.</p> <p><b>NOTE:</b> The Program Office will receive the final approval memorandum from the Deputy Secretary of Energy within approximately two weeks after the meeting.</p>
<p><b>Step 9</b> <i>Non-Major Systems Projects</i></p>	<p>When the CD-2 prerequisites (Step 3) are completed, the Program Office requests that an EMAAB (or CBCAAB depending on delegated authority) meeting for CD-2 be scheduled. The request should be placed at least two weeks prior to the anticipated Board meeting date.</p>
<p><b>Step 10</b> <i>Non-Major Systems Projects</i></p>	<p>The Federal Project Director, in cooperation with the Program Manager, prepares a briefing package and a CD-2 approval document for the EMAAB (or CBCAAB) meeting and forwards these to the Board Secretariat at least one week prior to the scheduled meeting.</p> <p><b>NOTE:</b> <a href="#">EMAAB</a> (or <a href="#">CBCAAB</a>) will have one week to review the documents and to provide preliminary comments or issues to the Program Office.</p>
<p><b>Step 11</b> <i>Non-Major Systems Projects</i></p>	<p>Conduct the EMAAB (or CBCAAB) Meeting:</p> <ul style="list-style-type: none"> <li>a. The Federal Project Director presents the CD-2 request for approval to the Board.</li> <li>b. The Board has the opportunity to ask questions, raise concerns, and make a recommendation for approval to the Acquisition Executive.</li> <li>c. Based on these recommendations, the Acquisition Executive either approves the CD-2 request or defers approval until questions and/or issues are resolved.</li> <li>d. The Board Secretariat prepares and distributes minutes of the meeting.</li> </ul>

<p><b>Exception</b></p>	<p>Exemption from DOE Order 413.3 Requirement that CD-2 must be Approved Prior to Budget Request for Construction Funds.</p> <p>If an exemption is required, the Program Office prepares an action memo from the Under Secretary for Science to the Chief Financial Officer and the Director of the Office of Management (<a href="#">Performance Baseline Development and Validation document</a>). The exception statement should include the following:</p> <ul style="list-style-type: none"> <li>• Identification of specific impacts if construction is delayed (including impacts to strategic plan, key agreements, safety, etc).</li> <li>• Explanation of why the project is expected to be ready for construction and a statement that the Program has high confidence that all project planning necessary to award construction contracts will be completed in time to cost-effectively use the construction funds. In general, work necessary to start construction would include the following activities that should be addressed in the Exception statement: <ul style="list-style-type: none"> <li>○ Scope is well defined with no significant changes expected following start of construction</li> <li>○ Design requirements are well defined and agreed to by the Integrated Project Team</li> <li>○ Preliminary and final design will be complete</li> <li>○ Construction planning will be complete (including bid packages)</li> </ul> </li> </ul>
<p><b>Exception</b></p>	<p><b>Phased CD-2.</b></p> <p>In most cases, a phased CD-2 (CD-2a / CD-2b) approach is used for projects that require long-lead procurements; however, the phased approach may be used in other situations as necessary. The decision to use a phased CD-2 approach is determined early in the project by the Program Office, Federal Project Director, and Project Assessment (EM-53), and is first noted in the Mission Need Statement, Acquisition Strategy, and Preliminary Project Execution Plan.</p> <p>A project requiring long-lead procurement may have the following scheduled CDs:</p> <ul style="list-style-type: none"> <li>• CD-2a, Approve the Long-Lead Procurement Budget</li> <li>• CD-2b, Approve Performance Baseline</li> <li>• CD-3a, Approve Start of Long-Lead Procurement</li> </ul>

	<ul style="list-style-type: none"> <li>• CD-3b, Approve Start of Construction</li> </ul> <p>The ESAAB Review/Approval process for a phased CD is similar to that of a normal CD-2.</p>
<b>Step 12</b>	<p>The Federal Project Director begins reporting the project performance, monthly, using the <a href="#">Project Assessment and Reporting System (PARS)</a>.</p>

### 3.0 References

- [CBCAAB Procedure](#)
- [ESAAB Procedures](#)
- [Capital Asset Project Critical Decision Approval Process \(EMAAB\)](#)
- [External Independent Reviews for the Environmental Management Program \(SOPP 026\)](#)
- [OECM External Independent Review Standard Operating Procedure](#)
- [DOE G 413.3-5 Performance Baseline Development and Validation](#)
- [Critical Decision 1 - Approve Alternate Selection and Cost Range](#)
- [Project Assessment and Reporting System](#)
- [DOE G 413.3-15 Project Execution Plan Guidance](#)
- [DOE G 413.3-9 Project Review Guide for Capital Asset Projects](#)
- [DOE G 413.3-12 Project Definition Rating Index Guide for Traditional Nuclear and Non-Nuclear Construction Projects](#)
- [EMCBC DOE Service Plan](#)
- [Example of Approved PEP](#)