

Management System: [Project Management](#)

Subject Area: [Critical Decision Management](#)

Procedure: **Critical Decision 0, Approve Mission Need**

**Issue Date:**

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| [EMCBC Home Page](#) |

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## 1.0 Applicability

This procedure applies to all Program Office staff seeking to document a mission requirement for a project with a Total Project Cost (TPC) greater than \$20 million.

## 2.0 Required Procedure

A [Mission Need Statement \(MNS\)](#) documents a mission requirement the U.S. Department of Energy (DOE) cannot meet through nonmaterial means. It is the primary document supporting Critical Decision (CD) 0, Approve Mission Need. Mission needs are identified in terms of capability, not in terms of equipment, facility, or other solutions, and must support DOE's Strategic Plan and the Office of Environmental Management's (EM's) Strategic Plan under it. Approval of the mission need is the authorization to develop alternative concepts and functional requirements.

A MNS must be developed for projects having a TPC greater than \$20 million. Projects with TPCs between \$5M and \$20M still require a defined and approved mission need. Additional information regarding MNSs is available in DOE [G 413.3-17, Mission Need Statement](#) and the Office of Management and Budget's (OMB) [Capital Programming Guide](#). As a Program Secretarial Officer (PSO), EM-1 will approve all MNSs, though CD-0 approval may be made at a higher level.

The Capital Programming Guide asks agencies to answer the Three Critical Questions before planning to acquire capital assets.

1. Does the investment in a major capital asset support core/priority mission functions that need to be performed by the Federal Government?
2. Does the investment need to be undertaken by the requesting agency because no alternative private sector or governmental source can better support the function?
3. Does the investment support work processes that have been simplified or otherwise redesigned to reduce costs, improve effectiveness, and make maximum use of commercial, off-the-shelf technology?

Until CD-2, when the baseline is approved, the cost and schedule estimates will be ranges, roughly equating to Association for Advancement of Cost Engineering International (AACEI) Class 5 or 4 estimates. See DOE [G 413.3-21 Cost Estimating Guide](#) for more information.

Steps related to obtaining CD-0 are as follows:

Step	Description
<b>Step 1</b>	Establish the cost range of the proposed project. At CD-0, the cost estimate will be an order of magnitude or AACEI Classes 5. The upper cost range will determine the Acquisition Executive (AE).
<b>Step 2</b>	Obtain Approval of the Mission Need Statement: <ul style="list-style-type: none"> <li>• Go to Step 2.1 for Projects with a TPC greater than or equal to \$100M.</li> <li>• Go to <a href="#">Step 2.2</a> for Projects with a TPC less than \$100M.</li> </ul>
<b>Step 2.1</b> <i>Projects with a TPC greater than or equal to \$100M</i>	<p>Projects with a upper end cost range <math>\geq</math>\$100M require concurrence from the Office Acquisition and Project Management (APM, MA-60) before EM-1 can approve it.</p> <p>If the TPC is <math>\geq</math>\$100M, then APM will review the MNS and provide a recommendation to EM-1.</p> <p>If the Project is a Major System Project (<math>\geq</math>\$750M, or as designated), APM will perform an Independent Cost Review (ICR).</p> <p>Submit the draft Mission Need Statement document for informal review by the EM Office of Project Assessment (EM-53):</p> <ol style="list-style-type: none"> <li>i. At least three months prior to the anticipated MNS EMAAB,</li> <li>ii. CD-0 <a href="#">Energy Systems Acquisition Advisory Board (ESAAB)</a> Meeting, e-mail the draft Mission Need Statement to the EM-53 Representative for the subject Site.</li> <li>iii. Resolve any comments received from EM-53.</li> </ol> <p><b>NOTE:</b> EM-53 provides comments to the Program Office, as necessary, to develop a final MNS.</p> <ol style="list-style-type: none"> <li>iv. Obtain Approval of the Mission Need Statement by the Director, Office of Environmental Management. The Program Associate Director forwards the Mission Need Statement to EM-10 for review. Approval by the Director is requested once EM-10 provides their recommendation memorandum.</li> <li>v. The Director, Office of Environmental Management, may sign the MNS after receiving the EM-10 recommendation memorandum.</li> </ol> <p><b>NOTE:</b> Approval of the Mission Need Statement does not represent</p>

Step	Description
	<p>approval of CD-0.</p> <p>See DOE <a href="#">G 413.3-9</a> <i>Project Review Guide for Capital Asset Projects</i> for project review requirements at this CD. See DOE G 413</p>
<p><b>Step 2.2</b> <i>Projects with a TPC less than \$100M</i></p>	<p>Obtain Approval of the Mission Need Statement: As early as possible, send the draft Mission Need Statement to the EM-53 Representative for the subject Site. EM HQ will follow SOPP #041 Capital Asset Project Critical Decision Approval Process to schedule the EMAAB and coordinate with APM for their input. Formally submit the MNS to EM53 (the ESAAB Secretariat) when it is final. The standard sequence is a Pre-EMAAB meeting, resolve comments, and resubmit for final EMAAB meeting (about 90 days).</p> <p>a. Prepare the <a href="#">Mission Need Statement</a> document and e-mail it for review by the Office of Project Management approximately three weeks prior to the anticipated CD-0 ESAAB Meeting.</p> <p><b>NOTE:</b> When the Mission Need Statement is submitted, please indicate the Program Manager or a point of contact for the MNS.</p> <p>b. Resolve any comments received from the Office of Project Management. (The Office of Project Management provides comments to the Program Office.)</p> <p>c. Submit a revised hard copy of the Mission Need Statement to the Office of Project Management for concurrence by the Deputy Assistant Secretary, EM-10. The Mission Need Statement may then continue through the concurrence/approval chain.</p> <p>d. Obtain the following concurrence signatures for the Mission Need Statement:</p> <ul style="list-style-type: none"> <li>o Program Manager</li> <li>o Program Associate Director</li> <li>o DAS for Acquisition and Project Management, EM-50</li> <li>o Director, Office of Budget</li> <li>o Approving Official (see Step 1 above)</li> </ul> <p><b>NOTE:</b> Approval of the Mission Need Statement does not represent approval of CD-0.</p> <p>e. Acquisition Executive authority cannot be delegated below the Program Secretarial Officer level. Therefore, the approved Mission Need Statement is presented for CD-0 approval to:</p>

Step	Description						
	<ul style="list-style-type: none"> <li>○ The PSO for projects with a TPC less than \$100M</li> </ul> <p>See <a href="#">DOE G 413.3-9</a> Project Review Guide for Capital Asset Projects for project review requirements at this CD.</p>						
<p><b>Step 3</b> Determine the AE</p>	<p>Determine the Critical Decision Approving Official. Part of the Mission Need Statement is a rough-order-of-magnitude cost and schedule range estimate. Use the upper end of the cost range to determine who will be the Critical Decision Approving Official.</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding-right: 20px;">TPC &lt; \$400M</td> <td>EM-1</td> </tr> <tr> <td>TPC ≥ \$400M and &lt; \$750M</td> <td>NA-2</td> </tr> <tr> <td>TPC ≥ \$750M</td> <td>S-2</td> </tr> </table> <p>Execute the ESAAB CD-0 Approval Process.</p> <ul style="list-style-type: none"> <li>• Refer to Steps 4 - 6 for Major Systems Projects CD Approval Process.</li> <li>• Refer to Steps 7 - 9 for Non-Major Systems Projects CD Approval Process.</li> </ul> <p><b>NOTE:</b> Approval of the Mission Need Statement and the ESAAB CD-0 approval process are independent activities. Steps below refer to obtaining approval of CD-0 and usually occur after approval of the Mission Need Statement.</p>	TPC < \$400M	EM-1	TPC ≥ \$400M and < \$750M	NA-2	TPC ≥ \$750M	S-2
TPC < \$400M	EM-1						
TPC ≥ \$400M and < \$750M	NA-2						
TPC ≥ \$750M	S-2						
<p><b>Step 4</b> <i>Major Systems Projects</i></p>	<p>Prepare for the Pre-ESAAB Meeting.</p> <ul style="list-style-type: none"> <li>a. Upon receipt of the EM-10 recommendation memorandum, the Program Office requests that Office of Project Management schedule a Pre-ESAAB meeting (or ESAAB Readiness Review) with <a href="#">DOE HQ Office of Engineering and Construction Management (OECM)</a>.</li> </ul> <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 meeting is to resolve comments and issues prior to the formal ESAAB meeting.</p> <ul style="list-style-type: none"> <li>b. The Program Manager prepares a draft presentation and submits it to the Office of Project Management one week prior to the Pre-ESAAB meeting for dissemination to the Pre-ESAAB members. The Pre-ESAAB briefing is usually presented by the Program Associate Director or by the Program Manager.</li> </ul>						
<p><b>Step 5</b> <i>Major Systems Projects</i></p>	<p>Brief Senior Management:</p> <p>In parallel with scheduling a Pre-ESAAB meeting, the Program Office also schedules a meeting with the Under Secretary and/or the Director/Principal Deputy Director, and Office of Project Management.</p> <p><b>NOTE:</b> The purpose of this meeting is to brief senior-level management on the project's request for CD-0 and to determine the manager (the Under Secretary or the Director/Principal Deputy Director or the Program Associate Director) who will make the presentation at the Secretarial Acquisition Executive ESAAB meeting. The Program</p>						

Step	Description
	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.
<b>Step 6</b> <i>Major Systems Projects</i>	<p>Obtain Secretarial Acquisition Executive ESAAB Review/Approval of CD-0. 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 via e-mail to the ESAAB Secretariat and requests the Secretarial Acquisition Executive ESAAB meeting for CD-0 be scheduled. Include the following individuals in the distribution: <ul style="list-style-type: none"> <li>o Deputy Assistant Secretary, Office of Project Management (EM-10)</li> <li>o Program Manager</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-0 presentation at the ESAAB meeting (the presentation is usually given by the Under Secretary, the Director/Principal Deputy Director, or in some cases the Program Office Associate Director).</li> <li>o Determine the individuals who will participate in the Secretarial Acquisition Executive ESAAB meeting (usually limited to five seats).</li> <li>o Advise Office of Project Management of the date of the ESAAB meeting.</li> <li>o 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>o Provide a laptop computer (for use with the LCD projector) and electronic copy of the current presentation at the ESAAB meeting.</li> </ul> </li> <li>f. After the Secretarial Acquisition Executive ESAAB meeting, the Program Office iterates a draft of the approval memorandum with OECM.</li> </ol> <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>

Step	Description
<b>Step 7</b> <i>Non-Major Systems Projects</i>	<p>When the Mission Need Statement is approved, the Program Office requests that Office of Project Management schedule an ESAAB Equivalent meeting for CD-0. The approved Mission Need Statement is presented for CD-0 approval to:</p> <ul style="list-style-type: none"> <li>• The Under Secretary for projects with a TPC between \$100-750 million</li> <li>• The PSO for projects with a TPC less than \$100 million</li> </ul> <p><b>NOTE:</b> This request should be placed at least two weeks before the anticipated ESAAB Equivalent meeting date.</p>
<b>Step 8</b> <i>Non-Major Systems Projects</i>	<p>The Program Manager prepares a CD-0 briefing package for use at the ESAAB Equivalent meeting and forwards it to Office of Project Management at least one week prior to the scheduled meeting. The ESAAB Equivalent Board members will have at least this one week to review the Mission Need Statement and CD-0 briefing package and to provide preliminary comments or issues to the Program Office.</p> <p><b>NOTE:</b> A separate CD-0 approval document is not normally prepared for a Non-Major Systems projects with a (TPC less than \$750 million)—the Mission Need Statement is considered to be the official CD-0 approval document (with the addition of an ESAAB Equivalent Board recommendation/approval page).</p>
<b>Step 9</b> <i>Non-Major Systems Projects</i>	<p>Conduct the ESAAB Equivalent Meeting:</p> <ol style="list-style-type: none"> <li>a. The Program Associate Director presents the CD-0 request for approval to the ESAAB Equivalent Board. For projects less than</li> <li>b. \$20 million, the Program Manager presents the CD-0 request.</li> <li>c. The ESAAB Equivalent Board has the opportunity to ask questions, raise concerns, and make a recommendation for approval to the Acquisition Executive.</li> <li>d. Based on these recommendations, the Acquisition Executive either approves the CD-0 request or defers approval until questions and/or issues are resolved.</li> <li>e. Office of Project Management prepares and distributes minutes of the ESAAB Equivalent meeting.</li> </ol> <p><b>NOTE:</b> Attendance at the ESAAB Equivalent meeting is limited to the Under Secretary, the Director/Principal Deputy Director, the ESAAB Board, the Program Office, Office of Project Management staff, and an OECM staff member. Contractors and Laboratory Staff are not permitted to participate in the ESAAB meeting.</p>
Step 10	<p>The Program Office begins reporting the project status, monthly, using the <a href="#">Project Assessment and Reporting System (PARS)</a> . (Refer to the <a href="#">Project Reporting Subject Area</a> .)</p>
Step 11	<p>The Acquisition Executive begins conducting Quarterly Project Performance Reviews. (Refer to the <a href="#">Project Reporting Subject Area</a> .)</p>

### 3.0 References

- DOE [G 413.3-9](#), *U.S. Department of Energy Project Review Guide for Capital Asset Projects*
- DOE [G 413.3-17](#), *Mission Need Statement Guide*
- DOE [G 413.3-21](#), *Cost Estimating Guide*
- Office of Management and Budget, [Capital Programming Guide](#), the Supplement to Circular A-11
- OECM [Energy System Acquisition Advisory Board \(ESAAB\) Standard Operating Procedure \(SOP\)](#), November 2011 (Office since divided among MA-60, APM).
- EM EMAAB SOP 041
- [Mission Need Statement Example](#) (Idaho DEC04 Example)
- [EMCBC Site Authority Matrix](#)
- [Project Reporting](#) Subject Area Description
- [Office of Engineering and Construction Management \(OECM\)](#) Web page  
<http://energy.gov/management/office-management/operational-management/project-management>
- [Project Assessment and Reporting System](#) (PARS-II)
- Memorandum: [Delegation of Acquisition Executive Authority for EM Non-Major System Projects with Total Project Costs up to \\$400 Million](#), T.P. D'Agostino/NA-1 to D. Huizenga/EM-1, dated 7/06/2012