

**NOT
MEASUREMENT
SENSITIVE**

**DOE G 413.3-20
7-29-2011**

Change Control Management Guide

[This Guide describes suggested non-mandatory approaches for meeting requirements. Guides are not requirements documents and are not to be construed as requirements in any audit or appraisal for compliance with the parent Policy, Order, Notice, or Manual.]



U.S. DEPARTMENT OF ENERGY
Office of Management

FOREWORD

This Department of Energy (DOE) Guide is for use by all DOE elements. This Guide provides a suggested approach, uniform guidance, and best practices for managing project and contract changes through applying the requirements of DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated 11-29-2010. DOE programs may establish other methods for managing contracts and project change control more suitable to their types of projects.

DOE Guides are not requirements documents, and the information provided should not be construed as requirements. Guides are part of the DOE Directives Program and provide suggested ways of implementing Orders, Manuals, and other regulatory documents.

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1.0 Purpose

The purpose of this guide is to describe effective change control management processes for use in the execution of capital asset projects and their associated contracts. These processes include controlling contract and project changes as integral, synchronized activities over the project lifecycle.

This guide provides a suggested framework for identifying and managing project changes through applying the requirements of DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated 11-29-2010. It also shows how this framework integrates with contract change management processes in accordance with the Federal Acquisition Regulation (FAR) and the Department of Energy Acquisition Regulation (DEAR).

The change control processes should help the Integrated Project Team (IPT) to systematically follow the steps for evaluation and approval of contract and project changes each when applicable to the project, in an integrated manner so that project baselines and contracts, from performance, cost, schedule, budget, and contract management perspectives, remain aligned. The guide provides clarification guidance about the differences in change management for projects performed under M&O and Non-M&O contracts.

The role of DOE change control boards (CCB) and their structure are described. In addition, supplements to the Guide provide some examples of procedures adapted from existing procedures used at various DOE sites. This guide also provides interface actions between DOE and the contractor. The suggested processes described in the guide should assist in setting forth the decision-making flow by listing the potential steps to be taken and who should be involved in those steps.

The guide is for use by all DOE elements and as such attempts to meet the needs of many stakeholders. The Guide is written primarily for use by the Federal Project Director (FPD) contracting officer (CO), and other members of the IPT, in managing the project. Others are encouraged to use the guide as appropriate. Each project and contract may have different needs. Change control processes and procedures, along with the CCB structure, should be tailored as needed for effective management. Further, the content of this guide generally will not apply to the Office of Science projects. Programs may establish other methods for managing contract and project change control more suitable to their types of projects. These other change control methods and procedures should be clearly stated in the project's Project Execution Plan (PEP) and/or the Contract Management Plan (CMP), as appropriate. The IPT should have an established, documented change control process to follow.

In this guide where reference is made to contracts it is referring to the DOE Prime Contract, and not prime contractor's subcontracts, unless otherwise clearly stated.

2.0 Scope

This guide may be used by all DOE offices and the National Nuclear Security Administration (NNSA), their respective field operations, operations' contractors, and subcontractors as specified in their respective contracts.

This guide provides acceptable change control processes for all project phases and may also be useful in managing groups of projects or programs and site-level change control activities. Tailoring should be applied based on project complexity, size, and duration and the skills of available personnel in change control management.

The FPD, with support from the IPT which includes the CO, recommends the level of project change control management tailoring in the PEP which is approved by the acquisition executive (AE). Similarly, the CO, with support from the IPT which includes the FPD, describes any tailoring of contract change control management in the approved CMP, when this situation applies. For sites with multiple projects under a single contract, the site manager may establish change control methods for the multiple projects by issuing site instructions that would be documented in the PEPs. Tailoring is discussed in Section 6.0 of this guide.

This guidance is intended to meet, but is not limited to, the following objectives:

- Identify, plan, and initiate performance baseline (PB) requirements subject to change control.
- Identify the project change control management processes.
- Provide guidance for integration of project baseline changes and contract changes
- Identify the steps necessary to facilitate the implementation of those processes.
- Suggest membership, roles, and responsibilities for the IPT and change control boards (CCBs).

The processes presented in this guide are based upon a number of assumptions:

- Logical planning, including the establishment of a measurable baseline
- Compliance with Federal and Departmental policies and procedures
- Well-trained Federal project and contracting personnel working together to meet contract and project objectives
- Approved project and contract performance baselines
- Management information systems that provide the data necessary for a project team to implement sound decisions.

On the basis of these assumptions, the FPD and CO, with the IPT, can use the processes in this guide to appropriately manage changes in project conditions as they arise. As the FPD and CO manages the changes, they can inform senior management and have confidence that their project will meet its objectives in accordance with the approved project baseline and contract.

3.0 Change Control Process Overview

A mature and rigorous, integrated contract and project change control process is a very important element of DOE's management framework and activities. A key goal of contract and project change control is to ensure PB thresholds are not exceeded. Integrated change control is an important management process that 1) ascertains when a change is required; 2) ensures that the required change is agreed upon; 3) manages the actual change when and as it occurs; 4) ensures that the contract remains aligned with the project; and, 5) identifies who approves the changes at the various scope, cost, and schedule thresholds. Formal change control includes not only the decision-making framework for assessing, negotiating, and implementing project and contract changes, but also includes management and performance tracking systems, authorization and control levels, budgeting and financial management, and contract and project documentation.

Project baseline changes include changes to any component of the PB as well as the Performance Measurement Baseline (PMB). Figure 3-1 shows the components of the contract and the PB. Since projects are executed through contracts, project changes may require contract changes. For clarity, one should be careful when discussing “baseline changes” since the term is often used interchangeably to refer to changes to the PB or the PMB. The terms PB and PMB are different, as shown in Figure 3-1. The original PB is established and documented at critical decision (CD)-2 approval and represents the Department’s top-line commitment to deliver the project’s defined scope by a particular date (CD-4) at a specific cost. The PMB is a subset of the PB and is used to manage project cost and schedule using the Earned Value Management System (EVMS). Refer to DOE G 413.3-10, EVMS, for further clarification of these terms.

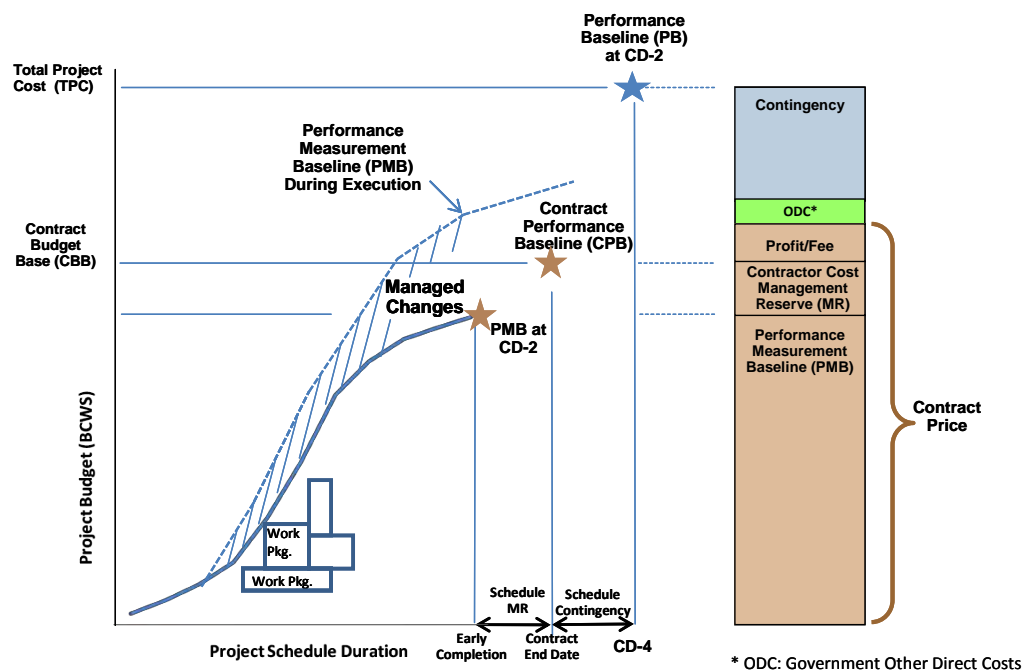


Figure 3-1 Project and Contract Performance Baselines—Key Terms and Relationships.

The PB includes the contractor-controlled PMB, contractor-controlled Management Reserve (MR), and DOE-controlled contingency. The cost components also include any other

Government direct costs (ODCs), not to be confused with contractors' other direct costs, and the maximum contractor's profit/fee (if applicable). The scope of work in the PB is generally quantified at the highest level by Key Performance Parameters (KPPs). The PB also includes the Total Project Cost (TPC) and the project completion (CD-4 approval) date. A preliminary baseline may be established prior to CD-2 approval and for internal project tracking. The approach and principles described herein may be used for this preliminary baseline management.

Project baseline changes include

- movement of budget within control account constraints (no contract change)
- movement of budget between control accounts, within PMB constraints (no contract change)
- movement of undistributed budget into control accounts (no contract change)
- movement of MR into control accounts (no contract change)
- movement of cost or schedule Contingency into contract performance baseline (CPB) (CPB=PMB+MR) (contract change for Non-M&O contract)
- establishment of new performance measurement baseline exceeding CPB as the result of failure to meet original objectives, with no change in scope (Over Target Baseline) (possible contract change)
- project schedule changes, possibly resulting in an Over Target Schedule (possible contract change).
- KPP changes (possible contract change)
- increased Total Project Cost (TPC) (possible contract change)

To keep a project on-track, a manager monitors and controls changes at each control account, and keeps a keen eye on performance, future planning packages, and emerging risks (threats and opportunities). The manager takes proactive steps through the established project and contract change control process to re-plan future work as appropriate.

For projects executed under Non-M&O contracts, a baseline change may also require a contract change. To ensure that the contract remains ~~aligned~~ with the project, the process for making contract changes is integrated with the project change process so that the contract reflects the changes in the project plan. Some baseline changes may be within the contractor's control so stipulated in the contract statement of work and planned to be accomplished within the CPB. Other changes, such as changes to contract scope, cost, or schedule or the use of DOE contingency, require approval of the Government and a modification to the contract, which should be negotiated prior to approval of the project change. Only the Contracting Officer is empowered to execute contract modifications on behalf of the Government. Change orders may also be issued for directed changes. Sections 3.3.1 and 3.3.2 discuss non-M&O contract

modifications. For change orders issued but not yet negotiated the work is considered authorized unpriced work (AUW) and should be tracked accordingly.

For projects executed under an M&O contract, contract changes are infrequent because the M&O contract statement of work is usually broad and the changes clause allows significant flexibility when issuing change orders (see Table S1-4, Comparative Overview of Non-M&O and M&O Contracts). Section 3.3.3 discusses M&O contract change control. Where more than one project is managed under a single contract, each project should have a CPB established.

Project and contract performance management are two key processes for successful project execution. The third key process for successful execution is maintaining the project within the approved budget. If changes occur or are expected that will cause the project budget to be exceeded, the FPD and program office management should determine if additional funds are available and the funding source prior to approval of the project or contract change. Reduction in project scope which does not impact the project's KPPs should first be considered to stay within budget. Otherwise, changes to the performance baseline may necessitate additional budget authorization and a revised funding profile. Congressional notification may be required.¹

If the project costs grow without scope changes, the CO, with input from the FPD and IPT, may authorize the establishment of an Over-Target Baseline (OTB) budget and/or schedule. Sections 3.2.1 and 3.3.1.2 discuss OTB with respect to project baselines and contracts. An OTB is used for planning, control, and performance measurement of authorized work to improve managerial control over the execution of the remaining work in a project. It may be necessary to execute a "cost growth" modification to a contract to obligate additional funding without adjusting work scope.

Figure 3-2 provides a visual depiction of the interrelation of the three key elements—project and contract performance baselines, and the project budget—to ensure project alignment.

¹ For Line-item Capital Asset projects, if the change exceeds the Congressional notification threshold (e.g., 25% over approved budget per 50 USC Ch 42 Sub Ch VII Part A Section 2744).

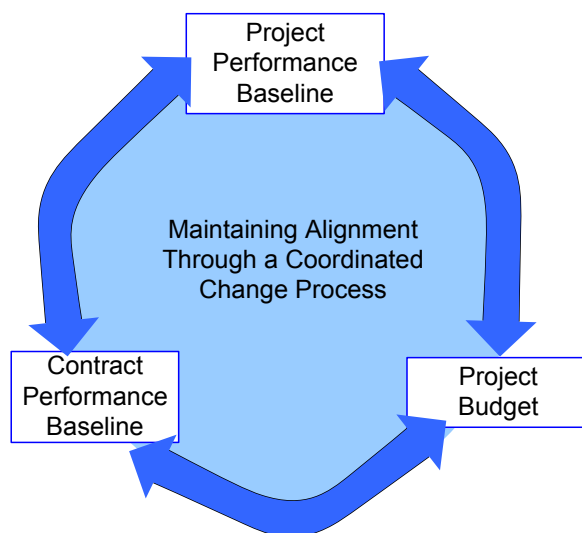


Figure 3-2. Maintaining Alignment through Integrated Change Control

The detailed processes for initiation, review, and approval are discussed in the following sections. Section 4.1 provides integrated process flow charts and step-by-step action descriptions for projects using both Non-M&O and M&O contracts.

To implement the change process, a project CCB should be established to support the decision maker as discussed in 3.1. Section 3.2 discusses project change control. Section 3.3 discusses contract change control. Each section includes discussion of approval authorities.

3.1 Change Control Boards

The AE should ensure that the project team has established an integrated DOE contract and project CCB as specified in the PEP, including approval authority levels. A formal charter should be included in the PEP or as a separate, standalone document. The CCB functions to support the project management and contract management decisions by the approval authority. The CCB should conduct special board meetings to review specific project or contract change proposals. CCB members, as part of the IPT, may participate in regular project reviews.

The CCB should include a representative from all major internal stakeholder groups that could be affected by the project and play a role in the success of its implementation, such as CO, technical representatives, safety, quality assurance, program representative, contracting officer's representative (COR), and chief financial officer or representative. Several stakeholders in one or more functional areas may be needed for additional analyses or reviews, in order to help provide the necessary information to the CCB to support decision making. The contractor is not a member of the DOE CCB.

At sites with multiple projects under the same contract a contract-level or site-level CCB may be more appropriate to support the FPD, CO, and site management in review of contract and project changes.

For other approval levels, such as the Program Secretarial Officer (PSO) or the Secretarial Acquisition Executive (SAE), advisory boards (change control boards) may also be established to assist the approval authority in the review of change requests as discussed in the next section. The SAE chairs the Energy Systems Acquisition Advisory Board (ESAAB).

3.2 Project Changes

As required by DOE O 413.3B, the project's preliminary PEP, which is approved by the AE at Critical Decision (CD)-1 (and updated and revised for CD-2), should provide approval thresholds specifying the control each organizational element has over project baseline change approval and the project change control process. Project change approval thresholds for changes within the approved performance baseline range from the contractor to the AE. The AE may delegate all change control authority within the PB to the Program Manager, Site or Field Office Manager, FPD, or others as specified in PEP. The SAE and US or NNSA Administrator are the approval authority for scope, schedule, and cost changes to the PB for both major system (MS) projects and non-MS projects as defined in DOE O 413.3B. The US may delegate change approval authority through a formal memo to the PSO.

Project changes can range from minor design improvements, to design evolution, or to major impacts in the project baseline due to directed changes. Some examples of project changes are listed below:

- A project's design requirements change due to new program input requiring a significant redesign.
- Due to design changes, the project schedule is projected to delay the completion date given in the approved PB by seven months after the approved completion date.
- Detailed safety analysis reveals that the ventilation system should be upgraded to a higher safety category.
- More piping is required for a system than was estimated at CD-2 as part of the normal project design development.

The above examples of changes require approval at levels ranging from the SAE to the contractor. For a typical change the contractor or the FPD prepares a baseline change proposal (BCP). A BCP may be further categorized by the impact of the change such as a deviation to the PB, a change using contingency, or one using management reserve (MR). Table 3-1 shows the approval authorities for the various levels of changes. For a more complicated project or group of projects, Table S1-1, Supplement 1, provides a sample table showing approval authority for project changes as delegated by the AE. These example tables could be used in a project PEP with specific cost and schedule values tailored to the project. The PEP includes or references the project change control organizational elements and the roles and responsibilities for each organizational member. Supplement 1, Table S1-2 provides a typical FPD-level change control organization and roles and responsibilities. At the SAE level, the ESAAB assists the SAE in reviewing the change. For some projects and sites, a CCB may be established and chaired by the

site manager or designee. For some sites, this site-level CCB may replace the FPD-level CCB—especially when many projects are managed at a program level under a single contract.

Table 3-1. Change Approval Authority for Project Changes

Approval Authority	BCP Type	Project Change Thresholds
SAE—Deputy Secretary	Deviation (change to PB)	<ul style="list-style-type: none"> • Approve: <ul style="list-style-type: none"> ○ TPC increase in excess of the lesser of \$100M or 50% (cumulative) of the original CD-2 cost baseline. ○ Any change in scope and/or performance that affect the ability to satisfy the mission need or are not in conformance with the current approved PEP and PDS • Endorse: Reduction in funding adversely affecting approved funding profile • Notify (SAE and OECM) of: <ul style="list-style-type: none"> ○ Any PB deviation (approved TPC, CD-4 date, or any performance and scope parameters that can not be met) ○ CD-4 schedule change of 12 months or more from original PB; post CD-2 projects terminated, or projects no longer meeting Department objectives.
Under Secretary/ NNSA Administrator <i>May be delegated to PSO</i>	Deviation (change to PB)	<ul style="list-style-type: none"> • Approve: <ul style="list-style-type: none"> ○ PB changes below the SAE level ○ Any slippage of the CD-4 date.
Acquisition Executive <i>May be delegated to Site Manager or FPD</i>	Contingency (change within PB)	<ul style="list-style-type: none"> • Approve: <ul style="list-style-type: none"> ○ Any change to the PEP ○ Use of Contingency up to the approved TPC or CD-4 date for managing DOE owned Risks
Contractor Project Manager (PM)	MR (change within CPB)	<ul style="list-style-type: none"> • Approve: <ul style="list-style-type: none"> ○ Use of MR for managing Contractor Risks ○ As specified in the Contract

Table S1-3, Supplement 1, provides a series of scenarios of various levels of changes and the approval authority according for an example project.

3.2.1 Baseline Change vs. Variance Guidance

Once the PMB is established, changes are expected and the project team should anticipate them. Internal adjustments to plans for future actions are a normal management process as events happen, variances occur, and situations change (ANSI EIA-748). The premise of Earned Value Management is to identify current and potential variances and use that information to proactively mitigate impact by taking action.

Depending on the circumstances and as allowed by the PEP, ANSI/EIA-748, and the contractor's EVMS documentation, the FPD may decide to attempt to eventually mitigate the circumstances causing potential or actual negative variances through various means such as increased productivity or efficiency on future work. Reasons for variances may include

- Contractor performance that is different from the baseline plans

- Contractor rework
- Increase in cost to complete work assigned due to estimating error
- Additional work required to complete assigned scope due to estimating or planning errors
- Normal material and contract pricing variations
- Additional time to complete work assigned due to estimating inaccuracy
- Other estimating errors

In situations where excessive variances mask the ability to adequately assess current performance and take mitigating actions, the Contractor, in consultation with the DOE, may propose rebaselining. Rebaselining is the general term used for describing a major realignment of the performance measurement baseline to improve the correlation between the work plan and the baseline budget, scope, and schedule. Rebaselining does not add or change existing scope of work, it merely changes how and when it may be accomplished within the constraints of the existing contract. Rebaselining may refer to either replanning or reprogramming² as discussed below. For further information refer to the OTB Handbook, listed in Appendix C, References.

- Replanning is a realignment of schedule or reallocation of budget for remaining effort within the existing constraints of the contract. In this case, the total allocated budget (TAB) does not exceed the CBB, nor is the schedule adjusted to extend beyond the contractually defined milestones. Replanning activities include the movement of budget within a control account, between the control accounts, and application of MR.
- Reprogramming is a comprehensive replanning of the remaining performance management baseline that results in a total budget and/or total schedule in excess of contractual requirements. If the situation arises whereby available budgets for the remaining work are insufficient to ensure valid performance measurement, ANSI/EIA-748 provides for a comprehensive reprogramming of the remaining PMB that results in an Over Target Baseline (OTB) and/or an Over Target Schedule (OTS) that exceeds the contract target cost or work is scheduled beyond the contract completion date. An OTB is for performance measurement purposes and does not relieve the contractor of contractual schedule and cost commitments. It can restore much needed control to a contract that has had poor execution or an unrealistic plan for the remaining work. The key benefits of a reprogramming are an executable and achievable baseline plan, renewed buy-in from the project team, meaningful performance indicators, and restored confidence.

² The terms reprogramming, replanning, and rebaselining used in context of the OTB refer to contract budget and baseline and are not to be confused with reprogramming in the context of Federal budgets, or baseline changes to the Federal PB.

Because OTB budgets and schedules do not supersede contract values and schedules and are implemented solely for planning, controlling, and measuring performance on already authorized work, a contract modification is generally not needed; however, in most cases the CO must authorize the contractor's use of OTB. If the new schedule results in an OTS situation, both parties must recognize that the existing contract milestone schedule still remains in effect for purposes of contract administration and execution. The new dates in the OTS are for performance measurement purposes only and do not represent an agreement to modify the contract terms and conditions.

The CO will need to issue a "cost growth" modification to obligate additional funding without adjusting work scope. These modifications are for funding only, not performance measurement budget. A cost growth modification does not authorize a contractor to increase the budget at completion (BAC) by the amount of the modification. Section 3.3.1.2 describes the steps the CO and the FPD should follow when establishment of an OTB becomes necessary because of cost overrun. In situations when contract changes are resulting from both additional scope and cost overrun, the contract modifications should clearly delineate the cost and schedule associated with each category of change.

MR is controlled by the contractor and is applied to the PMB via BCP during replanning efforts. The purpose of MR is to provide for budget associated with work that is within the overall contract scope but not within the scope of an existing control account due to unanticipated events that cannot be predicted, such as underperformance, planning errors, technical re-directions, or rate increases. MR is not used to offset accumulated overruns or under-runs and it is not a contingency budget used for new scope outside the contractual statement of work.

When new scope is added or removed, the budget associated with the scope moves as well. An example would be a change to the project scope issued by DOE. Contingency is controlled by the FPD and is applied via appropriate contract and BCP actions to add new scope to, or change requirements of, the project as stated in the contractor's work scope. Application of contingency requires a contract modification and does not automatically entitle the contractor to additional fee/profit if done for other than new scope or a requirements change, nor does application of MR or contingency to the PMB erase past variances.

Rebaselining is done via a BCP to adjust the PMB to provide a basis for more meaningful project performance assessment and reporting. Application of MR or contingency to the PMB only affects the future portion of the baseline; such use does not eliminate past variances due to difference between performance and the approved baseline plan. OECM—via its monthly assessment of Project Assessment and Reporting System (PARS) II data, other relevant project documentation, and discussions with the FPD, IPT, or program personnel—assesses the impacts of these variances and PMB adjustments on the overall project PB in the monthly project status and assessment report.

Some examples of events that prompt project baseline changes where MR or DOE contingency may be used are listed below. The application of MR or contingency will depend on the contractor's responsibility as stated in contract requirements and scope of work.

- Changes in scope (valid use of DOE contingency and requires a contract modification with a modified statement of work and with budget commensurate with scope either added to or deleted from the CBB)
- Unusually severe weather, e.g., hurricane (valid use of DOE contingency)
- Unfavorable market conditions (valid use of MR)
- Design development (valid use of MR)
- Technical and programmatic risks realized (valid use of MR or contingency depending on the risk owner)
- Material and price variations outside normal range due to unusual, unexpected market conditions (usually covered as risks—valid use of MR or contingency depending on the risk owner).

3.2.2 Sources of Project Changes

Changes to projects may occur from many sources as discussed in the following subsections. Project changes do not always require a contract change.

3.2.2.1 Configuration Management (Design Evolution)

The goal of configuration management is to ensure and document that project facility, structures, systems, subsystems, and components, as well as supporting documentation, interface physically and functionally. This process also ensures that the project's configuration agrees with the performance objectives defined in the technical baseline and that schedule and cost baselines are established, approved, and controlled. As part of the design process, a code of record is established as part of the project design requirements. These requirements are controlled using configuration management processes. See Appendix B for the code of record definition.

The FPD should initiate a configuration management system early and ensure the delivery of complete as-built documents at the close of the project. Configuration management control begins with baselining requirements and ends with project completion activities. The project configuration management system includes a design input, design requirement, and facility configuration control system. A change to the facility configuration may become a source of a project baseline change.

3.2.2.2 Risk Management Process

The risk management process is a continuous process throughout the project. Baseline changes may result from the risk management process. First, when a risk is identified, a risk-handling action may be developed to reduce the risk. Second, the risk-monitoring process may result in a new project scope strategy or a modified risk-handling action. A third source of baseline changes is a realized risk that results in the use of MR or contingency. (See Appendix A for definition of terms.) If these activities represent added scope to the project PMB, a baseline

change should be processed, and, if applicable, a contract change processed in parallel. Refer to DOE G 414.3-7A for further information on the risk management process.

3.2.2.3 Project Trend Process

The FPD should have a forward-looking process to identify potential issues that may become project changes. Many projects use a trend process to provide this forward-looking process. The Trend Process provides a formal, early warning method to identify and track possible deviations from the project baseline. The trend may be a projection of increased costs based on experience to date, a known future project change, or increased pricing. Typically, any contractor or IPT member may identify and document a trend. The trend goes through a review process to determine its validity and impact on the project, if any. The trend may ultimately result in a baseline change.

3.2.2.4 External Project Changes

External changes result from events outside the control of the project team. Examples of external events that typically result in a baseline change to the project are changes in congressional funding, external regulation, and programmatic mission. External changes normally result in directed project changes.

3.2.2.5 Directed Project Changes

Directed changes are caused by DOE policy directives (such as those that have the force and effect of law and regulation), regulatory, or statutory actions and are initiated by entities external to the Department, to include external funding reductions. Directed change decisions are reviewed and verified by OECM and OMB and follow the appropriate baseline management process.

3.2.3 Project Performance Baseline Change Process

The following steps describe the typical process for making changes to the contractor-controlled PMB and, in some instances, may result in changes to the PB. It should be noted that these steps are necessary but not sufficient when the change involves a contract modification. The contract change process is described in Section 3.3, and the integrated contract and project change process is described in Section 4.0.

The process described below is generally applicable no matter the level of change approval authority required. As the approval level moves up the chain of command, additional materials, briefings, etc. may be required.

1. **Initiating a BCP:** When a Control Account Manager (CAM) observes or is presented with a potential scope, schedule, or budget change the CAM notifies the Project Manager (PM). The CAM works with Project Controls to define the impacts of the proposed change. The CAM then submits a change, using a BCP Form, to the Project Manager. Project Controls staff generates and maintains a current BCP Log, assigns a BCP number, and summarizes the schedule and/or budget impact of the proposed change.

2. **Preparation of BCP Package:** The CAM, supported by Project Controls, is responsible for the preparation, accuracy, and completeness of each BCP package, which contains the documents to support proposed budget and/or schedule change(s). Each BCP is:

- Prepared using standard templates and formats.
- Tailored for the level and complexity of the change.
- Reviewed for consistency, completeness, correctness, and appropriate routing by Project Controls before submittal to the CCB.

The BCP should document information, including the following:

- **Scope Change:** This is an addition, deletion, or transfer of work scope to/from a body of formally authorized work represented in one or more control accounts and affected WBS elements.
- **Budget Change:** The budget of a given element of authorized work, which is currently planned in a future portion of the PMB, is newly estimated to be different than the budget originally associated with that work. In such a case, there have been no changes in requirements or objectives of the work. Typically, there are no activities added to or deleted from the PMB schedule.
- **Schedule Change:** Project priorities or unforeseen events may result in re-sequencing of project activities which may cause a change in the timing and/or definition of controlled or earned value milestones.

Consequence of Not Approving: If appropriate, the project manager (PM) attaches an impact statement to the BCP package explaining the consequence of not approving the BCP. **Budget Source Impact:** The PM, with the assistance of Project Controls, attaches a cost impact statement to the BCP package when budget is requested, returned, and/or transferred. This report shows the financial impact of the proposed change by WBS. This information is relevant when MR or Contingency is requested or returned or when budget (and scope) is transferred. This information is reflected on the BCP form and entered in the BCP Log when a BCP number is obtained. When scope is moved between groups or in the schedule, the corresponding budget will accompany it, resulting in a scope and budget transfer.

A typical BCP package includes:

a. **Reason/Justification** (The driver of change typically falls into one of the following categories):

- **Design Development:** Normal design development may result in significant scope and schedule changes for future work within and between control accounts. MR

may be required to cover the changes. DOE contingency should not be used to cover normal design development changes when there have been no changes in requirements or objectives of the work.

- **Risk Mitigation:** During the normal process of risk identification, monitoring and control, additional risk mitigation actions may be identified which may add scope and schedule to the PMB. MR or Contingency may be required to cover newly identified risk mitigation actions, depending on the risk.
 - **Realization of Risk:** Additional scope and schedule may be required if a risk is realized. MR or contingency and/or additional project TPC funding may be required, depending on the risk event.
 - **External changes:** Changes external to the project such as regulation changes, directed scope or schedule changes, reduced budgets, economic uncertainties, etc. may require scope and schedule changes. Normally, additional funds are added to the project to cover additional scope and schedule, i.e. neither original project MR nor contingency is used to cover external changes
 - **Improved planning of future activities within the PMB:** As a project progresses, more optimal planning of future activities may be accomplished to incorporate better understood pricing and productivity, construction re-sequencing, changes in subcontracting strategies, etc., or to simply optimize the remaining work schedule. This action normally does not result in the use of MR or contingency.
 - **Poor performance:** When performance deviates from the baseline plan to the point where the remaining work plan is unusable as a performance management tool, the future work is re-planned. This action typically will require MR and/or contingency or even additional TPC funding to cover cost and schedule increases above the current plan for future work. Reduction in the contractor's fee usually accompanies this action. In some cases, more extensive contract actions may take place such as contract termination.
- b. Schedule Milestone Impact Statement:** The PM, with the assistance of Project Controls, provides a printout of the schedule to reflect the Project Milestones that are affected if the BCP requires a Milestone revision. Proposed schedule revisions are indicated on PMB schedule printouts provided by Project Controls to reflect the pending milestone and date changes with ~~“before”~~ and ~~“after”~~ versions. These are entered into PMB schedule if/when the action is approved.
- c. Management Reserve, Contingency, Undistributed Budget or Additional Budget Requirement:** The PM, with support from Project Controls, indicates if the impact of the change will result in a request for expenditure of project Management Reserve, Contingency, Undistributed Budget or Additional Budget. The PM decides whether to process the baseline change or allow the affected CAMs to carry variances. Any changes to the project and use of any management reserve, contingency, undistributed budget or additional budget is approved and implemented following the baseline change control

process documented in the PEP. These change approvals are documented in the BCP including the applicable supporting documents and all changes are documented on a Change Control Log. The Change Control log includes undistributed budget, management reserve, contingency, performance measurement baseline, and contract budget base information.

- d. **WBS Affected:** The CAM indicates the Work Breakdown Structure (WBS) elements affected as a result of the change. If the change impacts other control accounts, the CAM notifies the PM and other affected CAMs to insure all issues are brought forward prior to approval of the change.

3. BCP Approval and Disposition:

- a. If the BCP approval is within the contractor's authority, the CAM obtains signatures from Project Controls, and submits the BCP package to the PM. After resolving inputs received from the PM, the BCP can be approved, approved with changes, disapproved, or returned for revisions, with notification to the FPD.
 - b. If the BCP action is outside the contractor's authority, the CAM obtains signatures from Project Controls, others, as necessary, and the PM. The contractor submits the BCP to the FPD (and CO, if a contract change is contemplated) for DOE action. If approved for DOE action, such as authorization to access DOE Contingency, the change documentation is transmitted in accordance with the contract management procedures to the DOE Contracting Officer (or the designated DOE official for M&O contracts). Section 4 provides details of the integrated contract and project change steps for processing for approval of BCPs and contract modification. Changes that require DOE approval are reviewed by an appropriate CCB that includes both contract and project personnel. For Non-M&O contracts, an Independent Government Cost Estimate (IGCE) is always needed when the change involves additional scope to be incorporated into the contract. In addition, depending upon the magnitude of the change an Independent Project Review (IPR), an External Independent Review (EIR), and congressional notification may also be needed. The FPD prepares briefing materials for CCB meetings, including briefings for pre-ESAAB and ESAAB meetings.
 - c. **Contract Change:** For projects under Non-M&O contracts, a normal part of the BCP evaluation and approval is to evaluate and determine early if a contract change will also be needed. See Section 3.3.3. When the project change also involves a contract change, the steps for preparing and approval of contract change documentation should proceed in parallel with project change control process. Contract changes should be negotiated prior to requesting approval of a BCP. If the change is external to the project, a contract change may be needed even for some projects under an M&O contract. See section 3.3.3. Contract modifications should not be definitized until after the AE approves the BCP.
4. **Updating the PMB:** The CAM updates all affected documents that reflect scope, schedule, and budget information and assures that these updates are consistent with the approved BCP and contract modification, if required. This is accomplished in a timely manner, typically

within 30 days. Once done, Project Controls completes the BCP log to indicate when the updates were made and by whom. The contractor submits an update for PARS II reflecting the change. Contract change documentation is explained in Section 3.3.

3.3 Contract Changes

Projects are executed through contracts. If a project change necessitates a change to the contract, the CO acting within the scope of his/her authority is the only one empowered to execute a contract modification. For non-M&O contracts, a project change may require a contract modification, depending on the extent of the change. Changes affecting the contract-defined scope, cost, or schedule will require a contract modification. Throughout this guide, the term “contract” refers to DOE prime contracts, not prime contractor subcontracts unless otherwise stated.

Of the many different contract types, DOE uses M&O and non-M&O contracts. Supplement 1, Table S1-4 highlights the key differences of the two contract types, including major differences related to change control.

Sections 3.3.1 and 3.3.2 discuss change control for Non-M&O contracts. For M&O contracts if the CO determines a contract change is required, DEAR (Section 970.5243-1, Changes) and the Changes clause in the contract cover the change process. Section 3.3.3 discusses change control on M&O contracts.

3.3.1 Contract Modifications for Non-M&O Contracts Including True-Up

Contract and project performance may be impacted by things not covered in the contract or that exceed limits set in the contract. Examples of the types of things that may impact contract and project performance are differing site conditions, constructive changes, inclement weather, heightened security requirements, or other unforeseen situations. Contract true-up is an instance of contract change that becomes necessary for newly awarded contracts to account for changed conditions since issuance of solicitation. Section 3.3.1.1 provides further discussion of this topic. Where the contract includes FAR 52.243-7, “Notification of Changes”, the contractor has the responsibility to submit a Notification of Change, in accordance with the contract. If considered valid by the CO, a contract modification will be negotiated and executed. If the CO does not agree that the contractor is entitled to a change, the contractor may submit a claim. After the CO reviews the claim and makes a final decision that denies the contractor’s claim, then the contractor may appeal the CO’s final decision to a board of contract appeals or the Federal Court.

In some situations, the Government may initiate changes to a project/contract. In these situations, the FPD and contractor will work with the CO to describe the required changes and a request for proposal will be sent to the contractor. In optimal situations the negotiation for such changes will be completed prior to the contractor performing the changed work. In situations that require immediate action on the part of the contractor, a Change Order must be issued if the contract scope is added to, deleted, or otherwise changed. The Change Order is issued unilaterally and should be definitized at a later date, normally not later than 180 days after issuance. When a Change Order is issued the CO should develop a definitization schedule and

set a Not-to-Exceed amount in order to limit the Government's risk. A Change Order means a written order, signed by the contracting officer, directing the contractor to make a change that the Changes clause authorizes the contracting officer to order without the contractor's consent. Contract modifications, including Change Orders are processed on Standard Form (SF) 30, see Supplement 1, Figure S1-6.

When a Change Order is issued and the change is expected to exceed \$100,000, the CO should require the contractor to maintain separate cost accounts for the change so that actual costs can be used to the degree possible when negotiating the change. FAR 52.243-6, Change Order Accounting, allows for this segregation of costs.

Contract changes are governed by the applicable sections of the FAR (Part 43, Contract Modifications). DOE Order 413.3B requires that prior to approval of a baseline change by the AE, the FPD should coordinate with the Contracting Officer to identify the specific contract changes that may be required, develop an Independent Government Cost Estimate (refer to FAR 36.203 and FAR 15.406-1), establish a schedule for receipt of a contractor's proposal(s), obtain audit support, and ensure the timely analysis, negotiation, and execution of contract modification(s) that comply with regulatory and statutory requirements. After approval of a BCP by the AE, the previously negotiated contract change should be definitized.

The contract change process is implemented in parallel and coordinated with the project change process. A Government/contractor negotiated price should be developed prior to approval of a performance baseline change.

Contracts for projects subject to DOE Order 413.3B require the contractor to develop and deliver to DOE a PMB. There is a direct correlation between the contract estimated cost and the project PMB. The contract price equals the contract estimated cost and available fee. The contractor's PMB plus management reserve equals the contract total estimated cost also referred to as the Contract Budget Base (CBB). The contractor cannot change the CBB, schedule, or statement of work (SOW) that it agreed to in the original award by simply submitting or updating the project's PMB.

A contract management plan (CMP) (see DOE Acquisition Guide, Chapter 42.5) provides the "road map" for administering and monitoring key elements of contract performance. A sound CMP should clearly outline (1) the roles and responsibilities of key DOE officials, (2) key contract milestones and other performance requirements, (3) processes for ensuring that the rights and remedies of the parties remain operational, and (4) an effective contract change control process.

Upon notification of the need for a change to the contract, either through a proposed BCP or a notification submitted by the contractor in accordance with the Notification of Changes clause, the CO should work closely with the FPD to determine whether a change to the contract is, in fact, necessary. Only changes to the statement of work (SOW) that have been vetted through the formal CCB process should be implemented by contract modification. Depending on the urgency of the required change, the CO should make a determination about issuing a Change Order or pre-negotiating the change. Time permitting, pre-negotiated changes are the most preferred method for changing a contract. Not all changes approved by the CCB will result in a

change to the contract. It is imperative that all stakeholders understand prior to approval of BCPs whether a contract change is required. Changes to project PMBs or the receipt of a revised PMB from a contractor do not constitute a contract change or a baseline change proposal.

COs should:

- not issue unpriced change orders unless absolutely necessary
- always:
 - Be alert to potential change issues and circumstances
 - Insist on proof of entitlement and demonstration of quantum in REA negotiations
 - Follow DOE and FAR procedural requirements for cost analysis and negotiation
 - Include ceiling prices and definitization schedules where unpriced change orders are issued.
 - Insist upon delivery of clearly & definitively itemized detail pertaining to any changes affecting cost, scope and/or schedule.

FAR Part 43 identifies two types of modifications that can be executed by the contracting officer: unilateral and bilateral modifications.

Unilateral Modifications are changes to the contract signed only by the contracting officer.

Government contracts will usually contain a "Changes" clause permitting the Contracting Officer to make [see FAR 43.103(b)] unilateral changes (signed only by the Contracting Officer) in order to make administrative changes; issue change orders within the scope of the contract and in accordance with the terms of the specific "Changes" clause of the contract; make changes authorized by other clauses (the Property clause, Options clause, or Suspense of Work clause); and issue termination notices are typical examples.

Administrative changes are changes in payment office, or appropriation data. Change Orders are unilateral modifications specifically authorized by a Changes clause in the contract. A number of contract clauses anticipate unilateral changes by the contracting officer. The Government Property clause, Options clauses, and Suspension of Work clause are typical examples.

It is important to note that Change Orders are usually consummated in two documents: the change order and a supplemental agreement reflecting the resulting equitable adjustment in contract terms. The Change Order is unilaterally issued. The second supplemental agreement is a bilaterally signed modification, referred to as the "definitization modification", representing the negotiations conducted and agreed upon by the contractor and the government. In very rare cases, should the parties not be able to reach an agreement, the CO has the unilateral right to definitize the equitable adjustment, leaving the Contractor with recourse under the Contract Disputes Act. For obvious reasons, it is considered beneficial to reach an agreement and definitize the equitable adjustment bilaterally.

Bilateral Modifications are signed by both the contractor and the contracting officer. The contractor signs bilateral modifications prior to the Government Contracting Officer. Bi-lateral

modifications are often referred to as ~~“supplemental agreements”~~ because that is exactly what they represent, additional agreements to be incorporated in and made a part of the original contract. Bilateral modifications [FAR 43.103(a)] are used to make negotiated equitable adjustments resulting from the issuance of a change order, definitive letter contracts, and reflect other agreements of the parties modifying the terms of contracts. Generally, changes to any of the terms and conditions of the contract, other than unilateral modifications described above, should be accomplished bilaterally. This includes revisions or additions to contract clauses, special contract requirements, DOE orders list, etc.

Equitable adjustments required as a result of unilateral modifications under clauses other than the changes clause are also incorporated in this manner. So too are the results of annual Performance Evaluation Management Plans on Cost plus Award Fee Contracts.

3.3.1.1 Contract True-Up

At times, the scope of the contract SOW that was established in a solicitation may change due to a delay in the award of the contract or the amount of work that the incumbent contractor actually completed versus the work that was projected to be completed at the time the solicitation was issued. In this case, the CO should require the contractor to identify the differences in the scope within 60 to 90 days of contract award. Once the differences are verified, the CO, with support from the FPD, should request that the contractor submit both technical and cost proposals addressing the differences. This process has been referred to as a "true-up." Following are the key steps for executing a True-Up modification:

1. Identify differences in scope from what was specified in the solicitation and issue a performance work statement reflecting changes
2. Follow the six-step contract change process described in Section 3.3.2, starting with requesting contractor's proposal that identifies changes related to true-up and prices them. Any other changes, such as new work, deleted work are priced separately.

The true-up should be negotiated as any other contract modification (see the guidance in Supplement 5). The true-up should be completed in a timely fashion and should not wait for the submission or validation of the contractor's project performance measurement baseline.

3.3.1.2 Contract Scope Considerations

Changes within the General Contract Scope

A Contracting Officer is only authorized to make a change to the contract that is within the scope of the contract. Scope determinations fall within the purview of the Contracting Officer, who makes the determination with the assistance of technical personnel and legal counsel. The Changes clause provides the Government with the unilateral right to make certain changes ~~“within the general scope of the contract.”~~ More specifically, such areas include designs, specifications, place of performance, and methods for packing and shipping are identified as candidates for unilateral change and are, as such, within the general scope of the contract.

Cost Overruns and Over-Target Baseline

Because OTB budgets and schedules do not supersede contract values and schedules and are implemented solely for planning, controlling, and measuring performance on already authorized work, a contract modification is generally not needed; however, in most cases the CO must authorize the contractor's use of OTB. If the new schedule results in an OTS situation, both parties must recognize that the existing contract milestone schedule still remains in effect for purposes of contract administration and execution. The new dates in the OTS are for performance measurement purposes only and do not represent an agreement to modify the contract terms and conditions.

All cost overruns do not require the contractor to process an OTB. Contract changes (except for modifications to provide additional funding) are generally not required in OTB situations; however, the CO, with FPD input, should authorize the use of the OTB for reporting. Because OTB budgets and schedules do not supersede contract values and schedules and are implemented solely for planning, controlling, and measuring performance on already authorized work, a contract modification is not needed. If the new schedule results in an OTS situation, both parties should recognize that the existing contract milestone schedule still remains in effect for purposes of contract administration and execution. The new dates in the OTS are for performance measurement purposes only and do not represent an agreement to modify the contract terms and conditions. The CO and the contractor may wish to negotiate consideration, as well as decide to execute a contract modification to formalize the revised expectations via a contract change; however, no other contract modification is necessary.

The CO is part of the OTB process and should authorize use of OTB/OTS on the project, with input from the FPD. The key steps are:

- Acknowledge and authorize the development of OTB/OTS by the contractor
- Agree on an action plan for development and implementation of the OTB/OTS that addresses:
 - Establishing a consensus on the remaining scope
 - Conducting a full assessment of all aspects of the project and contract including performance issues and identification of contract amendments to tighten performance variance thresholds and sets triggers for subsequent contract evaluations
 - Identify if a contract change or PB change is contemplated
- Conduct OTB review
- CO concurs with implementation.

The OTB/OTS Handbook, see the References Section describes a detailed process for implementing an OTB/OTS. Supplement 1, Figure 1-7 provides a sample concurrence memo taken from the OTB/OTS Handbook.

A “cost growth” modification to a contract involves obligating additional funding without adjusting work scope. These modifications are for funding only, not performance measurement budget. A cost growth modification does not authorize a contractor to increase the BAC by the amount of the modification. Execution of a “cost growth” modification to cover an overrun does not automatically mean the use of an OTB is warranted.

Changes Outside the General Contract Scope

When the Contracting Officer determines that a proposed change is outside the scope of the contract, this constitutes a new procurement, thus full and open competition is required pursuant to FAR Part 6, unless circumstances permitting other than full and open competition exist pursuant to FAR 6.3. In addition, unilateral changes that fundamentally alter the original purpose or magnitude of the original contract can leave the contractor without a contractual remedy for increased cost, profit, or time required to perform the contract effort.

3.3.1.3 Contract Change Approval Authority

In addition to the project and program review and approval process for Project Changes, those requiring a contract modification should comply with the policies and guidance established by the Senior Procurement Executive (SPE) for approval of contract actions prior to execution. The SPE’s review and approval of contract actions is accomplished through the Business Clearance Review (BCR) process. The BCR process is performed for the SPE by the Acquisition Planning and Liaison Division (APLD). The review and approval requirements are set forth in Acquisition Guide (AG) Chapter 71.1.

The SPE delegates specific authorities to individuals who are designated as the Head of a Contracting Activity (HCA). An HCA establishes review and approval procedures for a contracting activity and implements an independent review function. The HCA may approve contract actions within their respective delegated authority level. Those actions exceeding their authority should be reviewed in accordance with local procedures and cleared through the BCR process. However, the SPE may waive the requirement for BCR in which case approval authority is delegated to the HCA.

Approval authority for contract modifications will generally follow the model set forth in Table 3-2 below, however, projects and contracting officers should verify the most current policies, procedures, and thresholds rather than relying on this table which is provided for purposes of illustration.

Table 3-2. Contract Modification Approval Authority

Approval Authority	Contract Modification Approval Thresholds
Senior Procurement Executive	<p>The Acquisition Planning and Liaison Division (APLD) performs the Business Clearance Review (BCR) function for the SPE and reviews contract modifications that meet any of the following criteria (funding modifications are excluded):</p> <p>a. Contract modifications that exceed the delegated authority for an HCA. For non-Power Marketing Administration contracting activities, this threshold is currently at \$50 million;</p> <p>b. Any contract modification for which the estimated value exceeds both 20% of the original contract value and \$10 million (for non-Power Marketing Administration offices); or</p> <p>c. Any modification to a contract originally approved by Headquarters, regardless of the estimated value, that involves a significant restructuring of contract terms and conditions (e.g., contract type, deviations/modification of standard clauses).</p>
HCA	<p>Through the established independent review function, the HCA may approve:</p> <p>a. Contract modifications that are within the delegated authority of the HCA (currently at \$50 million for non-Power Marketing Administration contracting activities) provided that the modification does NOT result in either</p> <ul style="list-style-type: none"> • An increase in the estimated value exceeding both 20% of the original contract value and \$10 million (for non-Power Marketing Administration offices) or • A significant restructuring of contract terms and conditions (e.g., contract type, deviations/modification of standard clauses). <p>b. Contract modifications that have been waived for BCR by APLD.</p>
Contracting Officer	Contract modifications that are within the delegated authority of the CO.

3.3.1.4 FAR Changes Clauses

The FAR currently includes more than a dozen variations of the contract Changes clause applicable to various types and kinds of contracts. Each identifies what can be changed, the equitable adjustment that will result and the contractor's obligation to claim the equitable adjustment in a reasonable time. The clauses also address the contractor's obligation to continue performance of the contract as changed. Table S1-5, Supplement 1, provides a summary FAR clauses relating to contract changes.

3.3.1.5 Evaluation of Contractor Proposals

Defense Contract Audit Agency (DCAA) Guidelines for Acceptable Contractor Proposals

Proposals should be evaluated for adequacy within seven days after receipt so that corrective action can be taken immediately. If the proposal is so deficient that an examination cannot be performed, recommend to the Contracting Officer that the proposal be returned to the contractor without audit until such time as an adequate proposal is received. This approach is intended to permit the efficient use of audit resources.

Change Order Pricing

Contract modifications, including changes that could be issued unilaterally, should be priced before their execution if this can be done without adversely affecting the interest of the Government (FAR 43.102(b)). If a significant cost increase could result from a contract modification and time does not permit negotiation of a price, at least a ceiling price should be negotiated and specified in the change order.

FAR Part 15 Cost Analysis Requirements

The cost analysis and cost or pricing data requirements of FAR 15 apply to contract modifications as well as to initial awards. In fact, where competitive pricing is available on initial award, the level of effort for the cost evaluation may be somewhat less than in a post award modification situation, due to the fact that only one proposal is received and evaluated. Whether evaluating a proposal submitted under one of the clauses discussed previously, or an REA alleging a constructive change, the Contracting Officer should comply with these requirements prior to modifying the contract to definitize the equitable adjustment.

Price v. Cost Analysis

The FAR recognizes both price analysis and cost analysis as appropriate methods for evaluating contractor proposals. Cost analysis is used to evaluate the reasonableness of individual cost elements when cost or pricing data are required. Price analysis should be used to verify that the overall price offered is fair and reasonable.

According to FAR 15.403-4(a)(1)(iii), Cost or Pricing Data are required prior to accomplishing the modification of any sealed bid or negotiated contract (whether or not cost or pricing data were initially required) expected to exceed the cost or pricing data threshold (currently \$700,000).... Price adjustment amounts should consider both increases and decreases (e.g., a \$200,000 modification resulting from a reduction of \$500,000 and an increase of \$300,000 is a pricing adjustment exceeding \$700,000). Wherever Cost or Pricing Data are required, the contractor shall execute a Certificate of Current Cost or Pricing Data effective on the date of agreement on price.

3.3.1.6 Request for Equitable Adjustment

Requests for Equitable Adjustment (REA), in the general sense, are requests from a contractor to seek equitable relief as a result of changes that cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under the contract. These

changes may have been expressly ordered by the Government under the Changes clause, may have resulted from the operation of other clauses, or may be related to a constructive change. Whatever their form and origin, REAs are requests to the Contracting Officer to adjust the contract in an ~~equitable~~ way. REAs should be initiated by a Contractor per the Notification of Changes clause(s) included in the contract. If the contract includes the Notification of Changes clause and an REA is submitted without a Notification of Changes being received first, the CO should ensure the contractor complies with the terms of the clause and require the contractor to submit the required notification.

Elements of an REA include:

- (1) Proof of entitlement to an adjustment based on a Government act or failure to act,
- (2) Damages in the form of an increase in the cost or time of performance,
- (3) A causal link between the act or failure to act and the damages, and
- (4) Proof of the amount of the damages.

In order to prove entitlement to an equitable adjustment, a contractor must prove that the underlying change was directed by someone with actual authority to make the change.³

Negotiation of Equitable Adjustments

Negotiations should be conducted either prior to or as soon as possible after the initiation of the change. Changes clauses require the contractor to continue performance of the contract as changed by the Government even if the contractor and government do not come to agreement on an equitable adjustment. This ensures that the Government is not faced with a lack of progress in meeting its needs. Payment for affected items delivered may be withheld until unit prices have been adjusted as part of the equitable adjustment, increasing pressure on the contractor to negotiate. The contractor is incurring actual costs, but until the adjustment is consummated, the contractor assumes the risk that its actual costs will not be accepted as reasonable. As this actual cost increases, so does the pressure to negotiate. The clauses that provide for equitable adjustment also provide for a unilateral contracting officer decision if no agreement can be reached.

3.3.2 Six-Step Contract Change Process for Non-M&O Contracts

The following six step process describes a recommended contract change order process for DOE prime contracts. COs may establish formal Government Contract Change Boards for major construction projects and environmental cleanup contracts. For additional details, refer to the

³ Care should be taken by Government employees to ensure that the contractor is not directed by an ~~implied~~ authority as defined in FAR 1.602-3.

Contract Change Order Administration of Department of Energy Prime Contracts memorandum, April 1, 2008 contracts memorandum, Supplement 5 in this Guide.

1. If the Government needs to make a change in the scope of the contract that affects the estimated contract cost, fee (if any), delivery schedule, or option periods, the CO should issue a change order. The general areas a CO may direct a change are stated in applicable Changes clause cited in the contract. The proper procedure for implementing a contract change is for the CO—after ensuring all internal processes and procedures have been followed—to issue a request for proposal to the contractor with a 30-day response time for submission of the proposal.
2. The impacts for each contract change should be individually evaluated and documented by the CO with the assistance of technical personnel. An IGCE is required. It should be completed prior to receipt of the contractor's proposal. After receipt of the contractor's proposal, the CO ensures that a technical evaluation and cost analysis, including audit and field pricing support when required, is performed and documented.
3. Before negotiating with the contractor, the CO should prepare a pre-negotiation plan (FAR 15.406.1 Pre-negotiation Objectives). After contract negotiations are complete, but before executing the contract modification, the CO obtains a Certificate of Current Cost or Pricing Data per FAR 15.403-4(b)(2) unless an exception applies per FAR 15.403-l(b) or is waived by the HCA (FAR 15.403-l(c)(4)). Certified cost or pricing data is required where there is any pricing adjustment exceeding \$700,000. Any request for a waiver of the requirement to submit certified cost and pricing data should present information and a solid case to support the action sufficient to withstand the scrutiny of internal and external reviews and be within the HCA's delegated procurement authority. For actions that exceed the HCA's delegation, the HCA is required to obtain prior approval from the Office of Contract Management (MA-62).
4. The results of the negotiations are documented with a post-negotiation memorandum (FAR 15.406-3, Documenting the Negotiation). After the appropriate approval by the AE, S-3 or S-2 or their designees for the action, the CO should implement a bilateral contract modification using Standard Form 30 (SF 30), *Amendment of Solicitation/Modification of Contract*, (Figure S1-6, Supplement 1) for all changes that includes release language per FAR 43.204, Administration.
5. Bilateral modifications (supplemental agreements) are signed by the CO and the contractor before the initiation of any changed work. They are used to (1) implement prenegotiated supplemental agreements, (2) make negotiated equitable adjustments resulting from the issuance of a change order, (3) definitize letter contracts, and (4) reflect other agreements of the parties modifying the terms of the contract.
6. In certain urgent circumstances, issuing an undefinitized or unpriced change order may be necessary. In these exceptional instances, the CO may unilaterally direct by contract modification using SF-30 an immediate change within the general scope of the contract. The changed contractual requirement should be limited to the minimum effort required to satisfy the requirement while a proposal is prepared, analyzed, and negotiated. This

method should be used when implementation of the change is urgent due to mission requirements or necessary to minimize implementation costs when delay in incorporating the change could dramatically increase implementation costs.

When a change order is issued, the CO sets a ceiling price for the changed contractual requirements. The ceiling price should be separately identified in the unpriced change order from the pricing structure of the basic contract. The CO may consider utilizing FAR 52.243-6, Change Order Accounting, for changes expected to exceed \$100,000 for visibility into actual costs incurred pending definitization. The process of definitizing an unpriced change order requires a second modification. This second modification definitizes the initial change order. The CO definitizes the change as soon as practicable. The change order process, culminating in a contractor/Government agreement, should not exceed 180 days. Contract change orders and REAs, including the associated contract fee, should be negotiated to the extent possible prior to the incurrence of significant costs.

The CO determines if an audit is required. If required, the CO coordinates with the FPD, contractor, and audit organization for the audit.

3.3.3 Change Control under M&O Contracts

An M&O contract is an agreement under which the Government contracts for the operation, management, or support, on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency. The M&O contract is governed by FAR 17.6 and the DEAR and has unique allowable cost provisions and a broad definition of work. The CO determines whether the potential modification is within the general scope of the contract. M&O contracts, because of their broad definitions of work, are less likely to require a contract modification, but the potential for a modification still exists and should be reviewed.

The M&O contract change process is defined by the DEAR Part 970. The broad scope and size of a typical M&O contract results in relatively fewer contract changes due to project baseline changes. Most project baseline changes can be handled through the budget management process without a contract change. However, if a contract change is required, the process is similar to the non-M&O contract change process. Some notable differences from the non-M&O contract change process are as follows:

- The early involvement of the CO in the project baseline change process is not as critical.
- Because the M&O contractor accounting and business systems are integrated with DOE, the Defense Audit Agency (DCAA) audit of costs covered by the baseline change request is not required.

3.3.4 Change Control under Firm-Fixed Price Contracts

Refer to Supplement 1, Table S1-5 for FAR clauses affecting fixed price contracts.

3.4 Budget Profile Changes

Improved project and financial management integration strengthens project stability and reduces risk. It is the Department policy that in approving the funding profile for the life cycle of the project, acquisition executives determine that the proposed funding stream is affordable and executable within the program's capital and operations budget portfolio. Any changes to the approved funding profile that negatively impacts the project should be endorsed by the acquisition executive, who may not be the Program Budget Officer. Prior to endorsement by the acquisition executive, the Chief Financial Officer (CFO) and OECM are notified of any proposed project funding profile changes so that the CFO can verify that the funding profile is covered within the President's budget.⁴

Funding changes made by the program office as a result of changing program priorities are not considered directed changes.

DOE Order 413.3B requires that the SAE must endorse any reduction in funding that adversely affects the project's approved funding profile for all non-Major System Projects and previously approved SAE BCP actions. OECM shall be notified of these funding decrements.

4.0 Integrated Project and Contract Change Processes

This section describes the recommended project and contract change control processes in more detail, using flow charts to describe the steps in change control and identifying the integration of the project and contract processes. This section also provides examples of project changes.

Figure 4-1 provides an overall flow chart of the recommended change control process for Non-M&O contracts and for M&O contracts when a contract change is required (not a normal case). Table 4-1 highlights each step in the process and provides additional discussion. This process integrates and details the project and contract change control actions as discussed in Section 3. For M&O contracts, Figure 4-2 provides the process flow chart. Table 4-2 details the steps for M&O contracts. Note that the positions described in the flow charts and tables are suggested and the positions should be adapted as appropriate in an implementing project procedure.

⁴ See DOE O 413.3B, Appendix C, Section 15.c for information on funding profiles.

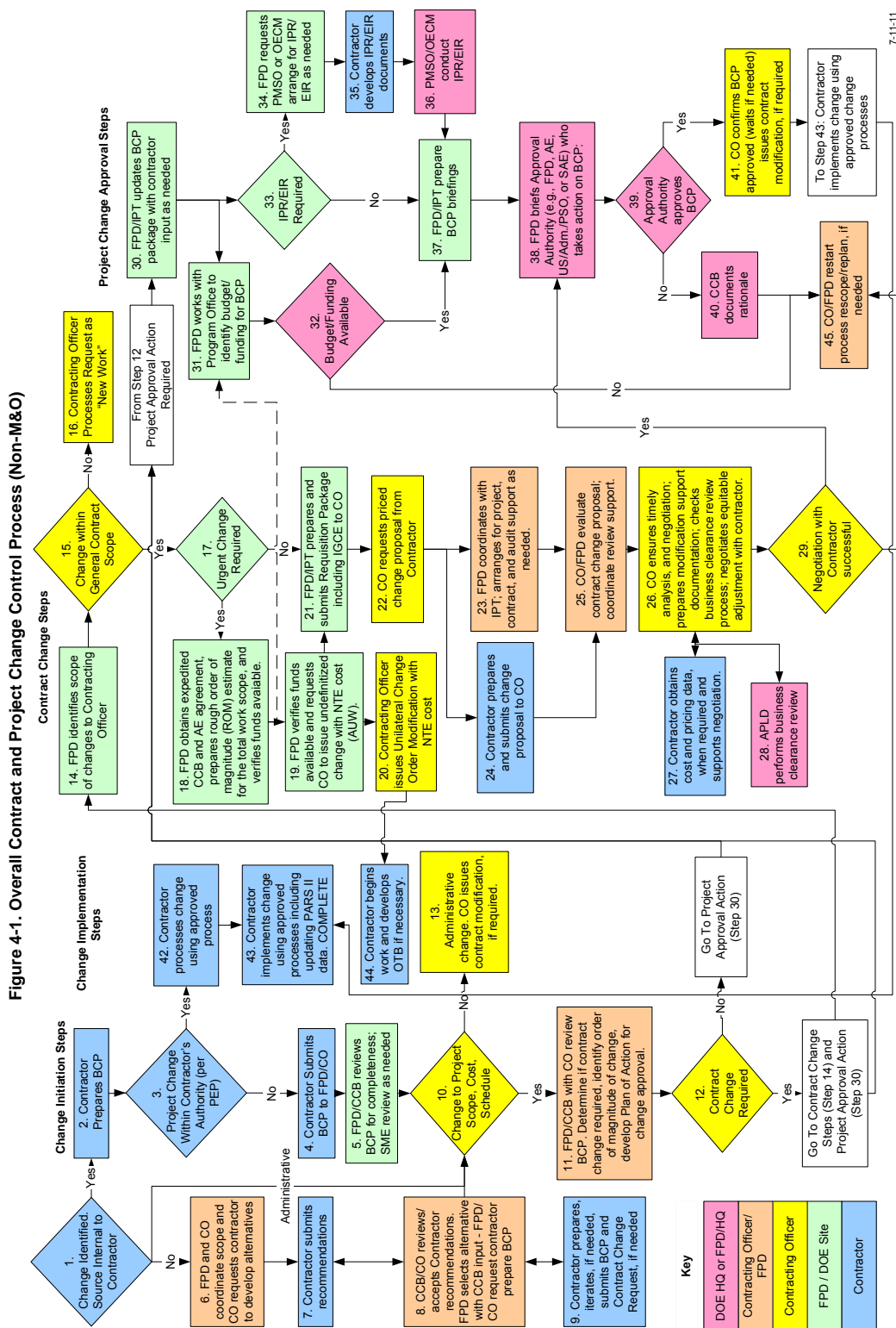


Figure 4-1 Overall Contract and Project Change Control Process (Non-M&O)

Table 4-1. Overall Change Control Process (Non-M&O Contract)

Step	Action
Change Initiation Steps	
1	The change is identified. If the change is clearly administrative and requires a contract modification, proceed to step 10. Is the change internally driven by the project (contractor identified)? If so, proceed to step 2. If not, jump to step 6.
2	<u>For an internally driven change</u> , the contractor Control Account Manager or Project Manager prepares the BCP following the project instruction and submits to the Contractor Change Control Board administrator. Section 3.2.3 provides specifics on the initiation activities and contents of the BCP.
3	Contractor CCB members review the BCP to determine if the change is within the contractor's authority (project change thresholds per PEP; no contract change required). If within the contractor's authority, go to step 42. If not, go to step 4.
4	If the change was not within the PM authority, the PM submits the BCP package to the FPD/DOE CCB administrator for action. The BCP indicates whether the contractor believes a contract change is required. If so, a copy of the request is also submitted to the CO.
5	The FPD/DOE CCB administrator reviews the BCP package for completeness. The CCB administrator distributes it to appropriate project stakeholders, functional area representatives, who may or may not be IPT members, and Subject Matter Experts (SMEs) for review. Jump to step 10.
6	<u>For an externally driven change</u> , the Program Office or other source of external change provides required direction to FPD. The FPD coordinates the scope change with the CO. The CO directs the contractor to prepare an alternatives evaluation.
7	The contractor reviews the scope change. Contractor develops alternatives and submits recommendations to the FPD and CO.
8	The CO and FPD, with support of the Federal Project CCB, reviews and accepts the contractor's recommendations or asks for changes. Once an acceptable recommendation is received, the CCB reviews and accepts the recommended alternative. The CO with the FPD input, requests the contractor prepare a BCP.
9	The contractor develops the BCP and contract change request, as appropriate. The contractor iterates (modifies) the change with the FPD/CCB input/feedback, as needed.
10	If the change affects project cost, schedule or performance requirements (scope), continue on to step 12. If not, the change is administrative but still may require a contract modification, step 13. .
11	FPD and CCB with CO review the BCP. The CO, with support from the FPD and IPT, determines if the contract requires a change and the estimated order of magnitude cost of the change. The FPD and CO develop a Plan of Action for processing the project change, including probable approval level, and contract change if required.
12	If a contract change is required, proceed to the contract change steps (step 14) and the project approval action process, step 30 in parallel. If no contract change is required, proceed to the project approval action process, step 30.
13	For changes not affecting project cost, schedule, or performance requirements (scope); i.e. administrative change, CO, coordinating with FPD, issues a contract modification, if required. A BCP is not necessary.
Contract Change Steps	
14	Assuming a contract change is determined to be required, the FPD, with IPT support, identifies the scope of the contract change and sends to the CO for evaluation.
15	The CO, with support from the Contract Change Control Board, or others as applicable, determines if the change is within the general contract scope. If so, proceed to step 17. If not, continue to the next step.
16	If the change is not within the general contract scope, the CO processes the requisition as a request for new work.

Table 4-1. Overall Change Control Process (Non-M&O Contract)

Step	Action
17	The FPD with CCB input determines if the change is urgent. If not, proceed to step 21. If so, continue to the next step. Some BCPs require immediate action to meet designated project milestones or time frames. In these cases, project progress is either halted or adversely impacted to a significant degree without the approval and implementation of the urgent change request. Urgent is defined as a change that requires initiation before all of the actions necessary for a bilateral contract change can be completed. In most cases, a project baseline change does not require a contract change to an M&O contract. Therefore, this section rarely applies to a project executed by an M&O contractor.
	Contract Change Steps—Urgent Process
18	The FPD obtains expedited CCB review and AE agreement. With support from the IPT, prepares rough order of magnitude (ROM) cost estimate. The CO needs to know an NTE price when issuing an unpriced change order to ensure adequate funds are available to perform the needed work. FPD coordinates with Program Office (Step 31) to ensure funds are available if change may exceed available contingency.
19	After verifying funds are available (either contingency or additional program funds), the FPD requests CO issue an undefinitized change with a not-to-exceed (NTE) cost. A unilateral change order can be used when time constraints preclude immediate negotiations with the contractor. Proceed in parallel with steps 20 and 21.
20	The CO issues a Unilateral Change Order Modification with the costs not to exceed the FPD-provided estimate which provides additional budget in the form of Authorized Unpriced Work (AUW). Go to Change Implementation, Step 44
	Contract Change Steps—Normal Process
21	FPD, with IPT support, prepares and submits a Requisition Package to the CO. The package should include an IGCE (refer to FAR 36.203 and FAR 15.406-1).
22	The CO requests a priced change proposal from Contractor to prepare the change proposal. Proceed to steps 23 and 24 in parallel
23	FPD coordinates with CO and arranges for project, contract, and audit support as needed (including requesting an audit, if required).
24	The contractor prepares and submits a change proposal to CO.
25	The FPD with the CCB including the CO evaluate the contract change proposal. Uses previously identified project, contract, and audit support as needed including an audit if required.
26	The CO ensures timely analysis and negotiation. If a project change requires a contract modification, the contract negotiation is first completed, then the contract modification and baseline change may be simultaneously approved, or the contract modification could immediately follow the approval of the baseline change. In cases where a contract modification is required, the baseline change is approved first; however, the contractor is not authorized to make the changes until the modification is issued (or as authorized by the CO). CO checks if the business clearance review is completed, if required (Step 28). The CO prepares the contract modification support documentation, negotiates an equitable adjustment with contractor (Step 29).
27	Contractor obtains cost and pricing data, when required, and supports the negotiation activities. The CO and contractor complete the Bilateral Modification negotiation.
28	APLD (MA-621) performs a business clearance review, if required.
29	If the negotiation is successful, proceed to step 38. If not go to step 45. Note: the CO may chose to issue a unilateral contract mod to affect the change without restarting the process.
	Change Approval Process
30	The FPD, with IPT support, updates the BCP package as appropriate, obtaining contractor support as needed. FPD submits BCP to the CCB.

Table 4-1. Overall Change Control Process (Non-M&O Contract)

Step	Action
31	The FPD works with the Program Office to identify budget/funding for BCP, total and/or fiscal year, as appropriate.
32	If budget/funding is available, proceed to step 37, in parallel with other steps. If not, go to step 45 to replan the change.
33	The FPD, with support from the Program's Project Management Support Office (PMSO) and OECM, determines if the BCP is within the threshold for an independent project review (IPR) or external independent review (refer to DOE O 413.3B). If not required, proceed to step 37. If so, continue to next step.
34	FPD requests PMSO or OECM arrange for IPR/EIR as needed.
35	The contractor develops IPR/EIR documents, as needed.
36	PMSO/OECM conducts IPR/EIR, resolve issues, and provide review results to FPD for action, including developing a corrective action plan, and resolving any major issues identified. Continue to next step.
37	FPD with IPT support prepares a BCP briefing and coordinates with PMSO and pre-briefs the appropriate CCB as needed. FPD coordinates with OECM/PMSO for pre-ESAAB meeting, as appropriate. If the change exceeds the Congressional notification threshold (refer to 50 USC 2744), the PSO through the DOE CFO, notifies Congress of the projected increase (note the exception for minor projects, 50 USC 2746). Note: Baseline changes should not be approved for the sole purpose of offsetting variances. ANSI/EIA-748-B states that MR is held for unexpected growth within the currently authorized work scope, rate changes, risk handling, and other program unknowns. Generally, MR is held for current and future needs and is not used to offset accumulated overruns or under-runs. The policy should also be applied to the use of contingency. Using MR or contingency to offset variances erases important information useful for effective project management and is counter to the purpose of the EVMS. However, if measuring and managing to the current baseline is no longer viable, and the EVMS is no longer an effective tool for management of the project, the project may be rebaselined.
38	The appropriate Approval Authority (such as FPD, AE, US/Adm./PSO, or SAE) takes action on BCP (Approval thresholds should be delineated in the PEP in compliance with DOE O 413.3B and in accordance with established contract change thresholds. In taking action, the Approval Authority usually uses a CCB to assist in the review of the BCP. In reviewing a BCP, for example: FPD conducts FPD CCB meeting, or AE (PMSO) conducts PMSO CCB meeting; or Under-Secretary/Administrator/PSO conducts ESAAB-equivalent meeting; or SAE conducts ESAAB meeting.
39	If the Approval Authority, with support from CCB/ESAAB, approves the BCP proceed to step 41. When a baseline change is approved, formal approval documentation should be created by the CCB administrator for signature by the CCB chairperson. The contractor should then be authorized to make the changes to the control accounts. The authorized change may be for scope, budget, or schedule. If not approved, continue to the next step.
40	CCB documents rationale for disapproval. When a baseline change request is disapproved, the CCB chairperson prepares formal documentation disapproving the request. The documentation includes the rationale or justification for the disapproval. Go to step 45 for replanning/reevaluation.
41	CO confirms BCP approved (waits if needed). CO issues contract modification, if required. Only COs acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. (The contract change process is summarized in Section 3.3.) Go to step 43.
Change Implementation Steps	
42	Project controls reviews for format, content, consistency, and validity. Subject Matter Experts review, as

Table 4-1. Overall Change Control Process (Non-M&O Contract)

Step	Action
	needed. PM convenes the CCB, which acts on the change following project procedures. Assuming approved, PM directs the project to implement the change, notifying the FPD of the action.
43	The contractor implements the approved change, following approved project procedures and processes. Contractor submits an update for PARS II. PROCESS COMPLETE.
44	<p>The contractor begins work and develops an Over Target Baseline (OTB) for EVMS purposes, if necessary. In response to the urgent change order, the contractor is required to submit an REA outlining the complete impact (cost, schedule, performance, and risk) of the proposed change, which is then negotiated with the CO and formalized in a –supplemental agreement.”</p> <p>The BCP process should be implemented in parallel and coordinated with the contract change process (step 30). A Government/contractor negotiated price should be developed prior to AE approval for major urgent changes. See Step 21.</p>
45	If the contract negotiation is not successful, if funds are not available, or if the project change is not approved the CO and FPD restart the change process, rescoping or replanning the change, if needed. CO/FPD, as appropriate, issue the appropriate request to the contractor.

Figure 4-2. Overall Change Control Process (M&O)

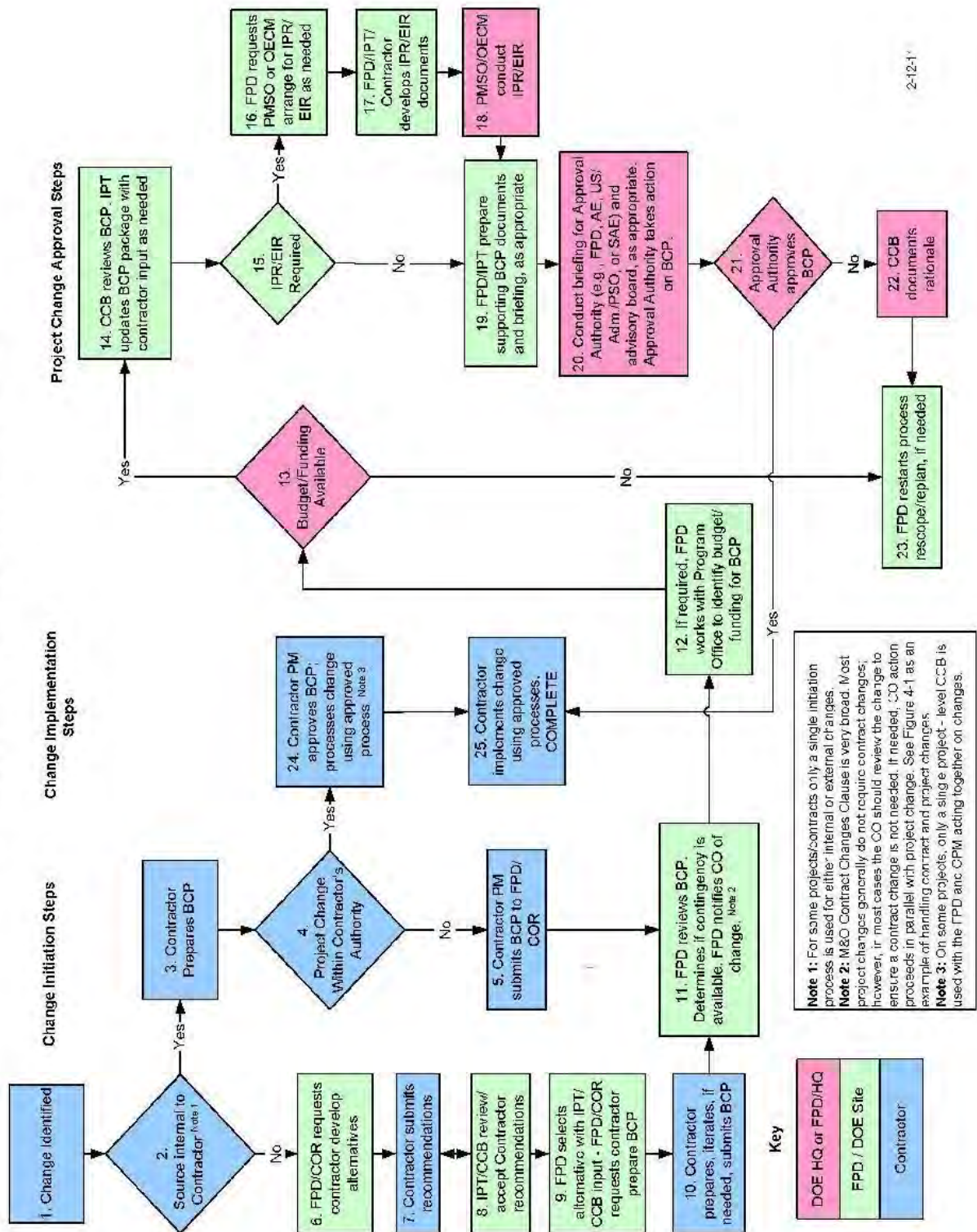


Figure 4-2 Overall Change Control Process (M&O)

Table 4-2. Overall Change Control Process (M&O Contract)

Step	Action
Change Initiation Steps	
1	Change is identified, either by the project team (contractor) or external to the project. Note, for some projects and contracts, only a single process is used for internal or external driven changes. If so, ignore steps 6-10. With a single process, the project-level CCB is integrated with contractor and federal personnel.
2	Is the change internally driven by the project (contractor identified)? If so, proceed to step 2. If not, jump to step 6.
3	<u>For an internally driven change</u> , the contractor Control Account Manager or Project Manager prepares the BCP following the project instruction and submits to the Change Control Board (CCB) administrator. Section 3.2.3 provides specifics on the initiation activities and contents of the BCP.
4	CCB members review the BCP to determine if the change is within the contractor's authority (project change thresholds; no contract change required). If within the contractor's authority, go to step 24. If not, go to step 4.
5	If the change was not within the Contractor Project Manager's authority, the PM submits the BCP package to the FPD/DOE CCB administrator for action. The BCP indicated whether the contractor believes a contract change is required (unusual for M&O contract. If a contract change suspected, the contractor PM notifies the FPD and Contracting Officer. The change control process of Figure 4-1 (Table 4-1) should be followed for contract changes. Assuming no contract change is needed, the PM submits the BCP package to the FPD/COR. Proceed to step 11
6	<u>For an externally driven change</u> , the Program Office or other source of external change provides required direction to FPD. The FPD or COR requests the contractor to prepare an alternatives evaluation.
7	The FPD/IPT/Federal Project CCB reviews and accepts the contractor's recommendations or asks for changes.
8	FPD selects alternative with IPT/CCB input - FPD/COR requests contractor prepare BCP
9	The contractor develops the BCP. The contractor iterates (modifies) the change with the FPD/CCB input/feedback, as needed.
10	The FPD/DOE CCB administrator reviews the BCP package for completeness. The CCB administrator distributes it to appropriate project stakeholders, functional area representatives, who may or may not be IPT members, and SMEs for review. FPD and CCB review the BCP. The FPD/CCB administrator notifies the CO of the BCP, for information.
Change Approval Process	
11	FPD reviews the BCP and determines contingency is available. FPD notifies the CO is notified of the change. Note: M&O Contract Changes Clause is very broad. Most project changes generally do not require contract changes; however, in most cases the CO should review the change to ensure a contract change is not needed. If needed, CO action proceeds in parallel with project change. See Figure 4-1 as an example of handling contract and project changes.
12	If required, the FPD works with the Program Office to identify budget/funding for BCP, total and/or fiscal year, as appropriate, if contingency is not available,.
13	If budget/funding is available, proceed to step 14. If not, go to step 23 to replan the change
14	The FPD submits the BCP to the CCB. The CCB reviews the change. As required, the FPD, with IPT support, updates the BCP package as appropriate, obtaining contractor support as needed.
15	The FPD, with support from the Program Management Support Office (PMSO) and OEMC,

Table 4-2. Overall Change Control Process (M&O Contract)

Step	Action
	determines if the BCP is within the threshold for an independent project review (IPR) or external independent review (refer to DOE O 413.3B). If not required, proceed to step 19. If so, continue to next step (16).
16	FPD requests PMSO or OECM arrange for IPR/EIR as needed.
17	The FPD/IPT/contractor develops IPR/EIR documents, as needed.
18	PMSO/OECM conducts IPR/EIR, resolve issues, and provide review results to FPD for action, including developing a corrective action plan, and resolving any major issues identified. Continue to next step.
19	<p>FPD with IPT support prepares a BCP briefing and coordinates with PMSO and pre-briefs the appropriate CCB as needed. FPD coordinates with OECM/PMSO for pre-ESAAB meeting, as appropriate. If the change exceeds the Congressional notification threshold (refer to 50 USC 2744), the PSO through the DOE CFO, notifies Congress of the projected increase (note the exception for minor projects, 50 USC 2746).</p> <p>Note: Baseline changes should not be approved for the sole purpose of offsetting variances. ANSI/EIA-748-B states that MR is held for unexpected growth within the currently authorized work scope, rate changes, risk handling, and other program unknowns. Generally, MR is held for current and future needs and is not used to offset accumulated overruns or under-runs. The policy should also be applied to the use of contingency. Using MR or contingency to offset variances erases important information useful for effective project management and is counter to the purpose of the EVMS. However, if measuring and managing to the current baseline is no longer viable, and the EVMS is no longer an effective tool for management of the project, the project may be rebaselined.</p>
20	<p>The FPD conducts the briefing for the approval authority/CCB/Advisory board. The appropriate Approval Authority (such as FPD, AE, US/Adm./PSO, or SAE) takes action on BCP (Approval thresholds should be delineated in the PEP in compliance with DOE O 413.3B and in accordance with established contract change thresholds.</p> <p>In taking action, the Approval Authority usually uses a CCB to assist in the review of the BCP. In reviewing a BCP, for example: FPD conducts FPD CCB meeting, or AE (PMSO) conducts PMSO CCB meeting; or Under-Secretary/Administrator/PSO conducts ESAAB-equivalent meeting; or SAE conducts ESAAB meeting.</p>
21	If the Approval Authority, with support from CCB/ESAAB, approves the BCP proceed to step 25. When a baseline change is approved, formal approval documentation should be created by the CCB administrator for signature by the CCB chairperson (approval authority). The contractor should then be authorized to make the changes to the control accounts. The authorized change may be for scope, budget, or schedule. If not approved, continue to the next step.
22	<p>Approval Authority/CCB documents rationale for disapproval.</p> <p>When a baseline change request is disapproved, the CCB chairperson prepares formal documentation disapproving the request. The documentation includes the rationale or justification for the disapproval.</p> <p>Go to step 23 for replanning/reevaluation.</p>
23	<p>If budget is not available, or if the project change is not approved the FPD restarts the change process, re-scoping or re-planning the change, if needed.</p> <p>FPD/COR, as appropriate, issues the appropriate request to the contractor for the re-planning effort.</p>
Change Implementation Steps	
24	Project controls reviews for format, content, consistency, and validity. Subject Matter Experts

Table 4-2. Overall Change Control Process (M&O Contract)

Step	Action
	review, as needed. PM convenes the CCB, which acts on the change following project procedures. Assuming approved, PM directs the project to implement the change, notifying the FPD of the action.
25	The contractor implements the approved change, following approved project procedures and processes. Contractor submits update for PARS II. PROCESS COMPLETE.

5.0 Change Control Documentation

The change control processes lead to formal documentation that provide traceability, transparency, accountability of changes and ensure the integrity and alignment of the project and contract scope, cost, schedule and budget. The change documentation includes:

1. Project Performance Baseline Change approvals that may revise project scope, cost, schedule, or project budget.
2. Project Execution Plan
3. Contract modifications that may change contract scope, cost, deliverable schedule, fee/profit or other terms and conditions. M&O type contracts generally do not require contract modification. Changes to work being performed by an M&O can be communicated through simple work authorizations. DOE uses both types of contract vehicles. Refer to sections 3.3.1 and 3.3.3 regarding contract modifications.
4. Performance Measurement Baseline changes that revise the project plan e.g. change to allocation of budget or time for activities, adding new activities due to realized risks and application of management reserve or contingency
5. Change Control Board meeting records or decision documents
6. Change control log: A change control log contains a record of all changes, including the amount of MR, contingency, and undistributed budget used, if any. Documents that may require updating as a result of the approved change are updated.
7. Update PARS II: The contractor submits update for PARS II database in accordance with applicable instructions.

Documents and records generated as a result should be suitable for reproduction and are signed and dated at the time of completion. Project Controls retains approved electronic copies.

6.0 Tailoring

The standard project and contract change control processes apply to most projects. Depending on the complexity, size, and duration of the project, the FPD and CO, in consultation with site and program management, may propose a modified-scope change control process. For small and short duration projects, a combined contractor and FPD project-level change control board may

be appropriate with a single upper-level board for approval of project changes that fall outside the FPD's approval authority. As in any project change control process, the planned process should be documented in the PEP, as required by DOE O 413.3B and approved by the AE. For smaller projects, the AE authority may be delegated to the PSO designee or site manager designee.

APPENDIX A: ACRONYMS

AE	Acquisition Executive
ANSI	American National Standards Institute
APLD	Acquisition Planning and Liaison Division
AUW	Authorized Unpriced Work
BAC	Budget at Completion
BCP	Baseline Change Proposal
BCR	Business Clearance Review
CAM	Control Account Manager
CBB	Contract Budget Base
CCB	Change Control Board
CD	Critical Decision
CICA	Competition in Contracting Act
CMP	Contract Management Plan
CPB	Contract Performance Baseline
CO	Contracting Officer
COR	Contracting Officer's Representative
DCAA	Defense Contract Audit Agency
DEAR	Department of Energy Acquisition Regulation
DOE	U.S. Department of Energy
EIA	Electronic Institute of America
EIR	External Independent Review
EM	Environmental Management
ESAAB	Energy Systems Acquisition Advisory Board
EVMS	Earned Value Management System

FAR	Federal Acquisition Regulation
FPD	Federal Project Director
FPCM	Federal Project Controls Manager
G	Guide
GAO	Government Accountability Office
HCA	Head of Contracting Activity
IPR	Independent Project Review
IPT	Integrated Project Team
KPP	Key Performance Parameter
M	Million
M&O	Management & Operating (contractor)
MR	Management Reserve
NNSA	National Nuclear Security Administration
O	Order
ODC	Other (Government) Direct Cost
OECM	Office of Engineering and Construction Management
OTB	Over Target Baseline
OTS	Over Target Schedule
PARS	Project Assessment and Reporting System
PB	Performance Baseline
PEP	Project Execution Plan
PMB	Performance Measurement Baseline
PMSO	Project Management Support Office
PSO	Program Secretarial Officer
PM	Project Manager (Contractor)

REA	Request for Equitable Adjustment
SAE	Secretarial Acquisition Executive (DOE Deputy Secretary)
SME	Subject Matter Expert
SOW	Statement of Work
SPE	Senior Procurement Executive
TAB	Total Allocated Budget
TPC	Total Project Cost
US	Under Secretary of Energy
USC	United States Code
WBS	Work Breakdown Structure
YSO	Y-12 Site Office

DEFINITIONS

Acquisition Executive (AE): The individual designated by the Secretary of Energy to integrate and unify the management system for a program portfolio of projects and implement prescribed policies and practices.

Acquisition Planning and Liaison Division (APLD): DOE organization performing business clearance reviews, a division of the Office of Contract Management. (MA-621)

Acquisition Strategy: A high-level business and technical management approach designed to achieve project objectives within specified resource constraints. It is the framework for planning, organizing, staffing, controlling, and leading a project. It provides a master schedule for activities essential for project success and for formulating functional strategies and plans.

Activity: An element of work performed during the course of a project. An activity normally has an expected duration, cost, and resource requirement.

Actual Cost: The costs actually incurred and recorded in accomplishing work performed.

Assumptions: Factors used for planning purposes that are considered true, real, or certain. Assumptions affect all aspects of the planning process and of the progression of the project activities. (Generally, the assumptions will contain an element of risk.)

Authorized Unpriced Work: Work contractually approved, but not yet negotiated; that is, the estimated cost (excluding fee or profit) for contract changes that have been approved by the government contracting officer but have not yet been fully negotiated. This type of change is also called: changes orders, not to exceeds, and undefinitized change orders. The Total Allocated Budget (TAB) will be equal to, the Negotiated Contract Cost (NCC) plus the value of all Authorized Unpriced Work (AUW), when there are no Over Target Baselines (OTBs). Authorized Unpriced Work (AUW) is the estimated cost approved by the contracting officer for pending contract modifications that are still being negotiated.

Baseline: A quantitative definition of cost, schedule, and technical performance that serves as a base or standard for measurement and control during the performance of an effort. It is the established plan against which the status of resources and the effort of the overall program, field programs, projects, tasks, or subtasks are measured, assessed, and controlled. Once established, baselines are subject to change control discipline.

Baseline Change Proposal (BCP): A document that provides a complete description of a proposed change to an approved performance baseline, including the resulting impacts on the project scope, schedule, design, methods, and cost baselines.

Business Clearance Review (BCR): A process performed for the Senior Procurement Executive by the Acquisition Planning and Liaison Division. The review and approval requirements are set forth in Acquisition Guide (AG) Chapter 71.1.

Change Control: A process that ensures changes to the approved baseline are properly identified, reviewed, approved, implemented and tested, coordinated within the IPT, and documented. (Process refers to both contract and project changes.)

Change Control Board (CCB): The review body with authority for approving changes that are consistent with the project's baseline performance requirements, budgeted cost, and schedule. CCB membership should include the project management, contracts representative, CFO representative, and Subject Matter Experts (SMEs) that support the project on technical matters. The CCB plays a critical role in managing change to the project's baseline and ensuring prospective changes are clearly defined, appropriate, and within the cost, schedule and performance parameters approved by the AE as specified in the PEP.

Change Order: A written order, signed by the contracting officer, directing the contractor to make a change without the contractor's consent, as authorized the contract's Changes clause. See FAR 43.201 for additional information.

Code of Record: A set of requirements, including Federal and state laws, as defined in contracts and Standards or Requirements Identification Documents (or their equivalent), that are in effect at the time a facility or item of equipment was designed and accepted by DOE. It is initiated during the conceptual design phase and prior to approval of CD-1. It is placed under configuration control to ensure it is updated to include more detailed design requirements as they are developed during preliminary design and prior to approval of CD-2. It is controlled during final design and construction with a process for reviewing and evaluating new and revised requirements to determine their impact on project safety, cost and schedule before a decision is taken to revise the Code of Record. It is maintained and controlled through facility decommissioning.

Constructive Change: An oral or written act or omission by the contracting officer or other authorized Government official that is construed as having the same effect as a written change order. A Government informal order can be defined as words or deeds excluding advice, comments, suggestions, or opinions. See FAR 52.243-7.

Contingency: The portion of the project budget (and schedule) that is available for risk uncertainty within the project scope, but outside the scope of the contract. Contingency is budget (and schedule) that is not placed on the contract and is included in the TPC. Contingency is controlled by Federal personnel as delineated in the PEP.

Contract Budget Base (CBB): PMB + MR. Also, negotiated contract cost and AUW.

Contract Performance Baseline (CPB): scope, CBB, schedule, contract end date

Contracting Officer (CO): The CO is the only individual with the authority to enter into, administer, and/or terminate contracts, and make related determinations and findings. The Head of the Contracting Activity (HCA) appoints and issues a warrant to individuals who meet the education and experience criteria required for FAC-C certification. Within the delegation from the HCA, the CO authorizes work execution in accordance with the approved baseline.

Contracting Officer's Representative (COR): an individual designated and authorized in writing by the CO to perform specific technical or administrative functions. The COR monitors the contract and provides technical direction that does not otherwise result in a change to the contract's cost, schedule, or performance requirements.

Contractor Project Manager (PM): The contractor official who is responsible and accountable for successful execution of contractor's project scope of work. The PM interfaces directly with the FPD.

Critical Decision (CD)-1 Range Estimate: A cost and schedule range estimate that accompanies or is a part of the conceptual design report at CD-1, Approve Alternative Selection and Cost Range. The cost and schedule ranges reflect project risks or uncertainties associated with the selected alternative. The low ends of the ranges reflect an optimistic view of the risks and uncertainties. The high ends of the ranges reflect a pessimistic view of the risks and uncertainties. The range estimate is approved by the AE.

Control Account Manager: Person, usually in contractor organization, responsible for a group of project work packages tracked for cost, schedule, and technical performance.

Design Authority: The engineer designated by the Acquisition Executive to be responsible for establishing the design requirements and ensuring that design output documentation appropriately and accurately reflect the design basis. The Design Authority is responsible for design control and ultimate technical adequacy of the design process. These responsibilities are applicable whether the process is conducted fully in-house, partially contracted to outside organizations, or fully contracted to outside organizations. The Design Authority may delegate design work, but not its responsibilities.

Earned Value Management System (EVMS): The EVMS is an integrated set of policies, procedures and practices to objectively track true performance on a project or program. The EVMS represents an integration methodology that is able to provide an early warning of performance problems while enhancing leadership decisions for successful corrective action.

Energy Systems Acquisition Advisory Board (ESAAB): Advises the SAE on CDs related to Major System Projects, site selection and PB deviation dispositions.

Federal Project Director (FPD): The individual certified under the Department's PMCDP as responsible and accountable to the AE or Program Secretarial Officer for project execution. Responsibilities include developing and maintaining the PEP; managing project resources; establishing and implementing management systems, including performance measurement systems; and approving and implementing changes to project baselines.

Federal Project Controls Manager (FPCM): The FPCM supports the FPD in preparation and review of project budgets, cost estimates, schedules, and basis of estimate documentation. The FPCM reviews contractor EVMS and other project reports and usually acts as the board secretary for the FPD Change Control Board (FCCB).

Head of Contracting Activity (HCA): The official who has overall responsibility for managing the contracting activity. This official is delegated HCA authority from the Department of Energy Senior Procurement Executive. This formal delegation prescribes the specific source and scope of the HCA's authority with respect to that individual's contracting actions. HCA delegations are unique and specific to an individual in a program or field activity, based on mission, workload, performance and other factors considered by the DOE Senior Procurement Executive.

Integrated Project Team (IPT): The IPT is a multidisciplinary team formed to manage major capital projects. OMB Circular A-11 recommends an IPT be established to "...analyze the performance and capability of the portfolio of assets used by the program, [and] should be led by a qualified program manager, supported by budgetary, financial, procurement, user, program, information resource management, value management professionals, and other staff as appropriate."

DOE O 413.3 defines the IPT as an essential element in DOE's acquisition process, and it is used during all phases of a project's life cycle, organized and led by the FPD. This team consists of professionals representing diverse disciplines with the specific knowledge, skills, and abilities to support the FPD in successfully executing a project. The team membership will change as a project progresses from initiation to closeout to ensure the necessary skills are always represented to meet project needs. Team membership may be full or part time, depending upon the scope and complexity of a project.

The IPT is accountable for developing the project's contracting strategy and for providing regular and systematic oversight of the contractor's performance relative to established project baselines and contract requirements, and coordinating changes through the CCB. Monitoring mechanisms include monthly earned value management (EVM) reports, property management reports, and other status reports. When problems repeat within a project, the IPT is responsible for determining the cause of the problem and a reasonable solution. The IPT monitors the overall project's health, including the type, frequency, and extent of changes.

Management Reserve (MR): An amount of the total contract budget (and schedule) withheld for management control purposes by the contractor. Management reserve is not part of the Performance Measurement Baseline.

M&O Contract: An agreement under which the Government contracts for the operation, management, or support, on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency.

Non M&O Contract: A binding agreement between the Government and a contractor to provide a service, commodity or construct a facility or facilities. A non-M&O contract is different from an M&O contract in that M&O contracts have terms and conditions not typically found in non-M&O contracts.

Office of Engineering and Construction Management (OECM): DOE office responsible for project and construction management.

Over Target Baseline (OTB): Reprogramming actions involving establishment of cost or schedule objectives that exceed the desired or contractual objectives of the program. An OTB is a new baseline for management when the original objectives cannot be met and new goals are needed for management purposes. OTB is the sum of CBB and the recognized overrun. (See **Reprogramming** below.)

Over Target Schedule (OTS): See OTB above. The schedule portion of an OTB.

Performance Baseline (PB): The collective key performance, scope, cost, and schedule parameters, which are defined for all projects at CD-2. Performance Baseline includes the entire project budget (TPC including fee and contingency) and represents DOE's commitment to Congress.

Performance Measurement Baseline (PMB): The baseline cost that encompasses all contractor project work packages and planning packages, derived from summing all the costs from the Work Breakdown Structure. Undistributed management reserve, contingency, profit, fee and DOE direct costs are not part of the Performance Measurement Baseline. The PMB is the benchmark used within EVM systems to monitor project (and contract) execution performance.

Program: An organized set of activities directed toward a common purpose or goal undertaken or proposed in support of an assigned mission area. It is characterized by a strategy for accomplishing a definite objective(s) that identifies the means of accomplishment, particularly in qualitative terms, with respect to work force, material and facility requirements. Programs are typically made up of technology-based activities, projects and supporting operations.

Program Secretarial Officer (PSO): The head of a Program office, e.g. Environmental Management or Nuclear Energy.

Program Management Support Office (PMSO): The PMSO supports implementation and oversight of the Program including project management. The PMSO staff usually includes project management expertise.

Project Risk: Risks that are captured within the scope, cost, or schedule of the project.

Quantum: Verifiable value of impacts or damages resulting from a change to a contract or project.

Rebaselining: The general term used for describing a major realignment of the performance measurement baseline to improve the correlation between the work plan and the baseline budget, scope, and schedule. Rebaselining does not add or change existing scope of work, it merely changes how and when it may be accomplished within the constraints of the existing contract. Rebaselining may refer to either replanning or reprogramming

Replanning: A realignment of schedule or reallocation of budget for remaining effort within the existing constraints of the contract. In this case, the total allocated budget (TAB) does not exceed the CBB, nor is the schedule adjusted to extend beyond the contractually defined milestones.

Reprogramming: A comprehensive replanning of the remaining performance management baseline that results in a total budget and/or total schedule in excess of contractual requirements. (See **OTB** above.)

Request for Equitable Adjustment (REA): Requests by the contractor for equitable adjustment under a contract clause providing for such adjustment. A contractor typically submits a request for equitable adjustment under the contract's changes clause.

Risk: Factor, element, constraint or course of action that introduces an uncertainty of outcome, either positively or negatively that could impact project objectives.

Senior Procurement Executive (SPE): DOE executive responsible for managing the direction of DOE's acquisition system, including implementation of DOE's unique acquisition policies, regulations and standards.

Total Allocated Budget (TAB): Contract cost. At the beginning of a project, TAB is equal to the negotiated contract cost and CBB.

Total Project Cost (TPC): All costs between CD-0 and CD-4 specific to a project incurred through startup of a facility, but prior to the operation of the facility. Thus, TPC includes TEC plus OPC. The PMB + MR + contingency + profit/fee + other DOE costs.

Under Secretary of Energy (US): A direct report to the Deputy Secretary responsible for a group of DOE Programs.

Undistributed Budget: Budget associated with specific work scope or contract changes that have not been assigned to a control account or summary level planning package. This is a part of the PMB and is contractor controlled.

Work Breakdown Structure (WBS) Dictionary: A WBS dictionary defines the work scope for each element in the WBS. The WBS is used as the basic building block for the planning of all authorized project work. The WBS is a product-oriented division of project tasks depicting the breakdown of work scope for work authorization, tracking, and reporting purposes, which facilitates traceability and provides a control framework for management. It should ensure that the work scope is entirely covered and allow for the integration of technical, schedule, and cost information.

The WBS also facilitates communications as it establishes a common frame of reference for customers, management, and IPTs. A WBS is a direct representation of the work scope in the project, documenting the hierarchy and description of the tasks to be performed and their relationship to the product deliverables. The WBS breaks down all authorized work scope into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control. The WBS should be extended to the level necessary for management action and control based on the complexity of the work. Each item in the WBS is assigned a unique identifier. These identifiers should provide a structure for a hierarchical summation of costs and resources.

APPENDIX C: REFERENCES

ANSI/EIA-748-B, Earned Value Management System (EVMS), September 2007.

DCAA Contract Audit Manual, August 31, 2010.

Department of Energy Acquisition Regulation, (DEAR).

DOE G 413.3-5, *Performance Baseline Guide*, September 2008.

DOE G 413.3-7A, *Risk Management Guide*. January 2011

DOE G 413.3 series of other guides.

DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, November 29, 2010

DOE, *Root Cause Analysis, Contract and Project Management*, April 2008.

DOE, *Root Cause Analysis, Contract and Project Management, Corrective Action Plan*, July 2008.

DOE-STD-1073-2003, *DOE Standard for Configuration Management*, October 2003.

Lawrence Berkeley National Laboratory PMO Procedure 1.9, Change Control.

Federal Acquisition Regulation (FAR).

Memorandum on —~~Contact~~ Change Order Administration of Department of Energy, Prime Contracts”, issued April 1, 2008, by the Director, Office of Contract Management, Office of Procurement and Assistance Management.

Mixed Oxide Fuel Fabrication Facility Project, MFFF-PRO-011, Change Control Procedure.

OMB Circular A-11, Part 7 Planning, Budgeting, Acquisition, and Management of Capital Assets, June 2008.

Over Target Baseline and Over Target Schedule Handbook; May 7, 2003

Y-12 YSO Procedure Number Y30-79-17, Project and Baseline Change Control for Multi-Year Projects, April 2010.

SUPPLEMENTS

This section provides supplemental information for use with the Change Control Guide. The section includes:

- Supplement 1
 - examples of material to use in preparation of the PEP (Supplement 1, Tables S1-1 Change Control Threshold Examples, and S1-2, FPD-Level CCB Roles and Responsibilities,
 - project change scenario examples (Table S1-3)
 - information on the differences between M&O and Non-M&O contracts pertaining to change control (Supplement 1, Table S1-4)
 - FAR Changes Clauses (Table S1-5)
 - Standard Form 30 (Figure S1-6)
 - example concurrence memo for OTB/OTS actions (Figure S1-7)
- Supplements 2-4: Sample change control procedures,
- Supplement 5: Contract Change Order Administration of Department of Energy Prime Contracts, issued April 1, 2008

SUPPLEMENT 1
Supplementary Tables and Reference Material

Table S1-1. Sample Project Change Control Thresholds

Project TPC at CD-2 = \$500M, DOE Contingency = \$100M

Approval Authority	Performance Baseline Changes		
	Technical	Schedule	Cost
Secretarial Acquisition Executive (Level 0)	Any change in scope and/or performance that affect the ability to satisfy the mission need or are not in conformance with the current approved PEP and PDS.	Notify if 12 month or more increase (cumulative) in original PB (project completion (CD-4) date).	TPC increase in excess of \$100M or 50% (cumulative) of the original CD-2 cost baseline
Program Secretarial Officer (as delegated by the Under Secretary) (Level 0)		Any delay in the CD-4 date.	Any TPC (cumulative).
Acquisition Executive (Level 1)	Changes to scope that do not affect mission need requirements or Project Data Sheet. Any PEP change.	More than 6 months increase (cumulative) in a project-level schedule milestone date or any delay in CD-4 date.	Use of Contingency of more than \$20M in a 12 month period.
Site Office Manager (Level 2a)		Up to 6 months increase (cumulative) in a project-level schedule milestone date.	Use of Contingency of more than \$10M for single event.
Federal Project Director (Level 2b)	Changes to DOE approved design or construction specifications that do not affect project scope. Changes to contract scope that do not affect project scope.	Any use of DOE Schedule Contingency or up to 3 month increase (cumulative in a project level schedule milestone date but within the CD-4 commitment	Any use of DOE Cost Contingency of up to \$10M for a single event or up to \$20M cumulative in a 12 month period
Contractor Project Manager (Level 3)	Changes to design or construction specifications for which the contractor is the design authority and the changes do not affect the contract or project scope.	Any use of Schedule MR Any re-sequencing of work packages that does not affect project level schedule milestones	Any use of Cost MR

Note: For projects being executed under a Non M&O contract, all changes at or above the FPD level will require a contract modification. Only the CO is authorized to make contract changes. For project baseline and the contract to remain aligned the FPD and CO responsibilities should be coordinated to avoid delays or the need for extraordinary approval measures.

NOTE: Table S1-2 provides sample roles and responsibilities listing from a typical project PEP.

Table S1-2. FPD-Level CCB Roles and Responsibilities (SAMPLE)

Role	Responsibilities
Federal Project Director	<ul style="list-style-type: none"> • Provides leadership to the CCB and the IPT(to include the Configuration Manager, if applicable) to ensure CRs are clarified, communicated, and implemented appropriately • Ensures that appropriate modifications are made to the project baseline, schedule, contract and other affected documents resulting from CCB-approved changes • Assigns a Configuration Manager • Approves or seeks AE/SAE approval of baseline changes as appropriate in accordance with the change approval authorities established in the PEP consistent with DOE O 413.3B. • Seeks CFO approval for changes to funding profile • Seeks internal project review and external independent review, if necessary
CCB Chairperson (may be the FPD)	<ul style="list-style-type: none"> • Reviews all project changes that result in a change to the baseline • Schedules and presides over CCB • Establishes meeting agenda items and sets priorities for proceedings • Approves and distributes CCB correspondence (e.g., e-mail and meeting minutes) • Serves as CCB Member; Chairperson's vote breaks a tie among the CCB voting members • Recommends approval of urgent change request (CR) to the FPD • Reviews and approves the Configuration Management Plan (CMP)
Contracting Officer	<ul style="list-style-type: none"> • Participates in the CCB as a standing member • Requests cost estimates from the contractor • Requests from the contractor BCP for approved or directed changes • Requests certified cost & pricing data if required • Determines if changes are within contract scope • Issues modifications to the contract (i.e., cost, schedule, and scope) if approved by the approving authority and funding is available • Ensures changes in cost, schedule, and scope requirements are made in accordance with applicable FAR and DEAR.
CCB Administrator	<ul style="list-style-type: none"> • Assists the CCB Chairperson • Prepares materials for review by the CCB • Records the disposition of each CR presented to the CCB • Reviews all CRs submitted • Forwards pre-approved CRs to the CCB • Requests further data from CR submitter (if necessary) • Ensures technical infrastructure (for communication, tracking, documentation) is adequate and available to support the CCB process • Logs and routes CR(s)

Table S1-2. FPD-Level CCB Roles and Responsibilities (SAMPLE)

Role	Responsibilities
CCB Members	<ul style="list-style-type: none"> • Reviews submitted CRs for impact to project (cost, schedule, and scope) • Establishes priorities for CRs • Approves, defers, or rejects CRs • Prepares recommended CR approval actions or follow-up actions with appropriate stakeholders (i.e., communication, research, budgets, etc.) for FPD to perform • Reviews and concurs on the CMP, if applicable
Configuration Manager	<ul style="list-style-type: none"> • Develops the Configuration Management Plan (CMP) • Documents configuration management decisions and processes in the CMP • Oversees configuration management activities • Submits configuration change requests
Change Request Submitter	<ul style="list-style-type: none"> • Submits a CR by completing a CR Form and provides supporting documentation to justify the need for the change ▪ Provides clarification on the CR to the CCB administrator and others as needed
Design Authority	<ul style="list-style-type: none"> • Reviews and approves changes to design requirements and design of record
Other Integrated Project Team (IPT) Members	<ul style="list-style-type: none"> • Provide regular and systematic oversight of the established project baselines and contract requirements. • Coordinate changes through the CCB • Monitors monthly Earned Value Management report, property management reports, and other status reports that manages the contract and project • Reviews CRs identified as solutions to current project requirement issues or new requirements
Quality Manager	<ul style="list-style-type: none"> • Ensures only approved changes are incorporated into the project • Audits processes and products at any time during the process
Subject Matter Expert (SME)	<ul style="list-style-type: none"> • Provides insight into a particular problem, issue, or set of issues • Performs analysis and identifies recommended approaches to implementing CRs • Participates in the CCB

Table S1-3. Example Project Change Approval

This Table provides a sample project and different levels of project/contract changes.

Using this sample project, three change example scenarios are identified:

1. TPC increase to \$160M due to a program direction change
2. DOE risk realized – impact: Cost: \$12M; Time: 6 months
3. Contractor Risk Realized – Impact: Cost: \$5M Time: 2 months

Table S1-3A provides applicable project information.

Table S1-3A. Project Information

Baselines	Parameters
CD-2 Performance Baseline:	
Scope:	10,000 SF Lab with KPPs X, Y, Z
TPC:	\$100M
Contingency:	\$15M, 3 months
CD-4 date	: July 1, 2012
Contract Performance Baseline (Non-M&O or Firm Fixed Price Contract):	
PMB:	\$75M
MR:	\$10M, 3 months
End Date:	March 2012




Table S1-3B lists the three example change scenarios to evaluate for the example project.

Table S1-3B. Change Example Scenarios

Scenario No.	Scenario	BCP Type
1	TPC increase to \$160M (more than 50% of original CD-2 baseline and more than \$100M change) (contract change required-not urgent) due to a program direction change.	Deviation
2	DOE risk realized – impact: Cost: \$12M; Time: 6 months (contingency partially available) (contract change required for use of contingency)	Contingency
3	Contractor Risk Realized – Impact: Cost: \$5M Time: 2 months (no contract change required)	MR

Table S1-3C shows the expected approval authority for each example change scenario. The levels of approval authority correspond to the significance of the change (as shown in Table 3-1); specifically, the SAE deals with significant changes to the baseline (scope and cost), etc.

Table S1-3C. Approval Authorities for Example Project Change Scenarios

Approval Authority	Example Scenarios		
	1 TPC Increase to \$160M	2. DOE Risk Impact Cost: \$12M Time: 6 mo	3. Contractor Risk Cost: \$5M Time: 2 mo
SAE—Deputy Secretary			
Under Secretary/ NNSA Administrator <i>May be delegated to PSO</i>			
Acquisition Executive <i>May be delegated to Site Manager or FPD</i> Note: AE or FPD (if delegation in PEP) use DOE Cost Contingency Notify OECM and SAE of 6 month schedule delay (impacts CD-4 date) FPD approval authorized			
Contractor Project Manager (PM) Note: Contractor uses MR			

DOE O 413.3B requires SAE approval for baseline changes greater than the lesser of 50% of TPC or greater than \$100M. Subsequent deviations require SAE approval, independent of threshold.

Use Figure 4-1 to track the process through to completion. The process goes from a few steps for Example Scenario 3 to using most of the steps for Example Scenario 1 including a contract change.

**Table S1-4. Comparative Overview of
Non-M&O and M&O Contracts**

Non-M&O Contracts	M&O Contracts
Local DOE offices can approve use of contracts within local HCA approval authorities.	Secretary of Energy must approve the use of an M&O contract in accordance with FAR 17.6.
Changes clause under a Non-M&O contract is limited to specific types of changes, e.g., statement of work, drawings, designs, specifications, deliverable schedule, etc.	Changes clause is very broad and invoked with less frequency than under a Non-M&O contract because M&O SOW is extremely broad. M&O Changes clause allows significant flexibility when issuing change orders. M&O can submit a REA at any time; however, adjustment to fee is made only if the change is considered a material change to the contract—as described in the M&O Changes clause (DEAR 970.5243-1).
Changes clause allows equitable adjustment, which may be fee bearing. Contractors may submit REA due to changes. Contract is cost-based and not budget-based. Decreases in work scope may result in decreases in fee or profit.	M&O contract is budget-based and not cost-based. M&O contractor is generally required to manage within the overall annual budgetary constraints. Funding can be decreased without changes in work scope. Fee is usually not reduced or increased with changes in the budget.
SOW tends to be more defined since the contractor prices the work scope and proposes a total evaluated price (cost and fee).	SOW tends to be extremely broad, and the contractor is evaluated in large part on the cost and merit of the management team. Other traditional elements of cost such as labor, materials and equipment, and associated fringe benefits and indirect costs are not proposed. The solicitation identifies an annual budgetary estimate. The contractor develops a work plan on an annual basis as funds are made available. The work authorization process is the basis for defining work scope at a more discrete level.
Arms-length relationship between the Government and contractor	Less than an arms-length relationship between the Government and the M&O contractor. M&O contractor provides majority of the oversight of projects that may be subcontracted.
Contracting Officer is a key member of the change control process. All contract changes must be issued by the CO using proper authority, which is usually the appropriate FAR Changes clause.	Contracting Officer is involved if a change to the contract is required. DOE program offices are often given authority to make budgetary changes to the M&O contractor, which result in changes to work activities. This is often done without the CO issuing a change order.

**Table S1-4. Comparative Overview of
Non-M&O and M&O Contracts**

Non-M&O Contracts	M&O Contracts
<p>Contractor's accounting system, estimating system, and other business systems must be reviewed and approved by the Defense Contract Management Agency (DCMA).</p> <p>Historically, DCAA has performed proposal audits and incurred cost audits.</p>	<p>M&Os' accounting and other business systems are integrated with DOE's systems. M&Os are required to set up independent limited liability companies or use similar arrangements for management and operations of DOE facilities.</p> <p>Office of Inspector General has cognizance in recommending rates and final costs on the M&O prime contract costs. Rate approval is given by the DOE Contracting Officer. DCAA has audit cognizance over subcontractor costs and business systems.</p>
<p>Contractor submits invoices requesting payment based on costs incurred. Letter of credit is rarely used. Letter of credit is most often used in other federal agencies for small business contracts.</p>	<p>Contractor has an account with the Dept. of Treasury that enables the M&O to draw down funds as needed through a letter of credit.</p>

Table S1-5. FAR Changes Clauses

The following table summarizes what can be changed in each of the alternate forms of the changes clause. Included in the slides is the FAR citation for each type of clause. Note that the description of what can be changed is normally the same for both Fixed Price and Cost Reimbursement type contracts. The various changes clauses each specify the type of equitable adjustment to which the contractor may be entitled. With two exceptions, the nature of the permitted adjustment is the same for each Fixed Price clause. It differs slightly from the adjustment permitted for Cost Reimbursement contracts.

Table S1-5A Contract Types and Changes

Type of Contract	Changes that Can Be Made
Non-Commercial Supply-Fixed- Price Contract or Cost- Reimbursement FAR 52.243-1 FAR 52.243-2	<ul style="list-style-type: none"> • Drawings, designs, or specifications when the supplies to be furnished are to be specifically manufactured for the Government • Method of shipping or packing. • Place of delivery
Non-Commercial Service-Fixed- Price Contract or Cost- Reimbursement FAR 52.243-1, Alt I or II FAR 52.243-2, Alt I or II	<ul style="list-style-type: none"> • Description of services to be performed. • Time of performance (i.e., hours of the day, days of the week, etc.). • Place of performance of services.
Architect-Engineer or Other Professional Services Contracts- Fixed Price FAR 52.243-1, Alt III	<ul style="list-style-type: none"> • Services to be performed.
Transportation Services – Fixed Price FAR 52.243-1, Alt IV	<ul style="list-style-type: none"> • Specifications , Work or services, Place of origin, Place of delivery, Tonnage to be shipped, • Amount of Government-furnished property.
Research and Development-Fixed-Price Contract or Cost-Reimbursement FAR 52.243-1, Alt V FAR 52.243-2, Alt V	<ul style="list-style-type: none"> • Drawings, designs, or specifications. • Method of shipping or packing. • Place of inspection, delivery, or acceptance.

Construction or Dismantling, Demolition, or Removal of Improvements- Fixed-Price Contract FAR 52.243-4	<ul style="list-style-type: none">• Specifications (including drawings and designs),• Method or manner of performance of the work,• Government-furnished facilities, equipment, materials, services, or site, Acceleration in the performance of the work.
Construction -Cost-Reimbursement FAR 52.243-2, Alt III	<ul style="list-style-type: none">• Plans and specifications or instructions incorporated in the contract
Facilities-Cost-Reimbursement FAR 52.243-2, Alt IV	<ul style="list-style-type: none">• Facilities or work described in the contract

Changes Clause for Fixed Price Construction Contracts

The standard changes clause for fixed price construction contracts is quite different from any of the other fixed price or cost reimbursement type clauses (FAR 52.243-4).

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes --

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished property or services; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the

Contracting Officer written notice stating --

- (1) The date, circumstances, and source of the order; and
- (2) That the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) of this clause.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

Changes and Changed Conditions

A special version of the changes clause for fixed price construction clause appears at FAR52.243-5. It is used for construction contracts where the total price is not expected to exceed the simplified acquisition threshold. This changes clause incorporates both the changes clause requirements and the elements of the FAR 52.236-2, Differing Site Conditions clause normally included in fixed price construction contracts expected to exceed the simplified acquisition threshold. This streamlined clause offers essentially the same protection for a construction contractor operating under a small award as that provided for a construction contractor on a larger award.

(a) The Contracting Officer may, in writing, order changes in the drawings and specifications within the general scope of the contract.

(b) The Contractor shall promptly notify the Contracting Officer, in writing, of subsurface or latent physical conditions differing materially from those indicated in this contract or unknown unusual physical conditions at the site before proceeding with the work.

(c) If changes under paragraph (a) or conditions under paragraph (b) increase or decrease the cost of, or time required for performing the work, the Contracting Officer shall make an equitable adjustment (see paragraph (d)) upon submittal of a ~~proposal for adjustment~~ (hereafter referred to as proposal) by the Contractor before final payment under the contract.

(d) The Contracting Officer shall not make an equitable adjustment under paragraph (b) unless --

(1) The Contractor has submitted and the Contracting Officer has received the required written notice; or

(2) The Contracting Officer waives the requirement for the written notice.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause.

The limitation on equitable adjustments where the contractor has not submitted the required written notice of changed conditions is similar to that set forth in the Differing Site Conditions clause. However, in this clause, the Contracting Officer can waive the requirement for written notice where, in the Differing Site Conditions clause, the Contracting Officer may only extend the time allowed for the written notice to be submitted.

Commercial Contract Terms and Conditions – Changes (FAR 52.212-4)

Changes in the terms and conditions of this contract may be made only by written agreement of the parties. Commercial contracts discussed in FAR Part 12 incorporate Commercial Terms and Conditions similar to those used in non-government contracts. The changes provision in the standard commercial terms and conditions clause appears at FAR 52.212-4. Note that no unilateral changes are permitted under this clause. Since the Government is procuring supplies and services to specifications and service descriptions developed by the contractor for his commercial business, it would be inappropriate for the Government to confer on itself the right to change these specifications and service descriptions without the contractor's agreement.

DOE Management and Operating Contract Changes Clause

DOE Management and Operating contracts (M&O) incorporate the DOE unique changes clause appearing at DEAR 970.5243-1. This clause addresses unilateral changes in the context of the unusual M&O contract environment. The Contracting Officer may at any time and without notice to the sureties, if any, issue written directions within the general scope of this contract requiring additional work or directing the omission of, or variation in, work covered by this contract. If any such direction results in a material change in the amount or character of the work described in the "Statement of Work," an equitable adjustment of the fee, if any, shall be made in accordance with the agreement of the parties and the contract shall be modified in writing accordingly. Any claim by the Contractor for an adjustment under this clause must be asserted in writing within 30 days from the date of receipt by the Contractor of the notification of change.

The equitable adjustment contemplated in this changes clause is limited to the adjustment of fee.

Note that the M&O clause allows the Government to add, delete, or direct variations in the work covered in the contract. This changes clause must be read in the context of the M&O contract which also includes a Technical or Performance Direction Clause and a Work Authorization clause.

Change Order Accounting (FAR 52.243-6) requires the contractor to segregate all costs associated with a change order and to retain records of those segregated costs until the equitable adjustment is agreed upon. The Contracting Officer may require change order accounting whenever the estimated cost of a change or series of related changes exceeds \$100,000. The Contractor, for each change or series of related changes, maintains separate accounts, by job order or other suitable accounting procedure, of all incurred segregable, direct costs (less

allocable credits) of work, both changed and not changed, allocable to the change. The Contractor shall maintain such accounts until the parties agree to an equitable adjustment for the changes ordered by the Contracting Officer or the matter is conclusively disposed.

Notification of Changes (FAR 52.234.7): The Notification of Changes clause is used in research and development or supply contracts for major weapons system or subsystem acquisitions exceeding \$1,000,000. A number of large CPIF and CPAF non-M&O contracts involving major site cleanup projects incorporate the clause. The clause provides the contractor an opportunity to notify the Government whenever it believes that the conduct of the contracting officer or any ~~Specifically Authorized Representative~~ (SAR) of the contracting officer has constituted a change to the contract.

Following notification by the contractor, the contracting officer has a certain number of days (also negotiated by the parties) to respond. Contracting Officer must respond in writing, within a negotiated number of days after receipt of notice, and either --

- (1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
- (2) Countermand any communication regarded as a change;
- (3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
- (4) In the event the Contractor's notice information is inadequate, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

Figure S1-6. Standard Form (SF) 30

PART 53.3—ILLUSTRATION OF FORMS

53.301-30

Standard Form 30

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE	OF	PAGES
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (if applicable)	
6. ISSUED BY: _____		CODE _____		7. ADMINISTERED BY (if other than item 6): _____		CODE _____	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11) _____			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
				10B. DATED (SEE ITEM 11) _____			
CODE _____		FACILITY CODE _____					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers: <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or its amendment, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (if required) _____							
13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.						
B	THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in delivery address, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).						
C	THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF _____						
D	OTHER (Specify type of modification and authority): _____						
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible) _____							
Except as provided herein, all forms and conditions of the document referenced in item 9A or 10A, as hereinafter changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				(Signature of Contracting Officer)			
HSH 7540-01152, 8070 Previous edition unusable				STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243			

Figure S1-7. Sample OTB/OTS Concurrence Memo

APPENDIX A – SAMPLE PCOL LETTER

Office Symbol

Over-Target Baseline Review; Contract number

Contractor
Address

1. In accordance with the subject contract, a joint baseline review of the implementation of your Over-Target Baseline was conducted on (date). The purpose of this review was to determine if the Over-Target Baseline (OTB) had been implemented in accordance with your earned value system procedures and with the joint team's working agreement on ground rules and assumptions. This OTB is implemented for the purpose of improving the performance management of this contract, and does not constitute direction to change any contractual parameters.

2. Based on the findings of the review, we concur with your implementation of the OTB. The increase in value of \$xxM was properly documented and explained and should be reported in the contractually-required, earned value management report, using instructions contained in the applicable data item description.

3. This letter is considered within the current contractual requirements, target cost, terms and conditions. (For cost reimbursable contracts only) The government recognizes the potential cost liability to the government caused by the OTB and underlying revised estimate. The OTB amount is considered to be outside of the negotiated contract terms and is not subject to fee provisions, including award fee. If you do not concur and consider this letter as direction likely to change these and other contract provisions, notify the Contracting Officer immediately and delay implementing this letter until the matter has been resolved.

4. Please contact (contracting officer, phone #) if you have any questions concerning the results of the OTB Review.

I.M. Warranted
Contracting Officer

CC:

Atchs:

SAMPLE PROCEDURE 1

Project Change Control Process Form for an M&O Contract

(Office of Science Project Example)

Sample Procedure 1 is a 6-page BCP action form. The form is essentially self explanatory. Follow the process diagram for M&O contracts (Figure 4-2 in body of guide).

1) BCP Number:	2) BCP Title:
3) Project ID Number:	4) Project Title:
5) DOE Program:	6) Project Location:
7) Causes of Deviation	
Directed Change (check all that applies): __ Congressional Budget Rescission/Cut __ Regulatory Change __ DOE Policy Change	Other (check all that applies): __ OMB Budget Cut/Rescission __ Funding Partner Cut/Rescission __ DOE Budget Cut/Rescission __ Technical Challenges __ Scope Change __ Other—Please explain:
10) Point of Contact:	12) FAX:
11) Phone:	13) e-mail:
14) Change Description:	

1) BCP Number:	2) BCP Title:
15) Change Justification: (If Directed Change specify authority and documentation)	
16) Impact of Non-Approval:	

1) BCP Number:		2) BCP Title:																																					
17) Impact on Cost Baseline:	Baseline (As of December 2004)	Proposed	Change																																				
Estimate without contingency																																							
Contingency																																							
TEC																																							
18) Impact on Funding Profile (BA):																																							
<table border="1"> <thead> <tr> <th></th> <th>Prior FY</th> <th>FY0X</th> <th>FY0Y</th> <th>FY0Z</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Baseline (\$M)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DOE TEC</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Proposed (\$M)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DOE TEC</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Change in DOE TEC (\$M)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Prior FY	FY0X	FY0Y	FY0Z	Total	Baseline (\$M)						DOE TEC						Proposed (\$M)						DOE TEC						Change in DOE TEC (\$M)					
	Prior FY	FY0X	FY0Y	FY0Z	Total																																		
Baseline (\$M)																																							
DOE TEC																																							
Proposed (\$M)																																							
DOE TEC																																							
Change in DOE TEC (\$M)																																							
19) Explanation of Impact on Cost and Funding Baseline:																																							

1) BCP Number:		2) BCP Title:	
20) Impact on Schedule Baseline:			
Milestone (No. and Description)	Baseline (Month/Year)	Proposed (Month/Year)	Change
21) Explanation of Impact on Schedule Baseline:			
22) Impact on Scope Baseline:			
23) Explanation of Impact on Scope Baseline:			
24) Other Impacts (Health, Safety, Environment, etc.)			
25) Interim or Corrective Actions:			

1) BCP Number:		2) BCP Title:	
FIELD DISPOSITION			
26) Members		Recommendations	
 _____ _____ (name) Date Federal Project Director			
 _____ _____ (name) Date Acting Site Manager			
PROGRAM DISPOSITION - LEVEL 1			
27) Advisors (Specialized Support, as required)		Recommendations	
 _____ _____ (name) Date Program Manager			
 _____ _____ (name) Date Acquisition Executive			

1) BCP Number:	2) BCP Title:
SECRETARIAL ACQUISITION EXECUTIVE	
Disposition <input type="checkbox"/> Approved <input type="checkbox"/> Endorsed <input type="checkbox"/> Rejected _____ _____ Date _____ Deputy Secretary of Energy	Comments:

SAMPLE PROCEDURE 2

Project Change Control Procedure for Projects Executed under a Management and Operating Contract⁵

Table of Contents

Purpose	2
Scope	2
What To Do	2
A. Establish Change Control Thresholds	2
B. Identify Baseline Changes and Preparing BCPs	3
C. Reviewing and Analyzing BCPs	4
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E. Processing of Baseline Changes	5
F. Documentation and Distribution of Processed BCP	5
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Appendices	
A. Acronyms	
B. BCP Approval Levels & Approval Authorities	
C. Checklist for BCP Completeness	
D. BCP Form	
E. BCP Log	

⁵ This sample procedure based on a Y-12 Site CCB Procedure.

Purpose

This procedure describes the method for identifying, controlling, approving, and documenting changes to multi-year projects at the site.

Scope

This procedure applies to all multi-year projects. A multi-year project is a project whose baseline is managed as a multi-year Performance Measurement Baseline (PMB) and is reported in the Management and Operating (M&O) Contract Summary Work Breakdown Structure. Project may include line item, environmental management, general plant projects, general plant equipment, major items of equipment, and selected expense funded projects.

Baseline control begins with Critical Decision (CD)-0 for Conceptual Design, for Design after CD-1, and for the total project PMB after CD-2.

What To Do

A. Establish Change Control Thresholds

The change control thresholds and approval authorities are defined in Appendix B: Baseline Change Control Levels and Approval Authorities.

The following table illustrates the BCP responsibilities of contractor personnel according to the BCP approval levels for sign offs before submitting to FPD for processing Level 2 and above changes. Level 3 and Admin changes are handled by the contractor with notification to the FPD.

Table 1.0 Responsibility by BCP Approval Levels

Responsibility	BCP Approval Levels				
	Level 0	Level 1	Level 2	Level 3	Admin
Project Controls Representative	X	X	X	X	X
Project Manager	X	X	X	X	X
Contracting Officer	X	X	X	X	X
Sr. Project Manager	X	X	X	X	
EVMS Project Controls Manager	X	X	X	X	X
Program Manager/Director	X	X	X	X	
Projects Division Manager	X	X	X	X	
EVMS & Services Director	X	X	X		
EVMS BCP Coordinator	X	X	X	X	X
Office of the M&O President	X	X			

Federal Project Director	X	X	X		
Acquisition Executive	X	X			
Senior Acquisition Executive	X				

Project Manager

1. Define, during the preparation of the Project Execution Plan (PEP), the baseline change control thresholds that will apply to the project using the guidance in this procedure and Appendix B of this procedure.
2. Obtain approval of the BCP thresholds via approval of the PEP.

B. Identifying Baseline Changes and Preparing BCPs

Project Team Member

1. Identify and prepare possible baseline change notices.
2. Assist in the preparation, review, validation, and documentation of the BCP

Project Controls Representative

1. Develop an estimate of cost and schedule impact in conjunction with appropriate functional area organizations.
2. Determine if there is a need to revise the PMB or just allow a performance variation.
3. Enter the BCP information into the BCP log maintained by the EVMS organization and obtain a BCP number.
4. Complete the BCP form.
5. Attach all appropriate forms to the BCP (e.g. estimates, schedules, and other supporting information).
6. Regarding funds management:
 - a. For non-line item projects, if the requested change requires an addition, reduction, or transfer of funding to or from projects or between Budget & Reporting classification codes, then coordinate the funds request with the CFO.
 - b. For line item projects, annual data sheets OMB 300 reports are utilized to request funding.
7. Ensure that the BCP package is complete by utilization of the BCP checklist (Appendix C)
8. Obtain appropriate signatures utilizing Table 1.0 of this procedure.

Project Manager

1. Review and concur, with the assistance of the PCR, and validate that the BCP package includes appropriate attachments and supporting information to describe completely the following:
 - a. Scope of the change, and contractual and operating impacts, if any.
 - b. Impacts on the estimated cost of the project in current and future years.
 - c. Impacts on schedule, delivery dates, milestones, and critical decision points.

C. Reviewing and Analyzing BCPs

EVMS BCP Coordinator

1. Distribute BCP to appropriate subject matter experts (SMEs) and advisors to the CCB
2. Receive and distribute BCP comments from reviewers.
3. Distribute revised BCP documentation to appropriate SMEs, advisors to the CCB, and CCB members.

Project Manager/Project Team

1. Work with SMEs and advisors to the CCB to resolve comments.
2. Determine if the BCP should be recommended for approval to the CCB, or reject the BCP.
3. Provide comment resolutions to the PCR and EVMS BCP Coordinator.

Project Controls Representative

1. Revise BCP documentation to incorporate comment resolutions.
2. Transmit revised BCP documentation to the EVMS BCP coordinator.
3. If the PM/IPT has rejected the BCP, return the BCP to the EVMS BCP coordinator with documented rationale for disapproval.

D. Approving BCPs

Change Control Board Members

1. Review the BCP documentation including SMEs and advisor comments and resolutions.

Change Control Board Secretariat

1. Schedule the CCB meetings.
2. Record CCB meeting minutes.

3. Document CCB approvals/disapprovals.

Change Control Board Chairperson

1. Chair the CCB meetings.
2. Consider all CCB member inputs, and make approval/disapproval decision.

E. Processing of Baseline Changes

EVMS Project Control Manager or Delegate

1. Confirm the specific BCP type and approval requirements.
2. Review the BCP to ensure that it conforms to the standard format; that all required forms and supporting information is attached, with proper justification for the change; and that all signatures have been obtained.
3. Confirm the BCP approval level based on the criteria identified in Appendix B.
4. Approve and forward to EVMS BCP coordinator for processing; or disapprove and return to the PCR.

EVMS BCP Coordinator

1. Perform schedule validation.
2. Ensure the submitted BCP does not change baseline history.
3. If the request is a Level 0, 1, or 2 BCP, then forward the BCP package to the EVMS Director for preparation of the transmittal letter to the appropriate authority.

EVMS Director

1. If the request is a Level 0, 1, or 2 BCP, then prepare transmittal letter and forward to the appropriate authority.

F. Documentation and Distribution of Processed BCPs

EVMS BCP Coordinator

1. Receive BCPs that have been acted on by the CCB and update the log to reflect approval or disapproval.
2. If disapproved, transmit the disapproval comments back to the PC, PM, and PCR.
3. If approved, verify change is made in current month and upon re-validation that history has not been changed, incorporate change into the baseline.
4. Update the EVMS site-wide BCP log with current information.

5. Forward a signed copy of the BCP to the PM and PCR.
6. Incorporate schedule changes into the baseline.

Project Controls Representative

1. Update the project BCP log and inform all appropriate project and functional organizations of the BCP action.

Records

All records, including controlled documents generated as a requirement of this procedure, are to be dispositioned and maintained in accordance with site records management procedures.

Appendices

- A. Acronyms
- B. BCP Approval Levels & Approval Authorities
- C. Checklist for BCP Completeness
- D. BCP Form
- E. BCP Log
- F. Required Internal Attachments to the BCP

SAMPLE PROCEDURE 2, APPENDIX A

Acronyms

BCC	Baseline Change Control
BCP	Baseline Change Proposal
BCR	Baseline Change Request
CD	Critical Decision
	CD-0: Approve Mission Need
	CD-1: Approve Alternative Selection and Cost Range
	CD-2: Approve Performance Baseline
	CD-3: Approve Start of Construction
	CD-4: Approve Start of Operations or Project Closeout
COR	Contracting Office Representative
CSWBS	Contract Summary Work Breakdown Structure
DOE	U.S. Department of Energy
GPE	General Plant Equipment
GPP	General Plant Project
LI	Line Item
MIE	Major Item of Equipment
PCR	Project Controls Representative
PM	Project Manager
PEP	Project Execution Plan
PMB	Performance Measurement Baseline
PRD	Program Requirements Document
PSO	Program Secretarial Officer
SAE	Secretarial Acquisition Executive
SRD	Systems Requirements Document (Project Scope)

SAMPLE PROCEDURE 2, APPENDIX B

Baseline Change Control Levels & Approval Authorities

Approval authority for changes depends upon the impact of the change and can range from the contractor to Secretarial Acquisition Executive, usually with the involvement and support of Change Control Board.

The BCP approval levels established in DOE O 413.3A, Change 1, Attachment 5 are as follows:

- Level 0 – Secretarial Acquisition Executive (SAE)
- Level 1 – Program Secretarial Officer (PSO) as delegated from the Under Secretary or designee if project is less than \$100M
- Level 2 – Site Baseline CCB or the FPD (as delegated from the AE). FPD as the Contracting Officer Representative (COR), as delegated by the Contracting Officer
- Level 3 – Contractor with FPD's participation and/or notification as defined in the PEP.

DOE Guide 413.3-15, *Department of Energy Guide for Project Execution Plans*, states that the specific baseline change control thresholds for a project and approval authorities for scope, schedule, and cost must be documented in the Project Execution Plan (PEP).

	Level 0 SAE	Level 1 PSO	Level 2 Site/FPD Level	Level 3 Contractor
Scope	A change in scope that affects the ability to satisfy the mission need, an inability to meet a Key Performance Parameter, or non-conformance with the current approved PEP, which must be reflected in the Project Data Sheet	Changes to scope that affect mission need requirements documented in the Program Requirements Document (PRD), <i>or otherwise directed by the PSO.</i>	Any change that affects the ability to comply with the Functional Requirements as documented in the SRD. Any change to the project description, justification, scope, and acquisition strategy.	Any changes not affecting defined Level 2 or higher scope baseline changes, including conversion of Planning Packages to Work Packages. <u>Administrative Changes:</u> <ul style="list-style-type: none"> • Name, title and editorial changes • Corrections of errors that do not require Level 3 or greater approval • Correction of Charge Code and/or WBS changes
Schedule	CD-4 schedule delay of 12 months or more from original CD-2 baseline date.	Any slippage of approved CD-4 date.	Single or cumulative baseline schedule changes to major milestones defined in the PEP. Any change requiring use of schedule contingency.	Any change to activities in the project schedule that do not result in changes to major milestones. Any baseline change that uses contractor schedule contingency.
Cost	An increase in excess of the lesser of \$100M or 50% (cumulative) of the original CD-2 cost baseline	An increase greater than the TPC but less than \$100M or 50% (cumulative) to the approved Performance Baseline.	Any request for distribution of project contingency	Any distribution of contractor MR to the Performance Measurement Baseline.

SAMPLE PROCEDURE 2, APPENDIX C

Checklist for Verification of Baseline Change Proposal Completeness

BCP Number:	BCP Description:		
PCG and Title:	Date:		
	Yes	No	N/A
1) For Levels 0, 1, and 2, has the FPD been briefed?			
2) Are changes in scope, schedule and deliverables clearly identified in the BCP, including details about any work scope that is being displaced?			
3) Does the BCP change description and estimate provide sufficient information to evaluate scope changes (Levels 1, 2, and 3)?			
4) Are referenced letters and other backup information included in the BCP package?			
5) Have appropriate signatures been obtained?			
6) Reviewed by Derivative Classifier (DC) and determined to be "Unclassified." DC Signature			
EVMS BCP Coordinator:			
7) Have overheads been re-calculated by reviewer?			
8) Has the Schedule been validated?			
9) Re-verified Baseline History has not changed after Level 0, 1 and 2 approvals from BCC Board.			
EVMS BCP Coordinator – Signature and Date:			

SAMPLE PROCEDURE 2, APPENDIX D

BCP Form

Y-12 NATIONAL SECURITY COMPLEX
BASELINE CHANGE PROPOSAL (BCP) **INTERNAL BASELINE CHANGE**
☐ LEVEL 1 ☐ LEVEL 2 ☐ LEVEL 3 ☐ ADMINISTRATIVE

DATE SUBMITTED	MONTH CUMULATIVE CHANGES EFFECTIVE	BCP TITLE/SUBJECT	BCP NUMBER
PROJECT CONTROLS REPRESENTATIVE		PHONE	FAX
			E-MAIL

LEVEL 4 CSWBS AND TITLE

SAP PROJECT	SAP VERSION	BASELINE IMPACT	PRIOR YEARS	CURRENT YEAR	YEAR 2	REMAINING YEARS	TOTAL
		Current Value					\$ 0.00
BAR CODE	FUND TYPE	CCADSSOPIC	Proposed Change				\$ 0.00
			Revised Value	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SAP PROJECT	SAP VERSION	BASELINE IMPACT	PRIOR YEARS	CURRENT YEAR	YEAR 2	REMAINING YEARS	TOTAL
		Current Value					\$ 0.00
BAR CODE	FUND TYPE	CCADSSOPIC	Proposed Change				\$ 0.00
			Revised Value	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SAP PROJECT	SAP VERSION	BASELINE IMPACT	PRIOR YEARS	CURRENT YEAR	YEAR 2	REMAINING YEARS	TOTAL
		Current Value					\$ 0.00
BAR CODE	FUND TYPE	CCADSSOPIC	Proposed Change				\$ 0.00
			Revised Value	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

DESCRIPTION OF CHANGE

JUSTIFICATION FOR CHANGE

IMPACT OF NON-APPROVAL

SAFETY AND SECURITY ISSUES - ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH B&W Y-12 INTEGRATED SAFETY AND SECURITY MANAGEMENT PRINCIPLES

IMPACTS			
<input type="checkbox"/> COST	<input type="checkbox"/> ADDED SCOPE	<input type="checkbox"/> ERROR CORRECTION	<input type="checkbox"/> _____
<input type="checkbox"/> SCHEDULE	<input type="checkbox"/> REDUCED SCOPE	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____		

REQUIRED ATTACHMENTS	
<input type="checkbox"/> _____	<input type="checkbox"/> _____

OTHER ATTACHMENTS	
<input type="checkbox"/> LETTERS/VE MAIL	<input type="checkbox"/> _____

SIGNATURES			
PROJECT CONTROLS REPRESENTATIVE (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
PROJECT MANAGER (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
S/R PROJECT MANAGER (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
EVMS PROJECT CONTROLS MANAGER (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
PROGRAM MANAGER/DIRECTOR (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
PROJECTS DIVISION MANAGER (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
EVMS & SERVICES DIRECTOR (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
EVMS BOP COORDINATOR (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
OFFICE OF THE PRESIDENT (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
COMMENTS/JUSTIFICATION			

NNSA Y-12 SITE OFFICE			
NNSA PROGRAM MANAGER (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
FPD			
SUPERVISOR (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
Site Office			
VEA BOP CHAIRPERSON (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER
CCB Chairperson			
CONTRACTING OFFICER R (PRINTED NAME)	SIGNATURE	DATE	<input type="checkbox"/> APPROVE <input type="checkbox"/> DISAPPROVE <input type="checkbox"/> DEFER

SAMPLE PROCEDURE 2, APPENDIX E

< Project WBS, Title > - TEC (Capital)
< SAP Project Number >

[illegible][illegible]

CURRENT PROJECT TOTALS:	#REF!
-------------------------	-------

\$ -

SAMPLE PROCEDURE 2, APPENDIX F

Required Internal Attachments to the BCP

Below are Required Internal Attachments to the Baseline Change Proposal:

- Comparison of PMB and proposed revised PMB
- Schedule comparison:
 - Proposed Baseline Schedule (print proposed schedule with current baseline as target, if revision to existing baseline)
- Referenced letters or e-mails
- Checklist for BCP document completeness

SAMPLE PROCEDURE 3

**Non-M&O Contract Federal Project Change Control
Procedure⁶**

⁶ This sample procedure based on Mixed Oxide Fuel Fabrication Facility Project, MFFF-PRO-011, *Change Control Procedure*

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1.0 Purpose and Scope

1.1 Purpose

The purpose of this procedure is to establish the change control process, the Federal Integrated Project Team's responsibilities for change control, and the Baseline Change Proposal (BCP) documentation for non-M&O contracts.

1.2 Scope

The scope of this procedure is to ensure that:

- (a) Baseline changes are defined, documented, and approved, and the authority and responsibilities for such approvals are clearly delineated;
- (b) Technical, cost, and schedule project baselines are properly maintained;
- (c) Decisions are made at the appropriate management level;
- (d) Accountability and traceability are enhanced in the project decision making process; and
- (e) Project baseline and contract changes are coordinated and kept in alignment.

2.0 Definitions

- 2.1 Acquisition Executive –The individual designated by the Secretary of Energy to integrate and unify the management system for a program portfolio of projects and implement prescribed policies and practices.
- 2.2 Baseline Change Control – The integrated, systematic process to propose, coordinate, evaluate and disposition changes to established baselines in order to ensure that each project baseline change provides sufficient benefits for its impacts and that consistency between technical, cost, and schedule baselines are maintained.
- 2.3 Baseline Change Proposal (BCP) – A document consisting of proposed changes to the project technical, cost, or schedule performance baselines with justification and resulting impacts, which is submitted to the CCB for disposition. Approval of a technical change BCP is not a determination of whether or not the change could have been reasonably foreseen and is not directly related to fee determinations on the Project contract.
- 2.4 Baseline Change Proposal Disposition – The final decision regarding the implementation of a BCP, made by the highest level of approval authority required by the classification of the BCP (see Attachment 3.1).
- 2.5 Control Milestone – A milestone that represents a schedule commitment and is subject to change control.
- 2.6 Contract Modification – A document issued by the DOE Contracting Officer that legally changes one or more elements of the prime contract.

- 2.7 Contract Change Proposal – A formal proposal from the contractor to incorporate one or more BCPs dispositioned by the CCB that impact the contract statement of work, schedule, cost, and/or terms & conditions; submitted to the DOE Contracting Officer for consideration. This may also be referred to as a Request for Equitable Adjustment (REA).
- 2.8 Integrated Project Team (IPT) –A cross-functional group of individuals organized for the specific purpose of delivering a project to an external or internal customer. It is led by a Federal Project Director.
- 2.9 Change Control Board – A named group of federal individuals responsible for reviewing proposed changes to baselined configuration items and recommending disposition to the cognizant authority as defined in Attachment 3.1 and the PEP. The CCB membership is defined in Table 3-1. Additional federal leads for procurement, engineering, security, safety and regulatory affairs will be consulted and participate, as appropriate.

Table 3-1. Change Control Board Membership

Organization and Title
Federal Project Director, CCB Chairperson
Federal Project Controls Representative
Change Control Board Administrator
Federal Engineering Representative
Federal Construction Representative
Contracting Officer (CO)
Federal Environment, Safety & Health Representative
Chief Financial Officer Representative

- 2.10 Performance Measurement Baseline – The established technical configuration items and the interrelated quantitative expression of projected costs and schedule (without management reserve or other contingencies) which define the current plan of execution for the project and against which project performance is measured. Cost baseline is controlled at WBS level 6 and schedule baseline is controlled through controlled milestones.

- 2.11 Performance Measurement Baseline Change – Modification of approved measurement baseline. Approval authority for changes is determined by the impact the change has on the cost and schedule baseline and is defined in Attachment 3.1.
- 2.12 Performance Baseline –The performance baseline consists of the cost estimate, resource loaded schedule, Key Performance Parameters, and all contingencies established at Critical Decision 2 (Approve Performance Baseline) and reflected in the Congressional Project Data Sheet.
- 2.13 Project Change Notice (PCN) – A document consisting of proposed changes to the project technical, cost, and schedule performance baselines with justification and resulting impacts, which is submitted to the CCB for disposition. Changes that do not require Federal approval are processed within the Contractor process and approved by the Contractor Project Manager. See Attachment 3.1 for approval authorities.
- 2.14 Project Change Notice Disposition – The final decision regarding the implementation of a BCP or PCN. This decision is made by the highest level of approval authority required by the classification of the BCP or PCN (see Attachment 3.1).
- 2.15 Project Work Authorization – Generic term for a contract document issued by the Contracting Officer authorizing contractor performance, as agreed to by DOE, of the identified statement of work, control milestones, budget, and spending limit.
- 2.16 Rough Order of Magnitude (ROM) Estimate – A cost estimate that approximates the value of a BCP within an order of magnitude to provide adequate basis for the CCB to evaluate the potential cost impact of a BCP. Upon approval by the CCB a BCP requires a higher level of confidence estimate prior to inclusion in the contract via a contract modification. Contract modifications with a total estimated cost impact above \$700,000 require certified cost and pricing data.
- 2.17 Technical Baseline List – The set of design documents that are jointly controlled by NNSA and the contractor. The Federal Project Director shall approve changes to these documents.

3.0 Roles and Responsibilities

The project positions identified in Table 3-1, whose roles and responsibilities are described in this section, may delegate assigned responsibilities to another team member within their organization with a memo to the CCB Administrator. An addendum to this procedure provides the names of the individuals who are CCB members or advisors. The individual names will change, as necessary, to keep the CCB members current without having to revise the CCB procedure. If the project positions having responsibility change, the CCB procedure must be revised.

3.1 Contractor

- (a) Prepares PCN per Contractor procedure.
- (b) Obtains PCN approval through Contractor change control process.
- (c) Obtains BCP number from (Federal) CCB administrator and prepares BCP form and additional documentation required for presentation to the CCB.
- (d) Submits BCP to the CCB Administrator and CCB members.
- (e) Provides supplemental information to the CCB, as requested.
- (f) Provides documentation justifying a contract change, when appropriate
- (g) Provides a contract change request when requested by the FPD or when determines change required, submits to CO directly
- (h) Provides a contract modification proposal when requested by the CO
- (i) Provides a certificate of cost and pricing data when requested by the CO
- (j) Submits a Request for Equitable Adjustment (REA), when appropriate

3.2 CCB Members

- (a) Review and evaluate BCPs as assigned by the CCB Chair and provide a recommendation for disposition to the assigned lead for the particular BCP. The BCP assigned lead will complete the Disposition Recommendation form that includes the rationale for acceptance or rejection or proposed conditions and provide to the CCB chairperson.
- (b) Review and evaluate contract modification proposals and REAs as assigned by the CCB Chair and provide a recommendation for disposition to the assigned lead for the particular contract action.
- (c) Participate in CCB meetings (if a meeting is required).
- (d) Consult with other Federal leads, as required.
- (e) Propose project BCPs when appropriate. (Contractor prepares all documentation to initiate BCP, regardless of source)

3.3 CCB Administrator

- (a) Provides BCP numbers to Contractor and receives BCPs from Contractor.
- (b) Reviews BCP submittal for completeness.
- (c) Schedules BCPs for CCB meetings and issues meeting agendas to CCB members when required.
- (d) Resolves any BCP administrative issues and re-distributes BCPs to CCB members, if necessary.
- (e) Attends CCB meetings and records BCP disposition and related information.
- (f) Distributes dispositioned BCPs and contract change documentation to Contractor and other CCB members
- (g) Tracks BCP status and maintains status accounting database.
- (h) Generates BCP status reports and distributes them to CCB members.
- (i) Verifies implementing actions are complete by coordinating with IPT responsible party(ies) and documenting information in order to close out a BCP.

3.4 Federal Project Director, Chair Change Control Board

- (a) Serves as CCB chairperson for BCP actions.
- (b) Ensures technical and cost reasonableness review of Project BCPs.
- (c) Reviews and evaluates Project BCPs submitted for disposition and assigns a lead reviewer for each BCP.
- (d) Considers BCP recommendations of CCB members.
- (e) Makes disposition decision on Project BCPs within Level 2 approval authorities and signs BCP form.
- (f) Endorses and recommends consideration of changes for Level 0 or 1 approval authority (see Attachment 3.1).
- (g) When required, submits a contract change request to the CO.
- (h) Evaluates and coordinates contract change documents with the CO. Recommends dispositions of contract change documents.
- (i) For BCPs requiring AE approval, lead the development of an Independent Government Cost Estimate (IGCE).

3.5 Federal Project Controls Manager

- (a) Serves as member of the CCB.
- (b) Ensures maintenance of records for cost and schedule data related to the project cost and schedule baselines.
- (c) Updates cost and schedule performance measurement data in Project records, as necessary, following BCP approval.
- (d) Distributes revised Project cost and schedule baseline elements to the Integrated Project Team upon BCP approval.
- (e) Coordinates issuance of revised Project Work Authorization, as appropriate, with Contracting Officer and staff following Project BCP approval.
- (f) Coordinates preparation of documentation supporting issuance of Contract Modifications as applicable, with Contracting Officer and staff, for approved BCPs that impact the contract scope or cost.

3.6 Federal Contracting Officer

- (a) Serves as member of the CCB.
- (b) When required, acts on contract change requests from the FPD.
- (c) Evaluates and coordinates contract change documents with the FPD. Dispositions contract change documents.
- (d) Coordinates issuance of revised Project Work Authorization, as appropriate, with Federal Project Controls Manager and staff following Project BCP approval.
- (e) Coordinates preparation of documentation supporting issuance of Contract Modifications as applicable, with Federal Project Controls Manager and staff, for approved BCPs that impact the contract scope or cost.
- (f) Obtains a certificate of current cost or pricing data per FAR 15.403-4(b)(2), as applicable.
- (g) Issues Contract Modifications, as applicable.

4.0 Procedure

4.1 BCP Initiation

- 4.1.1 The Contractor processes a PCN through its change control process. If the proposed change requires Federal approval, the Contractor prepares a BCP using the PCN as backup. See Attachment 3.1
- 4.1.2 If the Contractor believes a contract modification will be required, justification for a contract change is prepared and submitted with the BCP.

4.2 BCP Preparation

- 4.2.1 The BCP Initiator obtains a basis of estimate using the Work Breakdown Structure (WBS) element definition format for each impacted cost account. The level of detail provided in the basis of estimate will be commensurate with the size and complexity of the proposed change. Certified cost data is not required at this point but will be needed when a contract change greater than \$700,000 is necessary. The certified cost data, if required, will be provided once the BCP is approved by the Government. In the rare instance when it is necessary to authorize work prior to BCP approval, the contractor may request approval from the Contracting Officer. Any approval will include a ceiling price and a negotiation schedule to finalize as soon as possible.
- 4.2.2 The BCP Initiator completes the BCP form (see Attachment 3.2) providing sufficient information regarding impacts and consequences for the CCB to adequately understand and evaluate the proposed change. A summary description and listing of all impacted baseline documents or other technical documents of significance must be included. Impacts to any affected risk events should also be described. For major changes, an assessment of remaining risks and a determination of the adequacy of remaining MR and/or DOE Contingency should be included in the BCP package. The BCP number is obtained from the CCB Administrator.

4.3 BCP Submittal to CCB

- 4.3.1 The Contractor submits the completed BCP package to the CCB Administrator requesting evaluation and disposition.
- 4.3.2 The CCB Administrator confers with the Federal Project Director to determine who will be the Lead BCP Reviewer.
- 4.3.3 The CCB Administrator reviews the BCP for completeness (form and attachments) and returns incomplete BCPs to the Contractor for rework; otherwise proceed to Step 4.3.4.
- 4.3.4 The CCB Administrator schedules the completed BCP for disposition by the CCB within 5 working days of the submittal date.
- 4.3.5 The CCB Administrator logs the BCP into the BCP Status Database and provides copies to the CCB members.

- 4.3.6 If a contract modification is required, the CCB Administrator coordinates review of the contract change documentation with the CCB and CO.

4.4 BCP Disposition

- 4.4.1 The CCB members review and evaluate the BCP and develop a recommendation including justification for BCP disposition and notify the BCP Lead Reviewer of their recommendation. This may occur in a formal meeting if required by the BCP Lead Reviewer. The disposition categories that may be selected are:
- (a) Approve.
 - (b) Approve with Conditions.
 - (c) Disapprove.
 - (d) Defer.
 - (e) Cancel or Withdraw.
- 4.4.2 If another organization or project is potentially impacted by the proposed change, the BCP Lead Reviewer sends the BCP to the other organization(s) for evaluation and input.
- 4.4.3 The CCB members identify any issues regarding the completeness of the BCP to the BCP Lead Reviewer. If additional information is needed, the BCP Lead Reviewer requests the information from the Contractor. If necessary, the CCB Administrator may reschedule disposition of the BCP.
- 4.4.4 Discussion on each pending BCP is held, as needed, to fully understand the change and associated impacts. The Contractor may be invited to the CCB meeting to defend the proposed change. Each CCB member provides the basis for their recommendation to the BCP Lead Reviewer. This may take place at a CCB meeting if one is necessary. The BCP Lead Reviewer completes the BCP Disposition Recommendation form (see Attachment 3.3) and submits it to the CCB Administrator.
- 4.4.5 If the BCP requires a contract modification, the CO will initiate appropriate contract change actions in parallel with the BCP process. See section 4.7 for the contract change process.
- 4.4.6 The CCB Chairperson makes a decision on BCP disposition (one of 5 possible selections as specified in Step 4.4.1).
- 4.4.7 The CCB Administrator records the disposition decision on the BCP form and associated instructions or comments, if any, and the CCB Chairperson signs the BCP Disposition Form in the disposition block.
- 4.4.8 If higher level approval is required (see Attachment 3.1), the Federal Project Director presents the BCP to appropriate approval authority as defined in the PEP. An IGCE for contract modifications is required prior to approval of PB changes by the AE. Negotiation of a contract modification must be completed prior to approval of a PB change by the AE.

- 4.4.9 Disposition of a complete and well documented BCP by the CCB, not requiring a contract change, will typically occur within 5 business days of the date of submittal. BCPs denoting major technical, cost, or schedule impacts or recommended changes to baselines, such as major replanning efforts, will typically be acted on within 15 business days of the date of submittal.

4.5 BCP Implementation

- 4.5.1 The CCB Administrator updates the Status Database and communicates the BCP disposition to the Contractor, CCB members, Contracting Officer, and project organizations after the CCB meeting. A copy of the approved BCP is provided to the Contracting Officer.
- 4.5.2 The Project Controls Manager coordinates revision of impacted project work authorization documents.
- 4.5.3 For changes requiring specific Contracting Officer direction to proceed with the proposed effort, the Contractor must not begin work prior to CO direction, even if the BCP has been approved. For urgent changes, the CO will issue a unilateral change, to be followed up by a request for proposal, contractor proposal submittal, evaluation, negotiation, and eventual bilateral contract modification. See section 4.7 for the contract change process. The CO obtains a certificate of current cost or pricing data per FAR 15.403-4(b)(2) unless an exception applies per FAR 15.403-l(b) or is waived by the HCA (FAR 15.403-l(c)(4)). Most change orders require certified cost and pricing data unless the item being changed is a commercial item.
- 4.5.4 The BCP initiator and other CCB members ensure that appropriate project personnel are informed of the BCP disposition and appropriate established procedures are followed for BCP implementation.
- 4.5.5 For a BCP approval or approval with conditions, project personnel complete actions for the specified conditions and then follow Step 4.6.1.
- 4.5.6 For a cancelled, disapproved or withdrawn BCP, project personnel do not revise technical, cost, or schedule baselines. The BCP Initiator may consider revising the BCP and resubmitting it or terminating activities.
- 4.5.7 For a deferred BCP, project personnel do not revise technical, cost, or schedule baselines pending another disposition at a future meeting. If additional information is needed to evaluate the BCP, the BCP Initiator obtains the needed information and sends it to the CCB Administrator.

4.6 Change Status Accounting

- 4.6.1 The CCB Administrator establishes a database and enters data to track, maintain, and report the status of BCPs in-process, BCPs dispositioned by the CCB, and the implementation of approved BCPs.

- 4.6.2 The CCB Administrator periodically produces a BCP status report and transmits the report to CCB members.
- 4.6.3 The Contractor shall maintain and submit a change control log monthly to the Federal Project Director identifying all changes to the performance baseline including PCNs under the Contractor Project Manager's approval authority and BCPs.
- 4.6.4 The CCB Administrator shall verify all actions needed to implement an approved BCP are completed before the closeout of a BCP.

4.7 Contract Changes

- 4.7.1 When a BCP requires a contract modification, the FPD prepares and submits a contract change request to the CO. The FPD may receive assistance from the contractor to prepare the contract change request.
- 4.7.2 If the change is urgent, the CO issues a unilateral change with an NTE cost along with a proposal due date and a definitization schedule. The FPD may provide input for the NTE cost.
- 4.7.3 If the change is not urgent, the CO issues a request for proposal to the contractor that identifies any proposed changes to the SOW and a planned negotiation schedule.
- 4.7.4 The contractor then develops the proposal with a cost estimate and submits it to the CO.
- 4.7.5 The CO leads the evaluation of the contractor proposal. The FPD and IPT assist the CO in the evaluation of the contractor proposal. The evaluation includes a cost and price analysis, a Defense Contract Audit Agency (DCAA) audit when required, and a technical evaluation.
- 4.7.6 A pre-negotiation plan is developed. The CO conducts negotiations that include price, terms, and conditions. A certificate of cost or pricing is obtained from the contractor and any applicable subcontractors.
- 4.7.7 The FPD incorporates the results of the proposal evaluation into the BCP package. For contract modifications that will result in a baseline change required to be approved by the AE, an IGCE is required, and negotiations with the contractor must be completed prior to the AE approval.
- 4.7.8 If the contract change is approved, the CO issues the contract modification. If the change was urgent, the CO issues the supplemental modification to definitize the initial change order.
- 4.7.9 The FPD/IPT process the appropriate BCP, and the contractor updates the PMB.

5.0 Records

Dispositioned BCPs are not quality assurance records; however, to support project management and oversight activities, the CCB Administrator will file dispositioned BCPs in the Project Records Center until project turnover.

6.0 Attachments

- 3.1 Project Change Approval Authority
- 3.2 Baseline Change Proposal (BCP) Form
- 3.3 BCP Disposition Recommendation Form

Attachment 3.1 – Project Change Approval Authority

	Level-0 SAE (Deputy Secretary)	Level-1 NNSA Administrator (may be delegated to Program Secretarial Officer)	Level-2 Acquisition Executive (may be delegated to Federal Project Director)	Level-3 Contractor Project Manager
Technical	Any change to scope or performance that affects the ability to satisfy mission need or change PEP or Project Data Sheet (PDS) requirements (e.g., KPPs).		Any change to technical requirements or parameters that affect the safety basis or operation functions, but which does not affect mission need, PEP or PDS requirements; or any change to Federal technical baseline.	Changes to design that are within the approved technical baseline.
Schedule	Notify SAE if CD-4 changes greater than 12 months.	Any slippage of CD-4 date.	Any change to a Level 2 Control Milestone date. Cumulative changes to any Level 1 Control Milestone not slipping the CD-4 date.	Any change to a Level 3 Control Milestone date that does not affect a Level 2 Control Milestone date.
Cost	Any increase in TPC greater than \$100 Million or 50% (cumulative) of CD-2 approved Total Project Cost (TPC) (which ever is less).	Any increase to the TPC approved at CD-2.	Any use of DOE Contingency. Any change requiring DOE contract action or use of Management Reserve (MR) in excess of what has been obligated to date.	Any cumulative change to the approved cost performance measurement baseline that does not require a DOE contract action or does not use MR in excess of what has been obligated to date.

Note: Refer to the Project Execution Plan for definitions of Level 0, 1, and 2 and 3 control milestones.

Attachment 3.2 – Baseline Change Proposal (BCP) Form

PROJECT BASELINE CHANGE PROPOSAL		
BCP Title:	BCP No:	BCP Date:
Initiator:	Organization:	Phone:
Change Approval Authority: Level 0 <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/>	Directed Change: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Change Description (Use continuation sheet if necessary) : Self Contained Summary- with additional detail attached See Supplemental Attachment providing the details of the impacts to cost, schedule and technical baselines and associated risk events.		
Contracting Officer Approval to Proceed Required <input type="checkbox"/> Yes <input type="checkbox"/> No Contract Modification Required <input type="checkbox"/> Yes <input type="checkbox"/> No		
Change Justification (Use continuation sheet if necessary): Self Contained Summary- with additional detail attached 		
Detailed Baseline Impacts (Identified anticipated variances. See attachments for details): Technical <input type="checkbox"/> Yes <input type="checkbox"/> No Cost <input type="checkbox"/> Yes <input type="checkbox"/> No Schedule <input type="checkbox"/> Yes <input type="checkbox"/> No		
Change to Baseline Proposed (Identified proposed changes to baseline. See attachments for details): Technical <input type="checkbox"/> Yes <input type="checkbox"/> No Cost <input type="checkbox"/> Yes <input type="checkbox"/> No Schedule <input type="checkbox"/> Yes <input type="checkbox"/> No		
Additional Impact to Other Activities (Operations, Startup, Other Projects, etc. See attachments for details): Technical <input type="checkbox"/> Yes <input type="checkbox"/> No Cost <input type="checkbox"/> Yes <input type="checkbox"/> No Schedule <input type="checkbox"/> Yes <input type="checkbox"/> No		

Proposed Changes

Cost Baseline Impact Summary:	Approved Baseline	Proposed Change	Proposed New Baseline
Performance Measurement Baseline (PMB)	\$	\$	\$
Contingency	\$	\$	\$
Total Estimated Cost (TEC)	\$	\$	\$
Other Project Cost (OPC)	\$	\$	\$
Total Project Cost (TPC)	\$	\$	\$

Cost Profile Impact (TPC=TEC + OPC)								
Fiscal Year	<u>Approved Cost Profile</u>		<u>Proposed Change</u>		<u>Annual Changes*</u>		<u>Proposed Profile</u>	
	Capital	Operating	Capital	Operating	Capital	Operating	Capital	Operating
Prior Year								
Current Year								
Budget Year (BY)								
BY+1								
BY+2								
BY+3								
BY+4								
Out Years								
Subtotal								
Total (TPC)								

Schedule Baseline Impact Summary:			
Milestone	Approved Baseline (Month/Year)	Proposed Change (Months)	Proposed New Baseline (Month/Year)

BCP Disposition Form

BCP Number and Title:

BCP Disposition:

☐ Approved

☐ Approved with Conditions

☐ Disapproved

☐ Deferred

☐ Cancelled or Withdrawn

Federal Project Director

Date

PSO Approval Required

☐ Yes ☐ No

☐ Approved ☐ Disapproved

Program Secretarial Officer

Date

AE Approval Required

☐ Yes ☐ No

☐ Approved ☐ Disapproved

Acquisition Executive

Date

Disposition Conditions/Comments:

BCP DISPOSITION RECOMMENDATION

Page 1 of 1

SUPPLEMENT 5
Contract Change Order Administration of Department of Energy Prime
Contracts
Issued April 1, 2008



Department of Energy
Washington, DC 20585

April 1, 2008

MEMORANDUM FOR DISTRIBUTION

FROM:

Thomas E. Brown
THOMAS E. BROWN, DIRECTOR
OFFICE OF CONTRACT MANAGEMENT
OFFICE OF PROCUREMENT AND
ASSISTANCE MANAGEMENT

SUBJECT:

Contract Change Order Administration of Department of Energy
Prime Contracts

The purpose of this memorandum is to highlight the need for good contract administration of Department of Energy (DOE) contracts (non management and operating contracts) including those covered by DOE Order 413.3A, Program and Project Management for the Acquisition of Capital Assets. One of the focus areas of the DOE's efforts to improve contract and project management is the recognition that effective contract change order administration is critical to ensuring that contract and project requirements are met. Fundamentally, the award of an appropriate contract type that best reflects performance and risk at a reasonable cost or price establishes the foundation for successful project performance. Contract management planning, as documented in a formal contract management plan (See DOE Acquisition Guide Chapter 42.5) provides the "road map" for administering and monitoring key elements of contract performance. A sound contract management plan must clearly outline (1) the roles and responsibilities of key DOE officials, (2) key contract milestones and other performance requirements, (3) processes for ensuring that the rights and remedies of the parties remain operational, and (4) an effective contract change control process.

A mature and rigorous contract change control process is, arguably, the most important element of DOE's contract management framework and activities. A change control process provides a mechanism to make timely and appropriate changes to the contract requirements to reflect changes to the contract within the scope of the contract "Changes" clause. Formal change control includes not only the decision-making framework for assessing, negotiating, and implementing contract changes, but also includes project management and performance tracking systems, authorization and control levels, financial and funding management, and contract and project documentation.

There is a direct correlation between the contract estimated cost and fee (or fixed price) and the contractor's project performance measurement baseline. Contracts for projects subject to DOE Order 413.3 require the contractor to develop and deliver to DOE a contractor project performance measurement baseline. The contractor's project performance measurement baseline total cost plus management reserve (contractor's contingency) should equal the contract total estimated or target cost or price. The contractor should not be allowed to change the contract cost, price, schedule, and/or statement of work (SOW) that it agreed to in the original award by simply submitting or



updating the project's performance measurement baseline. Contractors should be held accountable for the performance of their contracts at the agreed to contract cost or price and schedule.

Heads of Contracting Activities (HCA) are encouraged to establish formal Government change control boards (CCB) for major construction projects and environmental cleanup contracts. Contracting officers should issue approved program office or CCB changes (un-priced or bilateral) to the SOW by contract modification (Federal Acquisition Regulation (FAR) 43.201(a)) and request change proposals from the contractor.¹ Changes to project performance measurement baselines or the receipt of a revised baseline from a contractor do not constitute a contract change or a change proposal.

Validated project performance measurement baselines are valuable tools for Federal project directors and contractor project personnel to manage their projects. This management includes tracking performance against a baseline plan utilizing a certified earned value management system. However, DOE contracting officers are not authorized to modify a contract's estimated cost and fee/price or contractually required delivery dates/schedules based on a contractor's initial or revised project performance measurement baseline even if the baseline has been validated by DOE's Office of Engineering and Construction Management. A project performance measurement baseline is not considered cost and pricing data as defined by the FAR Part 15. In addition, the Department's validation reviews of these baselines do not differentiate contract overruns, new work, deleted work, change orders, requests for equitable adjustments (REA), incurred costs to date, contractor entitlement for change orders and REAs, and responsibility for schedule changes and delays. A baseline validation review also does not constitute a contract audit. A validated contractor project performance measurement baseline does not remove the contracting officer's responsibility for evaluating and negotiating outstanding contract changes and REAs even if the contractor may have accounted for these items in the revised baseline.

At times, the scope of the SOW that was established in a solicitation may change due to a delay in the award of the contract or the amount of work that the incumbent contractor actually completed versus the work that was projected to be completed at the time the solicitation was issued. In this case, the contracting officer should require the contractor to identify the differences in the scope within 60 to 90 days of contract award. Once the differences are verified, the contracting officer should issue a change order and request that the contractor submit both technical and cost proposals. This process has been referred to as a "true-up." The true-up should be negotiated as any other change order (see the attached guidance). The true-up should be completed in a timely fashion and should not wait for the submission or validation of the contractor's project performance measurement baseline.

¹ Prior to issuing either a priced or unpriced change order estimated to be in excess of the HCAs delegated procurement authority, the HCA shall obtain Office of Contract Management (MA-62) approval in accordance with Department of Energy Acquisition Regulation (DEAR) Acquisition Guide Chapter 71.

Fee may be paid on contract change orders and REA's with entitlement in accordance with applicable FAR and DEAR fee policy based on the net cost of the added and deleted work. Contractor performance that will result in the earning of minimum or no fee is not justification for adding more fees to the contract. Fee may not be based on initial or revised project performance measurement baselines. Fee may not be calculated or paid on estimated work to go or on cost overruns.

Contract change orders and REAs including the associated contract fee should be negotiated to the extent possible prior to the incurrence of significant costs. Incentive or performance fees may not be established or paid on incurred costs, past delivery dates, or other actions which have been accomplished by the contractor prior to the negotiation of the fee. To the extent that changes and REAs involve significant costs incurred prior to agreement on contract price, the fee objective should be reduced to reflect decreased cost risk. Only fixed fee adjusted for reduced cost risk shall be negotiated on changes and REAs negotiated after all costs have been incurred.

Please provide copies of this letter and the attached guidance to all procurement personnel including contracting officers, contract specialists, and cost/price analysts. If there are any questions or comments on this guidance, feel free to contact me at 202-287-1348 or thomas.brown@hq.doe.gov or one of the Acquisition Planning and Liaison Division (MA-621) procurement analysts.

Attachment

ATTACHMENT

CONTRACT CHANGE AND REQUEST FOR EQUITABLE ADJUSTMENT (REA) GUIDANCE

If the Government needs to make a change in the scope of the contract that affects an increase (or decrease) in the estimated contract cost, fee (if any), delivery schedule, or option periods, the Contracting Officer (CO) should issue a change order. The general areas a CO may direct a change are stated in the applicable changes clause cited in the contract. The proper procedure for implementing a contract change is for the CO, after assuring all internal processes and procedures have been followed, to issue a request for proposal to the contractor with a draft contract modification definitization schedule. Contract change orders and REAs should be negotiated in a timely fashion in accordance with the Federal Acquisition Regulation (FAR) and the Department of Energy Acquisition Regulation (DEAR). (Note: It is important that adequate funding is available to fund the contract change in order to not violate the Antideficiency Act).

The entitlement and quantum for each contract change and REA have to be individually evaluated and documented by the contracting officer. After receipt of the contractor's proposal, the CO shall ensure that a technical evaluation and cost analysis including audit and field pricing support when required (see attached letter from Edward R. Simpson to the Procurement Directors dated August 20, 2001), be performed and documented. Before negotiating with the contractor, the CO should prepare a pre-negotiation memorandum (pre-neg) (FAR 15.406.1 Pre-negotiation Objectives)

The pre-neg should discuss the proposed contractor position and the Department of Energy (DOE) objective by cost element. The pre-neg should address the reasonableness of the proposed cost changes from the current contract cost. It should breakout the cost of the new work, deleted work, change orders, REAs, and cost overruns. While one pre-neg may address several changes or REAs, the pre-neg should address the contractor's proposal and the DOE objective for each individual entitlement.

On REAs, the pre-neg should first establish the contractor entitlement or the lack thereof for each REA. The contracting officer may need to have a separate technical evaluation of the entitlement to support the pre-neg. On each REA with entitlement, the quantum has to be addressed in same manner as changes and new work.

After contract negotiations are complete but before executing the contract modification, the Contracting Officer shall obtain a certificate of current cost or pricing data per FAR 15.403-4(b)(2) unless an exception is applicable per FAR 15.403-1(b) or waived by the Head of the Contracting Activity (HCA) (FAR 15.403-1(c)(4)). Most change orders require certified cost and pricing data unless the item

being changed is a commercial item. Any waiver of the requirement to submit certified cost and pricing data must present information and a solid case to support the action sufficient to withstand the scrutiny by internal and external reviews and be within the HCA's delegated procurement authority. For actions that exceed the HCA's delegation, the HCA must obtain prior approval from the Office of Contract Management (MA-62).

The results of the negotiations are required to be documented with a post-negotiation memorandum (FAR 15.406-3, Documenting the Negotiation). After the appropriate approval of the action, the Contracting Officer should implement a bilateral contract modification that includes release language per FAR 43.204, Administration.

In certain circumstances, it may be necessary to issue an undefinitized/unpriced change order modification. In these exceptional instances, the CO may unilaterally direct by contract modification an immediate change within the general scope of the contract. The changed contractual requirement should be limited to the minimum effort required to satisfy the requirement while a proposal is prepared, analyzed, and negotiated.

In the contract modification, the CO is required to set a ceiling price for the changed contractual requirements. The ceiling price should be separately identified in the unpriced change order from the pricing structure of the basic contract. It is suggested that the CO consider utilizing FAR 52.243-6, Change Order Accounting, for changes expected to exceed \$100,000 for visibility into actual costs incurred pending definitization. The process of definitizing an unpriced change order mirrors the process outlined for a traditional change order. The CO should definitize the change as soon as practicable.

Most DOE cost reimbursable contracts contain both a technical direction clause and a changes clause. Technical direction is an important tool for the contracting officer's technical representative (COR) who is often the Federal Project Director, but it must be within the SOW stated in the contract and preferably should be in writing. Technical direction may not be used to assign effort outside of the SOW and may not constitute a contract "Change" (FAR 43.202, Authority to Issue Change Orders). The CORs are responsible for ensuring that they do not exceed their authority. If, in the contractor's opinion, technical direction has been issued that constitutes a change to the contract, the contractor is responsible for notifying the contracting officer in writing as soon as possible (FAR 43.104(a), Notification of Contract Changes) prior to performing the technical direction. As a best practice, the CO should be working with the COR and the contractor to avoid situations where the contractor feels compelled to seek instruction on the propriety of a technical direction. If advanced coordination is not practicable, the contracting officer is encouraged to be proactive in reviewing issued technical directions and coordinating any required actions.

Contract Change Order Administration of Department of Energy Prime Contracts

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Department of Energy

Washington, DC 20585

AUG 2 8 2001

MEMORANDUM FOR PROCUREMENT DIRECTORS

FROM:


EDWARD R. SIMPSON, ACTING DIRECTOR
OFFICE OF CONTRACT MANAGEMENT
OFFICE OF PROCUREMENT &
ASSISTANCE MANAGEMENT

SUBJECT:

CONTRACT AUDITS

The purpose of this memorandum is to emphasize the need for obtaining timely contract audit and pricing support for contracts for the Department of Energy's (DOE) major projects such as construction and environmental remediation work. As we move away from relying on traditional management and operating contracts to accomplish our major projects, it is important that DOE obtain adequate audit and pricing support to: provide scrutiny into the offeror's or contractor's cost or price proposal; confirm that the offeror's or contractor's accounting system and practices are adequate for the contract type; and ensure that the cost or price to be paid under these new contracts is fair and reasonable.

Department of Energy Acquisition Regulation (DEAR) 915.404-2-70, Audit As An Aid In Proposal Analysis requires a cognizant Federal audit activity review of any contract or modification action of \$500,000 or more for firm fixed price contract types and \$1 million or more for all other contracts when the contract price will be based on cost or pricing data submitted by the offeror/contractor. This DEAR requirement applies to not only preaward actions but contract modifications that include changes, definitization of unpriced change orders, request for equitable adjustments, overrun proposals, claims, price negotiations of unpriced options, settlement proposals, termination proposals, determinations of cost incurred for the payment of incentive fees, separately priced task orders, etc. Changes that include both deductive and additive work must consider both the increases and decreases for the purpose of the audit threshold (e.g. a \$400,000 modification resulting from a reduction of \$500,000 and an increase of \$900,000 would be valued at \$1,400,000 for threshold applicability purposes. See Federal Acquisition Regulation (FAR) 15.403-4(a)(1)(iii)). Contracting officer decisions on claims (see FAR 33.202) exceeding the thresholds above should also be supported by audit reviews where cost and pricing data is used to support the contracting officer's position.

The DEAR requirement may be waived at a level above the contracting officer when the reasonableness of the negotiated contract price can be determined from the information already available. It should be noted that independent Government estimates shall not be used as the sole justification for any such waiver. In addition, cost/pricing reports from DOE pricing support personnel or from Department of Defense field level contract management offices (see DEAR 915.404-2) do not satisfy the DEAR 915.404-2-70 audit requirement. In general, audits should



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not be waived unless the existing cost data being used to support the contract price has been audited within the past year. Audits are also deemed necessary when significant incurred costs are involved or when historical actual cost data on previous contracts exists and are relevant to the current contract action.

While requiring cost and pricing data and obtaining proposal audits when required is normally associated with single source contract actions, it should be noted that information other than cost and pricing data and audit assistance may be necessary on competitive procurements as well. FAR 15.404-1(d)(2) requires that cost realism analyses shall be performed on cost reimbursement contracts to determine the probable cost of performance for each offeror. Cost realism analyses may also be used on competitive fixed-priced incentive contracts or, in exceptional cases, on other competitive fixed-price type contracts when new requirements may not be fully understood by competing offerors, there are quality concerns, or past experience indicates that contractors proposed costs have resulted in quality or service shortfalls (see DEAR 15.404-1(d)(3)). If there is a significant cost/price spread in competitive offers, it may be an indication that the offerors may not fully understand the Government's requirements. Additionally, when joint ventures, limited liability corporations, or other similar entities with no prior cost history propose, audit assistance may be useful in evaluating proposed indirect costs and new accounting systems.

Any prenegotiation plans on contract actions requiring Office of Contract Management, MA-52, approval that do not include the appropriate audit support required by DEAR shall include a copy of the waiver and the supporting rationale as required by DEAR 915.404-2-70(b). If there is any uncertainty about whether or not an audit is required in any specific procurement action, feel free to discuss it with your assigned MA-52 "buddy". If there are any problems arranging audit support, the Office of Policy, MA-51, within the Office of Procurement and Assistance Management, can be contacted for assistance. If there are any questions about this letter, please contact Thomas Brown of my staff at 202-586-9075.

Please distribute this memorandum to all contracting officers and pricing support personnel.