

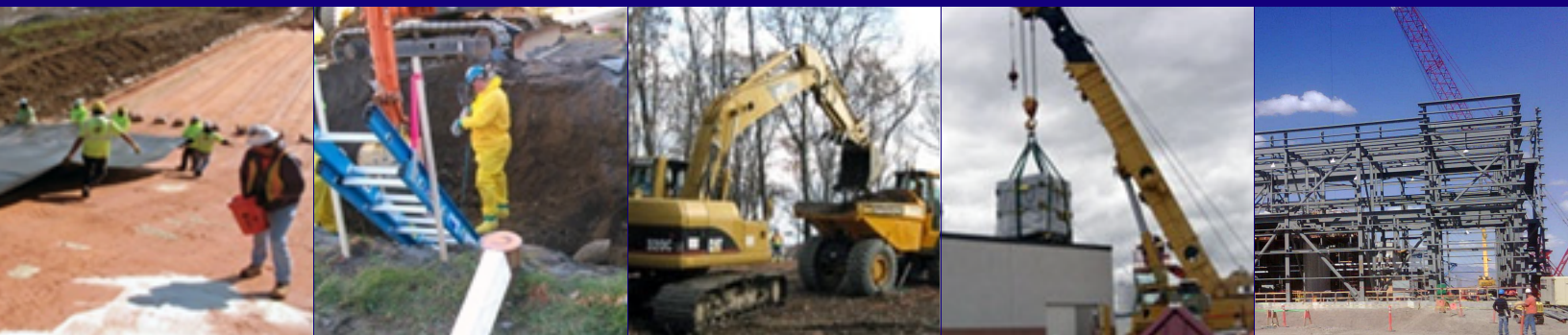


DOE - EM - SRP - 2010
2nd Edition

Environmental Management
Safety ▪ Performance ▪ Cleanup ▪ Closure

STANDARD REVIEW PLAN (SRP)

ACQUISITION STRATEGY REVIEW MODULE



**CORPORATE CRITICAL DECISION (CD) REVIEW AND
APPROVAL FRAMEWORK ASSOCIATED WITH NUCLEAR FACILITY CAPITAL AND
MAJOR CONSTRUCTION PROJECTS**

MARCH 2010

OFFICE OF ENVIRONMENTAL MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON D. C. 20585

OFFICE OF ENVIRONMENTAL MANAGEMENT

Standard Review Plan (SRP)

Acquisition Strategy

Review Module

Critical Decision (CD) Applicability					
CD-0	CD-1	CD-2	CD-3	CD-4	Post Operation
	✓				



March 2010

FOREWORD

The Standard Review Plan (SRP)¹ provides a consistent, predictable corporate review framework to ensure that issues and risks that could challenge the success of Office of Environmental Management (EM) projects are identified early and addressed proactively. The internal EM project review process encompasses key milestones established by DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Assets*, DOE-STD-1189-2008, *Integration of Safety into the Design Process*, and EM's internal business management practices.

The SRP follows the Critical Decision (CD) process and consists of a series of Review Modules that address key functional areas of project management, engineering and design, safety, environment, security, and quality assurance, grouped by each specific CD phase.

This Review Module provides the starting point for a set of corporate Performance Expectations and Criteria. Review teams are expected to build on these and develop additional project-specific Lines of Inquiry, as needed. The criteria and the review process are intended to be used on an ongoing basis during the appropriate CD phase to ensure that issues are identified and resolved.

¹ The entire EM SRP and individual Review Modules can be accessed on EM website at <http://www.em.doe.gov/Pages/Safety.aspx>, or on EM's internet Portal at <https://edoe.doe.gov/portal/server.pt> Please see under /Programmatic Folder/Project Management Subfolder.

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ACRONYMS

AS	Acquisition Strategy
CD	Critical Decision
DOE	Department of Energy
EM	Environmental Management
FPD	Federal Project Director
IPT	Intergraded Project Team
LEED	Leadership in Energy and Environmental Design
LOI	Lines of Inquiry
OECM	Office of Engineering and Construction Management
RM	Review Module
TPC	Total Project Cost
WBS	Work Breakdown Structure

I. INTRODUCTION

As required by DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Assets*, it is necessary to prepare an acquisition strategy that describes the high-level business and technical management approach designed to achieve project objectives within specified resource constraints. This is a required deliverable for CD-1 as identified in table 2 of DOE O 413.3A.

DOE Guide 413.3-9, *U.S. Department of Energy Project Review Guide for Capital Asset Projects*, in Table 3 identifies the completion of an Acquisition Strategy review by Office of Engineering and Construction Management (OECM) personnel as a required review for all major system projects. The adequacy of the acquisition strategy is an essential element in the success of DOE Capital Asset Projects.

From DOE Guide, 413.3-13, *U.S. Department of Energy Acquisition Strategy Guide for Capital Asset Projects*:

An acquisition strategy is a comprehensive high-level and business management approach designed to achieve project objectives within specified resource constraints. It is also considered the framework for the next phases of planning, organizing, staffing, controlling, and leading a project. In sum, the acquisition strategy provides an approach for activities essential for project success and for formulating functional strategies and plans.

II. PURPOSE

The Acquisition Strategy (AS) Review Module (RM) is a tool that assists Department of Energy (DOE) federal project review teams in evaluating the adequacy of the AS prior to approval of CD-1. The key elements and Lines of Inquiry's (LOIs) identified in this Module were specifically developed to be generic in nature to ensure that they were applicable to as many DOE projects as possible. Therefore, it is essential that the review team use these key elements and LOIs only as a starting point, and that more detailed project specific elements and LOIs be developed to ensure that the project is adequately evaluated.

III. ROLES AND RESPONSIBILITIES

A successful AS review in support of CD-1 depends on an experienced and qualified team. The team should be augmented with appropriate subject matter experts selected to complement the specific technical concerns of the project being reviewed. The specific types of expertise needed will be dependent on the type of facility being reviewed, as well as other factors such as complexity, hazards, and risks.

It is strongly recommended that the team leader should either be a project or systems engineer experienced in the management of a multi-disciplined review team (e.g., project management, safety, design, quality assurance) that matches to the extent practicable the

contractor's disposition team. The table below provides a compilation of acquisition strategy review roles and responsibilities.

Position	Responsibility
Field Element Manager	Provides support and resources to the Federal Project Director and Review Team Leader in carrying out the Acquisition Strategy (AS) review.
	Facilitates the conduct of the AS review. Assigns office space, computer equipment, and support personnel to the team as necessary to accomplish the review in the scheduled time frame
Federal Project Director	Identifies the need for a Federal Project Director (FPD) and determines the scope of the review effort.
	In conjunction with the Contractor Project Manager, develops the briefing materials and schedule for the review activities.
	Coordinates the review team pre-visit activities and follows up review team requests for personnel to interview or material to review.
	Coordinates the necessary training and orientation activities to enable the review team members to access the facility and perform the review.
	Unless other personnel are assigned, acts as the site liaison with the review team. Tracks the status of requests for additional information.
	Coordinates the Federal site staff factual accuracy review of the draft report.
	Leads the development of the corrective action plan if required. Tracks the completion of corrective actions resulting from the review.
Review Team Leader	In coordination with the Federal Project Director, selects the areas to be reviewed.
	Based on the areas selected for review, project complexity and hazards involved, selects the members of the review team.
	Verifies the qualifications: technical knowledge; process knowledge; facility specific information; and independence of the Team Members.
	Leads the AS review pre-visit.
	Leads the review team in completing the Review Criteria for the various areas to be reviewed.
	Coordinates the development of the data call and forwards to the Federal Project Director, a list of documents, briefings, interviews, and presentations needed to support the review.
	Forwards the final review plan to the FPD and Environmental Management (EM) management for approval.
	Leads the on-site review.
	Ensures the review team members complete and document their portions of the review and characterizes the findings.
	Coordinates incorporation of factual accuracy comments by Federal and Contractor personnel on the draft report.
	Forwards the final review report to the FPD and EM management for consideration in making the decision to authorize start of construction.

Position	Responsibility
	Participates, as necessary in the closure verification of the findings from the review report.
Review Team Member	Refines and finalizes the criteria for assigned area of the review.
	Develops and provides the data call of documents, briefings, interviews, and presentations needed for his/her area of the review.
	Completes training and orientation activities necessary for the review. Conducts any necessary pre visit document review.
	Participates in the on-site review activities, conducts interviews, document reviews, walk downs, and observations as necessary.
	Based on the criteria and review approaches in the Review Plan, assesses whether his/her assigned criteria have been met.
	Documents the results of the review for his or her areas. Prepares input to the review report.
	Makes recommendations to the Review Team Leader for characterization of findings in his or her area of review.
	Resolves applicable Federal and Contractor factual accuracy comments on the draft review report.
	Prepares the final review report for his or her area of review.

IV. REVIEW SCOPE AND CRITERIA

This Acquisition Strategy Review Module provides a set of review criteria that are organized based on the key aspects associated with the acquisition strategy as identified in the DOE Orders and guidance. For each review area, Appendix A of this Module provides overall performance objectives and then a subset of review criteria that satisfy each performance objective. These performance objectives and review criteria will provide consistent guidance to project-specific AS review teams to develop their Lines of Inquiry. The key elements and LOIs identified in this Module were specifically developed to be generic in nature to ensure that they were applicable to as many DOE projects as possible. Therefore, it is essential for a review team to use these key elements and LOIs only as a starting point, and that more detailed project specific elements and LOIs be developed to ensure that the project is adequately evaluated.

General

This area of the review is intended to capture the overall acquisition strategy with respect to the DOE requirements and guidance for format and content. This review will address the format and contents guidance as presented in DOE G 413.3-13. This review area will also address the five characteristics of a comprehensive acquisition strategy.

Desired Outcome & Requirements Definition

This area is focused on ensuring that the AS defines project description and scope, and the performance parameters required to obtain the desired or expected outcome. This review section will focus on ensuring that these elements are consistent with the conceptual design

and that the AS is developed based on the final conceptual design as submitted in support of CD-1 approval.

Cost & Schedule

The intent of this review area is to ensure that the cost and schedule are presented in the AS consistent with the requirements and guidance of DOE Orders, Manuals and Standards. The adequacy of the cost and schedule will be determined based on the conceptual design submitted for CD-1 approval.

Major Applicable Conditions

The purpose of this review area is to ensure that the AS identifies and addresses the applicable conditions and factors that may affect the operational, design or execution requirements. This section will address such factors as environmental documentation, economic factors, technological and political sensitivities among others.

Risk & Alternatives (Technical, Location & Acquisition Approach)

This review area will ensure that the acquisition strategy adequately addresses the possible alternatives and discusses the risks and benefits associated with each. This review area will ensure that the program considers each course of action across the key discriminators identified in the DOE guidance and requirements.

Business & Acquisition Approach

This review area will focus on the methods of competition that will be sought, promoted and sustained throughout the course of the project. Additionally, this review area will assess the adequacy of the basis for selection of these methods and/or exclusion of others.

Management Structure & Approach

This review area will ensure that the approach and structure for management of the project is adequately presented and discussed in the AS. This review area will also address items such as key interfaces and relationships between organizational elements.

V. REVIEW PLANS AND DOCUMENTATION

The acquisition strategy review is essential to the overall DOE process for the Approval of CD-1. The focus of the acquisition strategy is to ensure that the technical and business management approach is adequate to achieve the desired project objectives.

The following activities should be conducted as part of the AS review plan development and documentation or closure of the review:

- Subsequent to the selection, formation and chartering of the review team and receipt and review of the prerequisite documents; assignment of responsibilities for the development of specific lines of inquiry should be made.
- The review team members should develop specific lines of inquiry utilizing the topics and areas listed in the respective appendices of this guide.
- The individual lines of inquiry should be compiled and submitted to the manager authorizing the review for concurrence prior to starting the review. Once approved by the manager they should be provided to the organization being reviewed along with a schedule for the planned assessment.
- The project-specific review plan should be compiled with a consistent and uniform numbering scheme that provided for a unique identifier for each line of inquiry, arranged by subject area such that the results of each line of inquiry can be documented and tracked to closure.
- The lines of inquiry should be satisfied via document review and personnel interviews and any combination of these methods. For the field assessment these techniques are augmented by the direct observation of work to verify procedure execution as appropriate. The method used the basis for closure, comment, or finding and the result of the inquiry should all be documented and tracked.

VI. REFERENCE MATERIAL

- DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Asset*
- DOE G 413.3-9, *U.S. Department of Energy Project Review Guide for Capital Asset Projects*
- DOE G 413.3-13, *U. S. Department of Energy Acquisition Strategy Guide for Capital Asset Projects.*
- GAO-09-3SP, *GAO Cost Estimating and Assessment Guide*

APPENDIX A- PERFORMANCE OBJECTIVES AND CRITERIA

Legend of Acquisition Strategy Review Topics

Review Topical Area	Identifier
General	GE
Desired Outcome & Requirements	OR
Cost & Schedule	CS
Major Applicable Conditions	AC
Risk & Alternatives	RA
Business & Acquisition Approach	BA
Management Structure & Approach	MS

ID #	Performance Objectives and Criteria ²	Met?
General		
GE-1	Does the project Acquisition Strategy meet the DOE requirements and guidance for format and content?	
	Is the project title the same as was presented in the mission need, if not is the prior title referenced? (GE-1.1)	
	Is the primary office of responsibility for the project identified? (GE-1.2)	
	Is the total project cost (TPC) range identified? (GE-1.3)	
	Does the AS include a summary project description and scope? (GE-1.4)	
	Does the AS identify performance parameters required to obtain the desired outcome? (GE-1.5)	
	Does the AS include a Cost & Schedule range? (GE-1.6)	
	Is the project funding profile identified? (GE-1.7)	
	Are key milestones and events identified? (GE-1.8)	
	Does the AS identify environmental, regulatory and political sensitivities? (GE-1.9)	
	Does the AS summarize the major technical, cost and schedule risks identified and analyzed to date? (GE-1.10)	
	Are the acquisition and contract types identified? (GE-1.11)	
	Are any incentive approaches or linkage to performance metrics identified? (GE-1.12)	
	Is the competition approach to be used for the acquisition presented? (GE-1.13)	
	Does the AS identify the Intergraded Project Team (IPT), organization Structure and Staffing skills for the project? (GE-1.14)	
	Does the AS discuss the approach to performance evaluation and validation to be applied for the project? (GE-1.15)	
Are key interdependencies and interfaces essential to the success of the project identified and discussed in the AS? (GE-1.16)		

² The site should provide the technical bases and assumptions that support the answers provided to each Line of Inquiry. If possible, the review teams should independently verify the technical bases and assumptions.

ID #	Performance Objectives and Criteria ²	Met?
GE-2	Does the AS include the five characteristics found in a comprehensive acquisition strategy?	
	Is the AS realistic in that the programmatic, functional, and operational objectives are attainable? (GE-2.1)	
	Is the AS credible – reasonable and/or innovative technical and location alternatives are given due consideration and critical thinking is demonstrated in evaluating the alternatives? (GE-2.2)	
	Is the AS durable – it concentrates on strategy rather than detailed planning, it includes only a high-level view or approach and does not include detail that may change based on later operational or tactical decisions. (GE-2.3)	
	Is the AS flexible – the project description is kept at the strategy level so that operational details can be better incorporated within that vision without changes or redirection to the strategy or without significant disruption to project resources or project baselines? (GE-2.4)	
	Does the AS manage risk – potential impacts to the project are identified, analyzed, managed and tracked? (GE-2.5)	
Desired Outcome & Requirements Definition		
OR-1	Does the AS adequately present the desired project outcome?	
	Does the AS describe how the project fits within the mission of the program office and why it is critical to the overall accomplishment of the DOE mission including benefits to be realized? (OR-1.1)	
	Does the AS list the mission need approval date, the approving official, and summarize any material changes from the approved mission need? (OR-1.2)	
	Does the AS describe the key technical and performance parameters for the project including the proposed location? (OR-1.3)	
	If the project includes a new facility does the AS show the square footage and address elimination by transfer, sale or demolition of excess buildings and facilities? (OR-1.4)	
	Is the desired project outcome adequately based on the conceptual design as provided for CD-1 approval? (OR-1.5)	
OR-2	Does the AS clearly identify the project requirements?	
	Has the technical baseline for the AS been developed by qualified personnel? (OR-2.1)	
	Does the project description/scope address the following questions (as appropriate): <ul style="list-style-type: none"> • What is the purpose of the proposed acquisition; • What items or services will be produced; • What are the estimated quantities of products or services; • What is the proposed location of the new asset; • For a facility was is the required square footage; • What excess buildings or facilities will be eliminated as a result of this acquisition; • What specific laws, regulations, agreements or other factors will significantly influence the project; • Is this a hazard category 1,2 or 3 nuclear facility or other hazardous facility; 	

ID #	Performance Objectives and Criteria ²	Met?
	<ul style="list-style-type: none"> Is the facility required to comply with the DOE requirement for Leadership in Energy and Environmental Design (LEED) Green Building Rating System certification? (OR-2.2) 	
Cost & Schedule		
CS-1	Does the AS identify the projected total project cost (TPC) expressed as a cost range?	
	Does the AS include a table with the lower and upper cost estimate for each of the major work breakdown structure (WBS) elements and the summary totals? (CS-1.1)	
	Is a technical basis provided for both the lower and upper cost estimates? (CS-1.2)	
	Is the cost for the selected acquisition alternative within the established total project cost range? (CS-1.3)	
	Does the total project cost include preconstruction or implementation costs such as the conceptual design, preliminary design, research and development, training and startup costs? (CS-1.4)	
	Does the total project cost address lifecycle costs including costs of dismantling and demolition at project completion? (CS-1.5)	
	Does the TPC identify key milestone events in the acquisition, development and implementation process? (CS-1.6)	
	Is there demonstrable evidence that the TPC is based on the conceptual design provided in support of CD-1? (CS-1.7)	
CS-2	Does the AS include a funding profile for the acquisition alternative?	
	Does this funding profile distribute cost by fiscal years and funding sources? (CS-2.1)	
	Is the funding profile tied to the conceptual design provided for CD-1 approval? (CS-2.1)	
Major Applicable Conditions		
AC-1	Does the AS identify applicable conditions and factors that may affect the operational, design, or execution requirements?	
	Does the AS adequately consider U.S. Environmental Protection Agency, State and other legal entities and their associated requirements? (AC-1.1)	
	Does the AS adequately consider economic factors, workforce issues, security, technological and political sensitivities? (AC-1.2)	
Risk & Alternatives (Technical, Location & Acquisition Approach)		
RA-1	Does the AS identify the major acquisition, management, technical, and cost and schedule risks?	
	Does the risk assessment for each alternative consider external risks as appropriate but focus on internal risks that can be controlled by the project? (RA-1.1)	
RA-2	Does AS consider at least three viable alternatives?	
RA-3	Does the AS consider the appropriate discriminators in evaluating the alternatives?	
	Do the discriminators considered include (as appropriate): <ul style="list-style-type: none"> Scope and definition ES&H Cost & schedule 	

ID #	Performance Objectives and Criteria ²	Met?
	<ul style="list-style-type: none"> • Funding & budget • Technology & engineering • Interfaces & integration requirements • Safeguards & security • Location & site conditions • Legal and regulatory • Stakeholder issues? (RA-3.1) 	
RA-4	Does the selected alternative (as identified in the conceptual design) minimize the overall project risks?	
Business & Acquisition Approach		
BA-1	Does the AS discuss the approach to the acquisition including managing and executing the project?	
	Are contract alternatives evaluated for each of the alternatives considered? (BA-1.1)	
	Are the methods of competition that will be sought, promoted and sustained throughout the course of the project adequately presented in the AS? (BA-1.2)	
	Is each major contract type considered – adequately described? (BA-1.3)	
	Are planned incentive approaches identified and discussed? (BA-1.4)	
BA-2	Does the acquisition approach adequately address Major contracts, Special Acquisition Procedures, Performance Incentives and the Small Business Approach?	
Management Structure & Approach		
MS-1	Does the AS discuss the approach to managing the project?	
MS-2	Is the IPT identified in the acquisition strategy including organizational structure and staffing skills?	
MS-3	Does the AS describe the approach to performance evaluation, verification, and validation?	
MS-4	Does the AS describe the relationships and interfaces between organizational elements – including interfaces with other DOE organizations and stakeholders?	
MS-5	Does the AS include descriptions of project management and control systems that will be used to successfully execute the project?	