

LIFE
CYCLE
ASSET
MANAGEMENT

Good Practice Guide
GPG-FM-026
Revision A

Project Closeout

August 1996

Department of Energy
Office of Field Management
Office of Project and Fixed Asset Management

This page intentionally left blank.

1. INTRODUCTION	1
2. PRINCIPLES AND PROCESSES	3
2.1 Project Transition	3
2.1.1 Transition Planning	3
2.1.2 Project Turnover/Acceptance	4
2.2 Project Closeout	6
2.2.1 Physical Closeout	7
2.2.2 Financial Closeout	9
2.3 Early Project Termination	10
3. MEASURING FOR RESULTS	15
4. SUGGESTED READING	17
Figure 1. Project Transition Logic Flow	6
Figure 2. Physical Closeout Logic Flow	8
Figure 3. Project Financial Closeout Logic Flow	11
Figure 4. Termination Logic Flow	14

This page intentionally left blank.

1. INTRODUCTION

This Guide provides information about the project closeout phase, which includes project transition, physical closeout, and financial closeout. This Guide also provides information about closeout as a result of project termination. Use of this Guide can help the project manager ensure that these processes progress smoothly and that the project meets asset management goals and the financial closure goals of the Department of Energy (DOE) Office of Budget.

The DOE project transition, closeout, and termination processes can be applied to all capital funded and expense funded projects that meet DOE criteria for capitalization. The Department's capitalization criteria can be found in DOE O 534.1, ACCOUNTING. The processes described in this Guide can apply to completed projects or a portion of a project that functions independently of other portions of the project. Partial closure of a project helps the Department maintain more accurate financial and property records.

This page intentionally left blank.

2. PRINCIPLES AND PROCESSES

This Guide is based on the assumption that projects are divided into four stages: preconceptual activities and the conceptual, execution, and closeout phases. Typically, a program includes an operations phase. Each phase is defined in the *Project Management Overview*, GPG-FM-001. This *Project Closeout* Guide addresses project transition, closeout, and, as appropriate, termination activities, which can vary from site to site; it is likely that sites will issue more detailed instructions to convey local procedures.

2.1 Project Transition

Part of the transition process from construction to operations is to develop cost, schedule, and technical parameters that define how the project should be completed. This process, which is the DOE project manager's responsibility, should be as carefully planned and executed as any other.

2.1.1 Transition Planning

Converting a facility from construction project status to operating status requires that technical and administrative matters be addressed during earlier stages of the project. As early in the execution phase as feasible, the project manager should initiate planning for and development of the documentation for transition to operations. Planning may include, for example, development of operations and maintenance manuals, generation of as-built drawings, and the procurement of any materials required for initial operations. Planning should be developed in conjunction with the contractor who will operate the facility to encourage complete mutual understanding. Normally, the project transition plan is prepared by the contractor under the guidance of DOE. Depending on the type of project and the end use of the project deliverable, a transition plan typically includes following information.

- Specific roles and responsibilities of DOE, the contractor project team, and the operations contractor. Responsibilities will vary depending on the type of project but can typically include the following considerations.
 - ▶ Operations startup safety.
 - ▶ Training of operations personnel.

- ▶ Site support.
 - utilities
 - security
 - other support, such as radiological monitoring
- ▶ Sustained engineering.
- ▶ Spare parts/components inventory.
- ▶ Operational testing.
- ▶ Specialized vendor support for unique equipment operations requirements.
- ▶ Authority for contractor(s) release.
- A resource plan addressing the phaseout of personnel whose expertise is not required for the transition to operations. Consideration should be given to specialized skills needed for transition, such as specialized start-up personnel.
- A comprehensive transition schedule.
- Turnover and acceptance procedures.
- A list of permits or licensing required for facility operation.
- Operational testing, which might include:
 - ▶ identification of functional or integrated systems tests,
 - ▶ development of accept/reject test criteria, and
 - ▶ a method for documenting test results and resolving failed components or systems.

2.1.2 Project Turnover/Acceptance

For many projects, an operations phase follows the completion of the project. When, following completion of the construction phase, the project begins its transition

activities leading to operations, the DOE project manager should maintain responsibility for project functions so that he/she can address issues that arise concerning the project. The project manager should also work closely with operating organizations to complete acceptance testing and start-up in accordance with planning documentation developed during the project's execution phase. As previously planned, the operations or project organization will perform tests and evaluations to ensure that the project can be safely operated as designed and built. Commissioning of the project can be an important part of the transition.

During transition, the operations organization may accept beneficial occupancy and take ownership of project documentation. Typically, the documentation transferred from the project organization to the operating organization might include:

- environmental and safety documentation,
- design basis documents,
- drawings and specifications, including as-built documents,
- configuration management documents, and
- equipment and operating manuals, project records, and any other relevant documents.

The project manager should submit acceptance completion documentation to support the Acceptance/Completion Critical Decision (Critical Decision 4), which occurs before operations or the operations phase begins. (Requirements for typically meeting this decision can be found in *Critical Decision Criteria*, GPG-FM-002, section 2.5, Critical Decision Four (CD-4): Completion/Acceptance.) This decision indicates that technical performance has been demonstrated as acceptable and that no further transition activities are necessary. The acceptance phase concludes with final acceptance of the project by the operations organization or the decision from line management to proceed to the operations phase. Figure 1 depicts the sequence of primary activities/events necessary for project transition as discussed in this section.

Note: The operations phase applies only to those projects that include operations as an integral part of the project definition. Environmental restoration, for example, may include this phase for such activities as operating disposal or pump and treat facilities or long-term surveillance and maintenance.

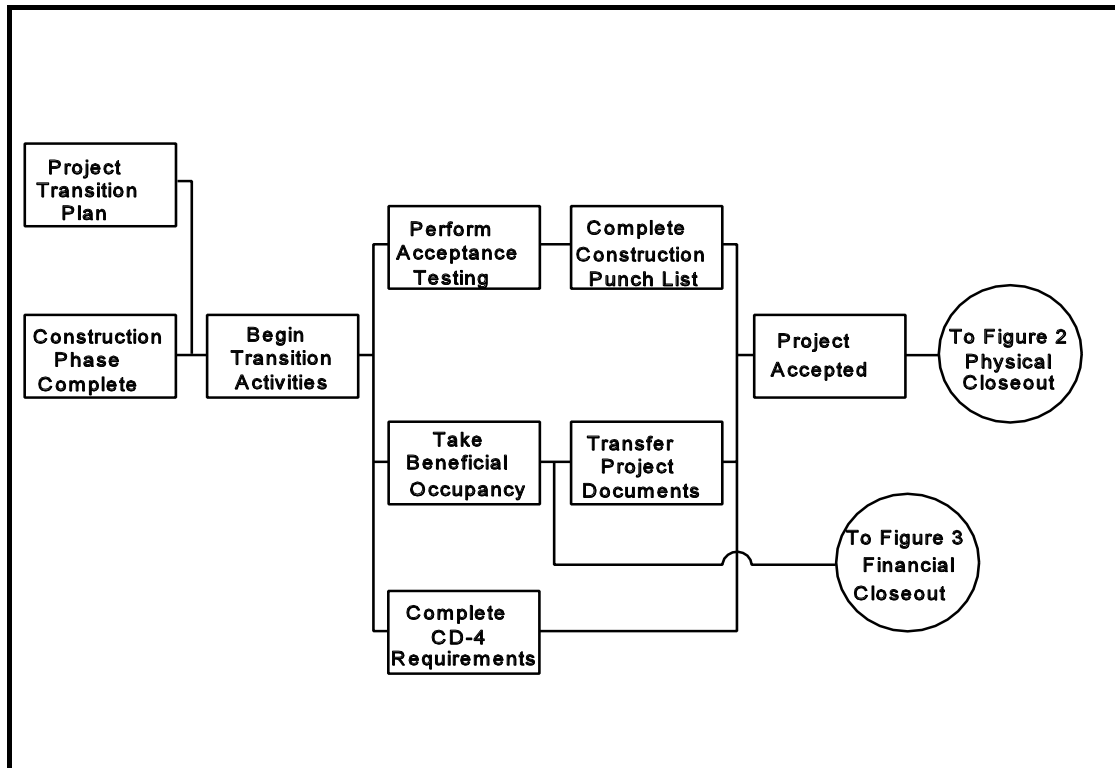


Figure 1. Project Transition Logic Flow.

2.2 Project Closeout

A project is ready for closeout once it has successfully made the transition from the project organization and has been accepted by the operating organization. For this Guide, project closeout is defined as follows.

Project closeout begins at beneficial occupancy, or termination, and is complete after all financial closeout activities are complete. Typically, the contractor will be allowed up to 6 months to prepare the Final Cost Report following project completion signified by Critical Decision 4 or equivalent. The Final Cost Report will include actual project costs to date and estimates for that work that occurs prior to turnover to operations. The Final Cost Report should also include estimates for outstanding claims if applicable. Timely submission of this report will facilitate removal of completed projects from the financial reporting system. Any obligations in excess of those specifically identified in the Final Cost Report should be deobligated and returned to the Chief

Financial Officer for entry into the Departmental project Overrun Cost Account. This account may be used, with proper Field/Program justification, for projects that have actual costs exceeding the estimates identified in the Final Cost Report.

Closing out a project occurs in two primary steps, physical and financial closeout, in that order. The following two sections address each process.

2.2.1 Physical Closeout

Physical project closeout primarily consists of activities remaining after the operating organization has accepted the project. The contractor project manager or equivalent has the responsibility to complete post-acceptance activities and officially request project closure approval from DOE. The activities normally associated with physical project closeout are as follows.

- If project completion criteria are established, presumably in the Project Execution Plan or equivalent planning/baseline documentation, the project manager should review each criterion and make a determination as to satisfactory completion. When completion criteria exist, completion documentation should accompany requests to DOE for closure approval.
- All turnover punch list items should be made to ensure they have been completed to the satisfaction of the project and operations organizations. Any uncompleted punch list items should receive the project manager's attention for closure. Quick punch list closure can, in many circumstances, hasten the release of construction contractors. Documentation verifying closure of punch list items should accompany requests to DOE for closure approval.
- Excess material or equipment must be identified, retrieved from any subcontractors, and disposed of in accordance with DOE property disposition regulations. Disposing of excess material or equipment may also entail adjustments to capital equipment accounts.
- All purchase orders should be closed. If a purchase order cannot be closed, the project manager should open a single account to deal with residual outstanding obligations. Outstanding obligations should be included in the Final Cost Report.
- All remaining project control accounts, except any for outstanding obligations, should be closed so that further charges will not be accepted.

- If required by previously established instruction, project lessons learned should be submitted to the DOE project manager.
- Forms required by the site shall be submitted.

The DOE project manager should receive the request for project closure approval with any supporting documentation. At that time, the DOE project manager may conduct any independent inquiry to determine that all actions have been satisfactorily completed. If the contractor's request cannot be approved, the closure request should be returned to the contractor with explanation.

Once DOE has approved the physical project completion request, the contractor may begin financial closeout. The DOE project manager or designee will coordinate with the site Facilities Information Management System (FIMS) manager to ensure that the data for the closing project has been entered into the system in compliance with DOE O 430.1, LIFE-CYCLE ASSET MANAGEMENT. Figure 2 depicts the physical closeout process.

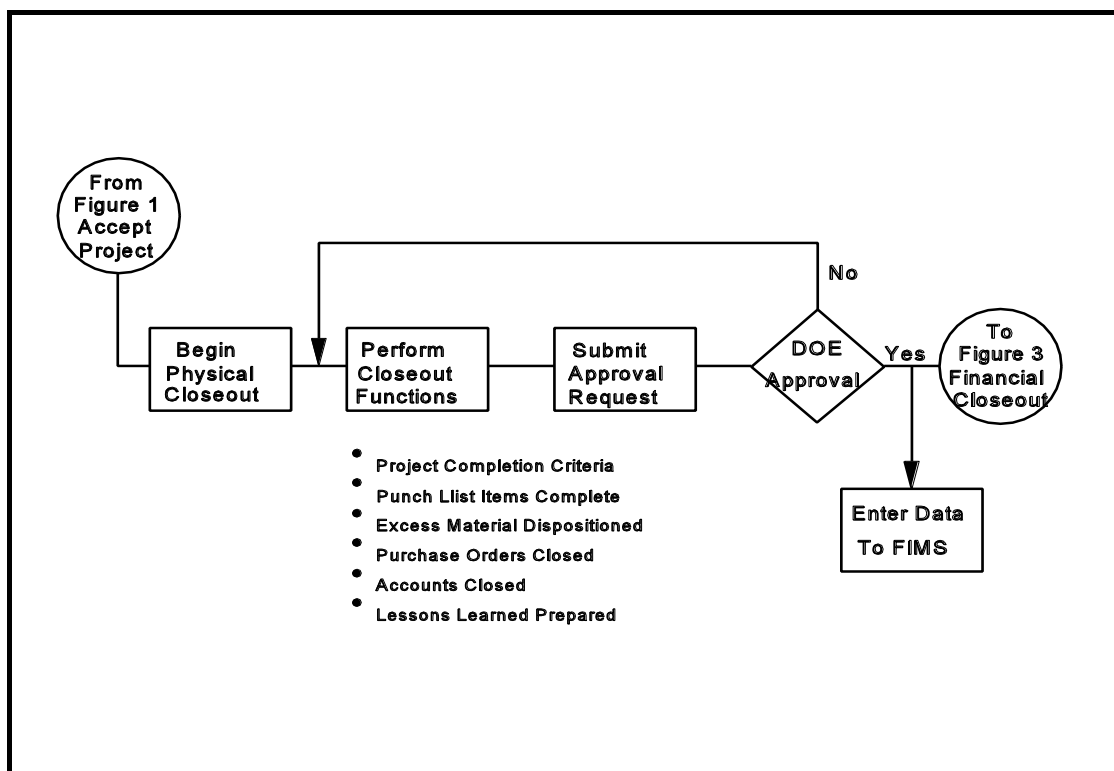


Figure 2. Physical Closeout Logic Flow.

2.2.2 Financial Closeout

Once the operating organization has beneficially occupied a facility, the project organization may begin preparing for financial closeout. (See Figure 3.) Although financial closeout and physical closeout can occur in parallel, financial closeout is finalized only after a successful physical closeout is complete. The timely closing of a project is of paramount interest both to Congress and the Department, each of which has an objective to identify unobligated balances and deobligate them for use elsewhere as needed. As described in this section, financial closeout follows two parallel paths that help meet this objective: adjusting the Department's construction and capital asset accounts and preparing the project Final Cost Report.

The DOE Operations Office uses the Final Cost Report to determine if unobligated balances remain. Remaining balances are deobligated through the Approved Funding Program and placed in the Headquarters Reserve for Project Overrun account, which ensures a source of funds if the project must be reopened later.

The contractor's project organization normally prepares the Final Cost Report for a project. Preparation of this report can begin once the operating organization takes beneficial occupancy of a facility. It is unlikely that work on a facility will be completed at beneficial occupancy, and the managing contractor should estimate the costs required to complete the facility. Estimating these residual costs, rather than waiting until all costs have been realized, is necessary to expedite the deobligation of funds. Costs normally estimated include the following.

- Open purchase orders awaiting residual equipment, initial spares, or final vendor/contractor invoicing.
- Construction services necessary to complete any remaining punch list.
- Outstanding claims.
- Administrative and management labor to support and process closeout activities.

Typically, the Final Cost Report contains the following information.

- Project number, title, and budget, and reporting classification.
- Amount of original obligation and subsequent obligations or deobligations.

- Cost summary broken down into the same major categories as in the original project data sheet.
- Capital investment from the project and the value of Plant and Capital Equipment (P&CE) adjustments.

Once the Final Cost Report has been prepared, estimated residual costs can be accrued in the site accounting system. Accruing the estimated residual project costs will facilitate an uncosted obligations balance of zero for the Prior Year Construction Projects Report. (This report was mandated by the House of Representatives in the Energy and Water Development Appropriations Bill of 1995.) Reserve accounts can be established within the site accounting system to collect estimated project costs, and residual balances (difference between accruals and actuals) can be liquidated in accordance with established site accounting practices.

In parallel with Final Cost Report activities, the project can be removed from the Department's Construction Work in Progress (CWIP) account and placed in the appropriate capital assets account. Removing a project or severable portions of a project from the CWIP account once beneficial occupancy has occurred complies with DOE O 534.1, ACCOUNTING. Removing the project from the CWIP account also facilitates financial closeout to support input to the annual Prior Year Construction Projects Report. The project can be considered financially closed once it has been removed from the CWIP account and the project's unobligated balance equals zero. Figure 3 depicts the logic flow of the financial closeout process.

2.3 Early Project Termination

In this Guide, project termination is defined as projects or portions of projects terminated before completion at the direction of the Department. Projects can be terminated for many reasons, and the size or stage of completion can impact the amount of time and resources required to effect a termination; however, the termination process closely follows the processes for project transition and closeout discussed in sections 2.1 and 2.2, respectively. Since the premature termination of a project is not anticipated, termination planning and execution usually occur in a relatively short time.

Once the Department decides to terminate a project, the contractor is issued formal direction to take specific actions. Depending on the size and complexity of the project, the Department's formal direction can range from a change action that reduces the scope of a stand-alone project unit, to a partial or complete contract termination. Regardless of

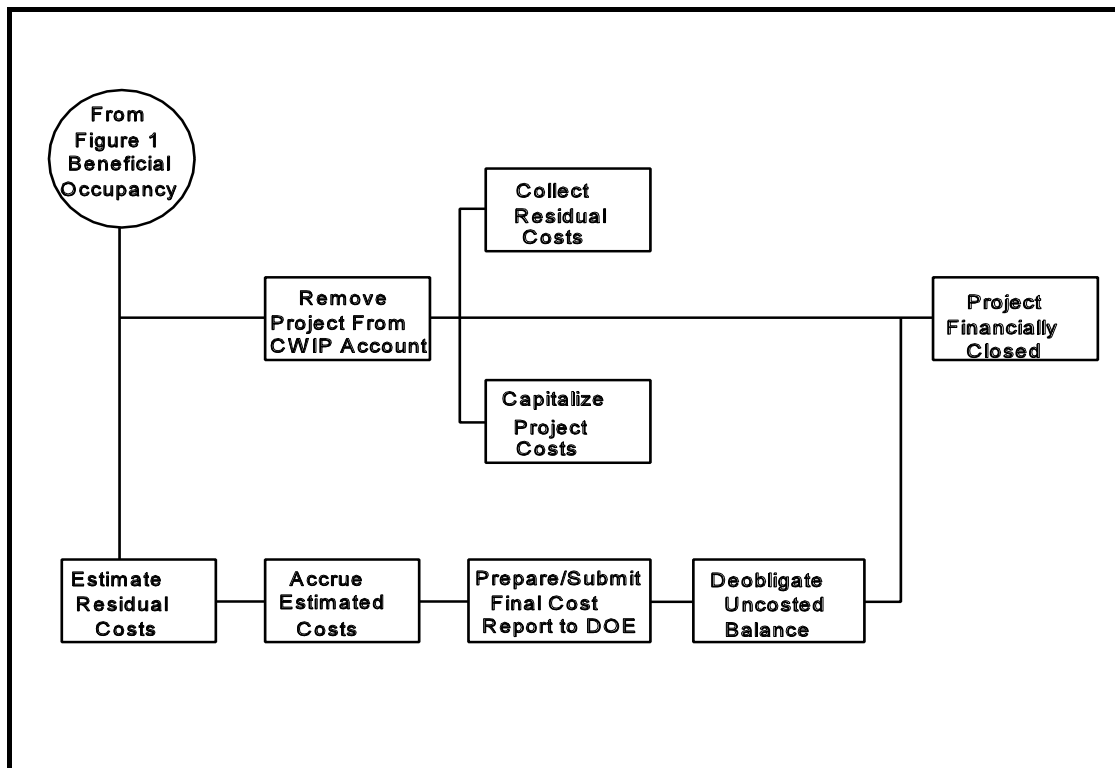


Figure 3. Project Financial Closeout Logic Flow.

the reasons for project termination and the actions necessary to effect the termination, the objectives to achieve a timely and cost effective project/contract closeout remain the same.

On receipt of a notice to terminate, the contractor should be directed to develop a shutdown plan if the size and complexity of the project warrant. All effort is to be within the parameters of the contract(s) terminated. Project termination planning should consider the following issues.

- The scope of work during a project termination undergoes a significant change with different end objectives. In some situations, depending on need and health, safety, and environmental considerations, DOE can elect to complete certain portions of a project as part of the termination effort. Other work might be completely halted. Regardless of the course taken by each project to meet termination requirements, the work scope required to terminate the project should be determined and documented.

The work scope is better developed task-by-task, with end results for each task specified. Defining the work by task facilitates overall management of the effort.

- Each task identified for project termination should be assigned to an individual or organization to be responsible for its completion and for meeting end objectives within the cost and schedule parameters determined.
- Termination costs and the labor skills required should be estimated for each termination task. Once manpower requirements have been determined, phaseout of excess personnel can begin.
- A termination schedule should be developed for all tasks identified, consistent with the resources available.
- For large projects and termination activities expected to continue for multiple accounting cycles, progress reports from the managing contractor should be required as one of the termination tasks. When termination efforts involve significant amounts of work, managing the termination is analogous to managing the execution phase of a project. As such, the DOE project manager should monitor contractor progress toward completion of established objectives.

The project termination planning steps discussed above are followed to assign responsibilities and establish a scope, budget, and schedule basis for performing termination activities. From the planning effort, several parallel paths can be pursued depending on the size of the project, completion stages, and any specialized instructions that might be contained in the termination notice. These paths are discussed below.

Project Capitalization. The project should capitalize equipment/systems as appropriate as soon as practicable after a termination decision. Items, operable units, or systems that meet the DOE capitalization criteria should be removed from the CWIP account and capitalized in the P&CE account.

Decisions are simplified when construction has not started; purchase orders or contracts may be dispositioned without incurring an outlay for construction activities, and restoration versus completion decisions can be avoided. However, decisions must be reached case-by-case for terminating construction that has reached a partial completion stage. For example, if the decision is made to complete construction or some part of construction for safety or economic reasons, capitalization should occur as soon as the work has been accepted.

The FIMS should be updated to reflect the status of all property and equipment.

Financial Closure. Project termination work scope is likely to be different for each project. In some cases, due to project complexity and the time required to shut a project down, financial closure might not occur as quickly as it would in a normal completion closeout. Judgment must be used to determine if the path described in section 2.2.2 and shown in Figure 3 can be taken. Although the goal is to estimate residual costs, accrue them, and deobligate the unobligated balance, extended shutdown periods might not make this path immediately possible. Whenever feasible, early financial closure is preferred.

Other Termination Activities. The activities in this path are similar to those described in section 2.2.1, Physical Closeout. Prior to beginning the activities necessary for termination, existing control accounts should be closed and new accounts opened to accommodate the work described in the termination plan to capture the termination costs separately from previous project costs. Termination activities consist primarily of the following.

- Excess material or equipment is to be identified and dispositioned in accordance with DOE property disposition regulations. DOE personal property items will be included in this process. Dispositioning excess material or equipment may entail adjustments to capital equipment accounts.
- Project documentation is dispositioned in accordance with the requirements of the contract and project termination plan. When the size of a project does not warrant a formal plan, documentation is dispositioned in accordance with existing plant or site directives. Project documentation will normally include, but will not be limited to, all documents under configuration control, such as design documentation, formal correspondence, and financial and procurement data. Archiving requirements exist for certain types of projects, and any such requirements are determined and followed accordingly.
- Subcontract/purchase orders are closed as quickly as practicable. Final cost estimates should reflect the likelihood that the number and size of claims will exceed those experienced during a normal project closeout.
- The retention of project personnel is based on the expertise required to implement the project termination plan. Contractors that cannot be readily closed out because of essential personnel should be downsized as quickly as possible.

Project termination is considered complete when all required termination and closeout activities are complete. The activities discussed in this section are illustrated in Figure 4. Note that this flow of termination activities can and should be adjusted to suit the particular needs associated with a project termination, the specific contract(s) terminated, and the procedures established for such at each DOE site.

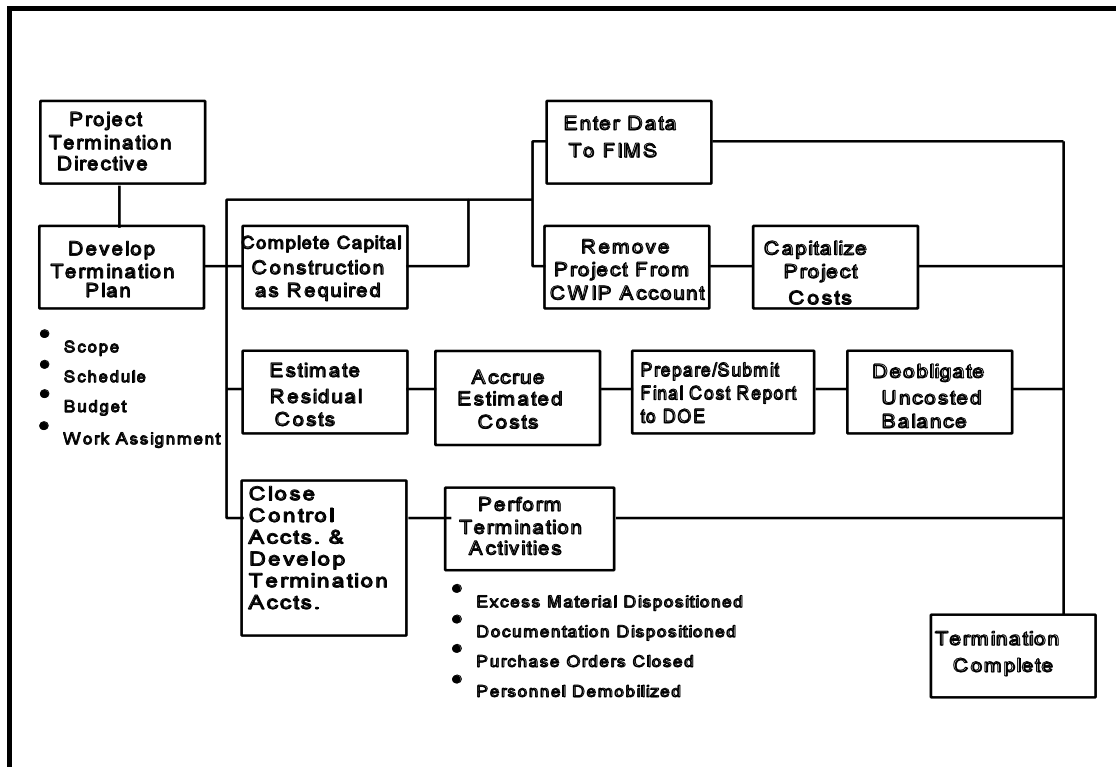


Figure 4. Termination Logic Flow.

3. MEASURING FOR RESULTS

To be determined.

This page intentionally left blank.

4. SUGGESTED READING

Although this document is a Guide and does not prescribe the processes discussed, requirements related to project closeout and termination exist in DOE Orders and other documents. Those responsible for closing out or terminating a project are responsible for following such direction. The references for development of this Guide and suggested reading include the following documents.

- DOE O 135.1, BUDGET EXECUTION-FUNDS DISTRIBUTION AND CONTROL.
- DOE O 430.1, LIFE-CYCLE ASSET MANAGEMENT.
- DOE O 534.1, ACCOUNTING.
- DOE Accounting Handbook, Chapter 10
- Energy and Water Development Appropriations bill, 1995.
- *Project Management Overview*, GPG-FM-001.
- *Critical Decision Criteria*, GPG-FM-002.