

U. S. DEPARTMENT OF ENERGY

Project Management Career Development Program

Certification and Equivalency Guidelines



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CONTENTS

1.0	Introduction.....	1
2.0	Applicability	2
3.0	Implementation Requirements	3
4.0	Duties and Responsibilities	4
5.0	Summary of Requirements	8
5.1	Experience.....	8
5.2	Training.....	8
5.3	Developmental Assignments	9
5.4	Interview	10
5.5	Continuing Education	10
6.0	Detailed Knowledge and Skill Requirements	11
1	LEVEL 1	
1.1	General Project Management	12
1.2	Leadership/Team Building	14
1.3	Scope Management	14
1.4	Communications Management	15
1.5	Quality/Safety Management	15
1.6	Cost Management	15
1.7	Time Management	16
1.8	Risk Management	16
1.9	Contract Management.....	17
1.10	Integration Management	18
1.11	Training/Electives.....	19
1.12	Work and Development Activities.....	19
1.13	Behavioral.....	20
2	LEVEL 2	
2.1	General Project Management	22
2.2	Leadership/Team Building	23
2.3	Scope Management	24
2.4	Communications Management	24
2.5	Quality/Safety Management	24
2.6	Cost Management	26
2.7	Time Management	26
2.8	Risk Management	26
2.9	Contract Management.....	26
2.10	Integration Management	26
2.11	Training/Electives.....	27
2.12	Work and Development Activities.....	29

2.13	Behavioral	31
3	LEVEL 3	
3.1	General Project Management	32
3.2	Leadership/Team Building.....	32
3.3	Scope Management.....	32
3.4	Communications Management	32
3.5	Quality/Safety Management	33
3.6	Cost Management	33
3.7	Time Management	33
3.8	Risk Management	33
3.9	Contract Management	33
3.10	Integration Management	33
3.11	Training/Electives.....	33
3.12	Work and Development Activities.....	37
3.13	Behavioral	39
3.14	Interview	41
4	LEVEL 4	
4.1	General Project Management.....	42
4.2	Leadership/Team Building.....	42
4.3	Scope Management.....	42
4.4	Communications Management	42
4.5	Quality/Safety Management	43
4.6	Cost Management	43
4.7	Time Management	44
4.8	Risk Management	44
4.9	Contract Management.....	44
4.10	Integration Management	44
4.11	Training/Electives.....	44
4.12	Work and Development Activities.....	46
4.13	Behavioral	48
4.14	Interview	51
7.0	Evaluation	52
8.0	Continuing Education	53
 TABLES		
Table 1. Comparison of Training and Work/Development Requirements		9
Table 2. Continuing Education Credit Assignments.....		10

ACRONYMS

A/E	Architecture/Engineering Firm
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CE	Continuing Education
CEG	Certification and Equivalency Guidelines
CHRIS	Corporate Human Resource Information System
COR	Contracting Officer's Representative
CRB	Certification Review Board
CWA	Clean Water Act
DOE	Department of Energy
DOE HQ	Department of Energy Headquarters
ESAAB	Energy Systems Acquisition Advisory Board
ES&H	Environmental, Safety and Health
ESS	Employee Self Service
EVMS	Earned Value Management System
FAR	Federal Acquisition Regulation
GAO	General Accounting Office
IPT	Integrated Project Team
ISM	Integrated Safety Management
M&I	Management and Integrating
M&O	Management and Operating
NEPA	National Environmental Policy Act
OECD	Office of Engineering and Construction Management
OMB	Office of Management and Budget
ORR	Operational Readiness Review
OSHA	Occupational Safety and Health Act
PMCDP	Project Management Career Development Program
PBI	Performance-Based Incentive
PE	Professional Engineer
PM	Project Management
PMP	Project Management Professional
PSAR	Preliminary Safety Analysis Report
RA	Registered Architect
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
SES	Senior Executive Service
SME	Subject Matter Expert
SOW	Scope of Work
TPC	Total Project Cost
TQP	Technical Qualification Program
TSCA	Toxic Substances Control Act
WBS	Work Breakdown Structure

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1.0 INTRODUCTION

This Certification and Equivalency Guideline (CEG) establishes the Department competency requirements for all Department of Energy (DOE) federal project management personnel to be certified as DOE project directors in accordance with DOE Order 361.1A, *Acquisition Career Development Program, Chapter IV*. Additional qualification requirements may be required for personnel at defense nuclear facilities who participate in the Technical Qualification Program (TQP).

The CEG is intended to provide program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) with the required guidelines for evaluating the Project Management Career Development Program (PMCDP) candidate competencies and requests for equivalencies at all four certification levels. Levels are tied to the total project cost (TPC) managed by the project director. The PMCDP certification levels are as follows:

- Certification Level 4: TPC exceeding \$400 million (M)
- Certification Level 3: TPC between \$100M and \$400M
- Certification Level 2: TPC between \$20M and \$100M
- Certification Level 1: TPC between \$5M and 20M

Considerations other than TPC may increase project director certification requirements. Among these considerations are technical complexity, management complexity, and stakeholder interests.

Satisfactory and documented completion of the requirements contained in this CEG document ensures that project management personnel possess the minimum requisite competence to fulfill related duties and responsibilities.

2.0 APPLICABILITY

Except as noted in DOE O 361.1A, Chapter IV (DOE O 361.1, Change 2 was initially issued June 13, 2003 and re-issued under DOE 361.1A, April 19, 2004), this CEG applies to all DOE federal project management personnel required to plan and execute projects in accordance with DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*. This document may be used as a stand-alone document or in conjunction with other qualification standards established by office/facility specific requirements.

3.0 IMPLEMENTATION REQUIREMENTS

The competencies contained in this document are divided into the following 11 knowledge/skill categories for each level of certification (as applicable):

- Project Management General
- Leadership/Team Building
- Scope Management
- Communication Management
- Quality/Safety Management
- Cost Management
- Time Management
- Risk Management
- Contract Management
- Integration Management
- Behavioral

The Office of Engineering and Construction Management (OECM) established a tracking system to ensure that all applicable project directors meet the competency requirements contained in this CEG. Documentation of the completion of these competency requirements must be recorded in the DOE Corporate Human Resources Information System (CHRIS)/Employee Self-Service (ESS) and included in the employee's record of qualifications.

In select cases, it may be necessary to grant equivalencies for individual competencies based upon an objective evaluation of the employee's prior experience. These guidelines are intended to allow program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) to objectively evaluate the requests for equivalency. The supporting knowledge and/or skill statements may be considered when evaluating an individual's ability with respect to each competency requirement.

4.0 DUTIES AND RESPONSIBILITIES

4.1 DOE project directors:

- Manage all activities of assigned projects from the assignment of a project through its completion.
- Review, evaluate, approve, and monitor, cost, schedule, and scope baselines.
- Monitor and oversee the progress of detailed engineering, design, and construction work.
- Ensure the preparation of required project documentation.
- Participate in the project acquisition strategy as required.
- Lead the Integrated Project Team (IPT).
- Ensure the preparation of reports to reflect project status, cost, and schedule trends, manpower adequacy, funding, and project uncertainties.
- Conduct field inspection of work in progress and evaluate the performance of contractors using established baselines.
- Ensure that the Environment, Safety and Health (ES&H) requirements and Quality Assurance requirements are properly implemented.
- Develop, review, and endorse the annual budget requests of the projects.
- Oversee the planning and coordination of the turnover of completed projects.

4.2 Program Secretarial Officers and Field Element Managers (including operations offices, site offices, area offices, project offices, site and service centers):

- Ensure their federal project directors are certified according to DOE O 361.1A, and at the appropriate level (i.e., Level 1, 2, 3 or 4) before authority for projects is delegated to those individuals.
- Identify and select DOE project management certification candidates and identify their respective CAPs within 90 calendar days of the effective date of DOE O 361.1 (June 13, 2004).
- Select candidates based on the qualification requirements in DOE O 361.1A and submit applications for project director certification to the CRB for review and

approval within 12 months of selection for new hires, reassignments, or promotions/advancements.

- Direct project directors' supervisors to identify training needs for each project director according to the requirements of DOE O 361.1A, and budget for these recurring project management training needs on an annual basis.
- Ensure project directors are provided the appropriate developmental assignments and experience needed to progress to higher levels of certification.
- Ensure project directors develop and execute individual development plans consistent with the training, experience, and development requirements defined in DOE O 361.1A.
- Ensure appropriate training and Continuing Education (CE) requirements are satisfied in a timely manner to maintain the project director's certification.
- Refer all incumbent project directors to the Headquarters CRB for certification.
- Approve individual competencies (requirements) and track the certification status of project directors.
- Provide OECM with quarterly updates of each project director's project assignments, training, developmental assignments, and certification status.
- Ensure training and certification records for project directors are accumulated and maintained in the DOE CHRIS/ESS.
- Reassign Federal employees whose certifications are cancelled under DOE O 361.1A, Chapter IV, paragraph 5c(9) to duties other than the management of DOE CAPs, and cancel any incentive pay provided under DOE O 361.1A, Chapter IV, paragraph 5a(17).
- At the discretion of the field office manager and commensurate with contract management practices at the site, provide certified project directors with formal contracting officer representative authority once project directors have received the required training and their technical contract administration competency is verified.
- Nominate project directors as candidates for the industry rotation program sponsored by the Office of Management, Budget and Evaluation, Management Services Division, as developmental assignments.

- Establish a project management function that:
 - Serves as a Project Management Support Office for project directors;
 - Assigns Level 4 mentors to Level 3 project directors candidates;
 - Establishes a voluntary mentoring program for Level 1 and Level 2 project directors;
 - Provides a forum for exchanging ideas, sharing lessons learned, and conducting technical presentations and workshops;
 - Tracks the project director's career path to ensure training, developmental activities, and experiences are being provided and used in a manner consistent with DOE O 361.1A; and
 - Tracks and reports PMCDP performance measures as identified and requested by OECM.
- Provide incentives to high performing project directors who attain certification and hold project management positions by providing incentives in addition to base pay (subject to budget availability), as follows:
 - PMCDP Level 1 – 5 percent of base pay;
 - PMCDP Level 2 – 7.5 percent of base pay;
 - PMCDP Levels 3 and 4 – 10 percent of base pay.
- Develop any required incentive pay justifications.
- Identify project directors for rotational assignments and details based on the developmental needs of the project directors.

4.3 Field Element Managers (including operations offices, site offices, area offices, project offices, and service centers). Perform the responsibilities identified in paragraph 4.2 above, as well as the following:

- Direct field-level project management SMEs to determine equivalencies for certification candidates using guidelines established by OECM.
- Ensure PMCDP certification is used as a quality-ranking factor in all relevant project management vacancy announcements.
- Conduct panel interviews for Levels 1 and 2 certification as deemed necessary and appropriate.
- Use model project director position descriptions developed by the Office of Human Resources [DOE O 361.1A, Chapter IV, paragraph 5d(6)] to the maximum extent practical.

- Pay for Project Management Institute Project Management Professional testing fees.
- Direct field training coordinators to track the completion of competencies and CE units in the DOE CHRIS/ESS.
- Maintain auditable records of project director training.
- Establish DOE project director Project Management Support Office function that tracks and advocates the career development of DOE federal project directors.

4.4 Subject Matter Expert:

- Review all competency requests as assigned in an expeditious manner.
- Maintain expert-level of competency in subject matter area.
- Document denial of competency requests in CHRIS/ESS and according to any other applicable Office/site procedure. See DOE O 361.1A Chapter IV, Section 5 (a).

4.5 Additional duties and responsibilities specific to the site, the facility, the operational activities, and/or the involved organizations may be applicable.

5.0 SUMMARY OF REQUIREMENTS

The required experience, training, and developmental assignments for project management personnel are:

5.1. Experience

Industrial, military, Federal, state or other directly related background that has provided specialized experience in project management. Specialized experience requirements comprise the following:

Project Manager Level 1 -- Three years of general project management experience

Project Manager Level 2 -- Two years experience at Level 1

Project Manager Level 3 -- Two years experience at Level 2

Project Manager Level 4 -- Two years experience at Level 3

5.2 Training

A total of 16 training courses are required to progress through Level 4 without Project Management Professional (PMP) certification and 11 courses with PMP certification. (See Table 1.)

In addition to the PMP certification, a Professional Engineer (PE) or Registered Architect (RA) license provides both:

- Level 1 equivalency for a one-year assignment as a project engineer or IPT member and
- Level 2 equivalency for a one-year assignment as a project engineer or IPT member on a post-Critical Decision-3 (post-CD-3) project (see DOE O 413.3) with an architecture/engineering (A/E) firm or DOE management and operating (M&O) contractor.

**Table 1. Department of Energy Project Management Career Development Program
Comparison of Training and Work/Development Requirements.**

Project Director Certification Level	Certification Requirements	With PMP Certification	Without PMP Certification
Level 1	Training Courses	3	6
	Work/Development Activities	0	2
Level 2	Training Courses	3	5
	Work/Development Activities	3	3
Level 3	Training Courses	3	3
	Work/Development Activities	3	3
Level 4	Training Courses	2	2
	Work/Development Activities	2	2

5.3 Developmental Assignments

The following are required to progress through Level 4:

- Twelve months of experience as a project engineer or as a member of an IPT, PMP certification, PE or a RA license.
- Twelve months of experience as a supervisor or as a team leader.
- One year of project experience post CD-3 phase (construction) with an Architect/Engineering firm or DOE M&O/M&I contractor (not required with a PE/RA License). This requirement will not apply to project directors who are incumbent project directors on DOE projects as of the effective date of DOE O 361. 1 (June 13, 2004) and are certified at Level 2 within 24 months of having all certification elements of the PMCDP in place (May 31, 2006).
- Serve one year as a COR or currently is an incumbent project director eligible for Level 3 or 4 certification (incumbent project directors on DOE projects as of the effective date of DOE O 361. 1 (June 13, 2004) and eligible for Level 3 or higher certification are determined to receive fulfillment for COR).

- Six months of mentoring by a Level 4 project director.
- Perform Program Management duties at DOE Headquarters for one year (minimum). This requirement will not apply to project directors on DOE projects as of the effective date of DOE O 361. 1 (June 13, 2004) who are certified at Level 4 within 24 months of having all certification elements of the PMCDP in place (May 31, 2006). In addition, this requirement may be waived by OECM, in consultation with the appropriate program and field managers, for project directors with more than 10 years of Federal experience in project management roles.

5.4 Interview

A successful interview conducted by the Certification Review Board (CRB) is required for certification at Levels 3 and new DOE hires for positions requiring Level 3 or Level 4 certification. Details of the interview requirements are contained in DOE Order 361.1A, Chapter IV. Project directors who were incumbents at Level 3 or 4 before the date of issuance of DOE O 361. 1 (June 13, 2004) does not have to complete the CRB panel interview.

5.5 Continuing Education

To maintain certification at an achieved level, a project director must complete 60 hours of continuing education biennially (once every two years).

Table 2. Continuing Education Credit Assignments.

Training/Continuing Education (CE) Opportunity Description	Unit	DOE CE Credit
Educational portions of technical meetings, conferences, workshops, and seminars; DOE training; and focused training and short courses provided by commercial vendors	1 hour	= 1 CE hour
Academic courses at an accredited college or university	1 semester credit 1 quarter credit	= 15 CE hours = 9 CE hours
Audited academic courses at an accredited college or university	1 semester credit 1 quarter credit	= 5 CE hours = 4 CE hours
Presentations at workshops, conferences, and seminars	1 formal presentation	= 5 CE hours
Instructing at an accredited college or university	1 semester credit 1 quarter credit	= 10 CE hours = 9 CE hours

6.0 DETAILED KNOWLEDGE AND SKILL REQUIREMENTS

The following knowledge and skills are required to be a successful DOE federal project director. They may be acquired by training, experience, developmental assignments, or a combination thereof. These requirements are provided for each of the four levels of certification and are categorized by each of the 11 knowledge/skill areas.

Generally, topics are provided, and the candidate must show knowledge of the topic and the skill and experience to apply that knowledge in a project management environment. In some cases, the candidate need only demonstrate that they have the capability to apply that knowledge in a classroom environment, rather than having actual job experience in the particular knowledge area. Such occurrences should be the exception and not the rule.

These knowledge and skill requirements contain both technical knowledge and skill and behavioral skills. Behavioral skills are often called “soft skills.” A large body of research has shown that an individual’s competence in behavioral skills is a better predictor than their competence in technical areas.

The following four competency statements (indicated in bold print) define the knowledge/skill level that an individual must possess. These levels are defined as follows:

Familiarity-level is defined as basic knowledge of, or exposure to, the subject or process adequate to discuss the subject or process with individuals of greater knowledge.

Working-level is defined as the knowledge required to monitor and assess operations/activities, to apply standards of acceptable performance, and to reference appropriate materials and/or expert advice as required to ensure the safety of project activities.

Expert-level is defined as a comprehensive, intensive knowledge of the subject or process sufficient to provide advice in the absence of procedural guidance.

Demonstrate the ability is defined as the actual performance of a task or activity in accordance with policy, procedures, guidelines, and/or accepted industry or Department practices.

LEVEL 1

1.1 General Project Management

1.1.1 The candidate must demonstrate a working-level knowledge of the federal project director's roles and responsibilities **or** successfully complete the following course or its equivalent: *Project Management Systems and Practices in DOE*. Expertise should include:

- The project director's responsibilities relative to the M&O or M&I contractor.
- The purpose and operation of the IPT.
- Ethics requirements for project directors.

1.1.2 The candidate must demonstrate a familiarity-level knowledge of the National Environmental Policy Act (NEPA) and environmental regulations applicable to DOE projects **or** successfully complete the following course or its equivalent: *Project Management Systems and Practices in DOE*. Expertise should include:

- The purpose and content of each of the following environmental documents and their impact on DOE projects:
 - Environmental Impact Statements
 - Environmental Assessments
 - Safety Analysis
 - Categorical Exclusions
 - Finding of No Significant Impact
- The role of the project director in the NEPA process.
- The requirements of the following laws as they impact DOE projects:
 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
 - Resource Conservation and Recovery Act (RCRA)
 - NEPA
 - Clean Water Act (CWA)
 - Clean Air Act (CAA)
 - Toxic Substances Control Act (TSCA)
 - Occupational Safety and Health Act (OSHA)
- The roles and responsibilities of the contractor for environmental safety and health protection, including integrated safety management (ISM).

1.1.3 The candidate must demonstrate an expert-level knowledge of DOE Order 413.3 **or** successfully complete the following course or its equivalent: *Project Management Systems and Practices in DOE*. Expertise should include:

- The purpose, scope, and application of DOE Order 413.3 and the DOE M 413.3-1 *Project Management for the Acquisition of Capital Assets* (PM Manual). This includes the definition of key terms, essential elements and personnel responsibilities and authorities.
- The source documents necessary to effectively manage the project.
- The critical decision process including the roles, responsibilities, and authorities for critical decisions.
- The procedures for determining contractor compliance with the requirements of DOE Order 413.3 and with the DOE PM Manual.
- The role of the participants in the Energy Systems Acquisition Advisory Board (ESAAB) process, the steps in the process, and the associated schedules.
- The purpose and use of the Work Breakdown Structure (WBS).
- The project director's role in baseline development, change control and project status reporting, including Quarterly Project Reviews.
- The role of the project director in the performance of independent reviews (headquarters, external reviews, internal assessments, General Accounting Office (GAO) and Inspector General reviews).
- General engineering or scientific principles required to perform DOE projects.
- Value engineering concepts and their application.
- Basic probability and statistics.
- The purpose, use, and content of the Project Acquisition Plan.
- The purpose, use, and content of the Project Execution Plan.
- The Earned Value Management System (EVMS) and project reporting requirements in DOE Order 413.3.

1.2 Leadership/Team Building

1.2.1 The candidate must demonstrate a working-level knowledge of leadership and team building **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Team building methods and recognizing individual and team performance.
- Working toward results/goal orientation.
- Team leadership and coordination of team activities.
- Consensus building and conflict resolution techniques.
- Developing trust and confidence among team members.
- Understanding functional business areas (accounting, finance, procurement, human resources, general counsel, etc.).
- Effective leadership models and their application.

1.3 Scope Management

1.3.1 The candidate must demonstrate a working-level knowledge of WBS development and project scope baseline **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Project mission need determinations.
- Conceptual and detailed design documentation and the review thereof.
- Developing a project work breakdown structure.
- Project scope baseline development techniques and their application.
- Evaluating project alternatives.
- Scope change management.
- Configuration management.

1.4 Communication Management

1.4.1 The candidate must demonstrate a working-level knowledge of interpersonal communications **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Technical writing including reports, decision memoranda, and technical documents (specifications, preliminary safety analysis reports (PSARs), test plans, etc.).
- Editing and reviewing documents.
- Effective oral communication skills.

1.5 Quality/Safety Management

There are no specific competencies required in this category for Level 1 project directors.

1.6 Cost Management

1.6.1 The candidate must demonstrate a working-level knowledge of life-cycle cost estimating **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Life-cycle estimating techniques and methodologies.
- The principles of time value of money.
- Basic cost estimating techniques, including parametric estimating, estimating by analogy, bottom up estimating, and activity-based costing.
- Review of representative DOE estimates to apply these skills.
- The estimating and use of contingency.
- The principles and use of range estimating.
- Procurement guidelines and performance regulations.

1.6.2 The candidate must demonstrate a working-level knowledge of the Federal budget process **or** successfully complete the following course or its equivalent: *Project Management Systems and Practices in DOE*. Expertise should include:

- The impacts of the Federal budget process on the project.
- The role of the project director in the Federal budget process.
- The participants in the Federal budget process and the major phases of budgeting.
- Budget documents, their development, and their use.
- Congressional, Office of Management and Budget (OMB), and DOE-internal budget roles and processes.
- Definitions of budget terminology.

1.7 Time Management

1.7.1 The candidate must demonstrate a working-level knowledge of project planning and resource loaded scheduling **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Developing project schedule networks, including the definition of activity durations, and logic.
- Critical paths and other scheduling terms.
- Resource allocation.
- Reporting and displaying schedule information.

1.8 Risk Management

1.8.1 The candidate must demonstrate a working-level knowledge of project risk management **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Risk planning, identification and quantification.
- The methods for determining appropriate cost and schedule contingencies for identified risks.
- Appropriate control tools for managing risks.

- Processes that are used to eliminate or mitigate risks.

1.9 Contract Management

1.9.1 The candidate must possess a working-level knowledge of performing as a COR **or** successfully complete the following course or its equivalent: *Contracting Officer's Representative (COR)*. Expertise should include:

- The roles and responsibilities of a COR.
- The process for modifying an existing contract.
- Methods for communicating with the contractor and the roles and responsibilities of project participants.
- Contract administration.
- Techniques for evaluating change orders.
- Evaluating contractor deliverables, accepting work, and evaluating contractor procurement guidelines and regulations.

1.9.2 The candidate must demonstrate a working-level knowledge in the area of acquisition strategy development and acquisition planning **or** successfully complete the following course or its equivalent: *Acquisition Planning*. Expertise should include:

- The different types of acquisition strategies.
- Writing acquisition plans.
- Requirements generation, solicitation, and contract awards.
- Contract types and their application.
- Ethics and conflict of interest issues that may arise during the acquisition process.

1.9.3 The candidate must demonstrate a working-level knowledge in the areas of Contract Types Bid/Evaluation/Award and Performance Based Incentive (PBI) Contracting **or** successfully complete the following course or its equivalent: *Contract Types Bid/Evaluation/Award and PBI Contracting* (or possess a current PMP certification). Expertise should include:

- Federal Acquisition Regulations.

- The contract bid process and various contracting documents, including Requests for Proposal (RFPs), Scope of Work (SOWs), and Invitations For Bids.
- Analyzing contracting requirements.
- Performance-Based Incentive contracting and its application.
- Bid and offer evaluations.
- Procurement contract law.

1.10 Integration Management

1.10.1 The candidate must demonstrate a working-level knowledge in the areas of project control and configuration management **or** successfully complete the following course or its equivalent: *Project Management Essentials* (or possess a current PMP Certification). Expertise should include:

- Techniques in change control and configuration management.
- Preparing, reviewing, and approving baseline changes.
- Basic decision making techniques.
- Project control techniques and their application.

1.10.2 The candidate must demonstrate a working-level knowledge in the areas of EVMS and project reporting **or** successfully complete the following course or its equivalent: *Earned Value Management System and Project Reporting* (or possess a current PMP Certification). Expertise should include:

- EVMS and their application.
- EVMS certification requirements.
- Definitions of EVMS terminology.
- Project performance reporting using EVMS.
- Methods for applying earned value techniques to quantify work progress.
- Using EVMS for forecasting estimates at completion.

1.11 Training/Electives

To attain Level 1 certification, the candidate must appropriately demonstrate Level 1 competencies or successfully complete the following courses:

Level 1 Project Management Course or its equivalent.

Module I: *Project Management Essentials* **or** possess a current PMP certification.

Module II: *Project Management System and Practices in DOE* or its equivalent, **with or without** PMP certification.

Earned Value Management Systems and Project Reporting or its equivalent **or** possess a current PMP certification.

The Fundamentals of Contracting, Contract Types, Bid and Evaluation, and PBI Contracting or their equivalent **or** possess a current PMP certification.

Contracting Officer's Representatives or its equivalent.

Acquisition Strategy and Planning or its equivalent.

1.12 Work and Development Activities

To achieve certification the candidate must perform developmental assignments or show experience that demonstrates application of the required knowledge and skills. The following are the required developmental assignments:

1.12.1 Work for 12 months as a project engineer or IPT member, PMP certification, **or** a PE **or** RA license.

1.12.2 Three years total experience in project management or a current PMP certification.

1.12.3 The following activities are provided to aid the program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience at Level 1. Expertise should include knowledge and skill from participating in some, if not all, of the following activities:

- Conducting design and project reviews.
- Developing and/or approving engineering drawings.
- Performing field construction inspections.
- Performing contract administration functions in their role as a project director.

- Evaluating contractor deliverables.
- Participating in the Federal budget formulation and execution processes.
- Developing Project Data Sheets.
- Defining project scope and the project WBS.
- Writing and/or approving specifications.
- Writing and/or approving decision memoranda and project reports.
- Developing the project acquisition strategy and the Acquisition Plan.
- Writing the Project Execution Plan and getting it approved.
- Participating in the ESAAB process.
- Participating in the NEPA and other regulatory processes and writing NEPA documents.
- Participating in quarterly project reviews.
- Participating in trade-off analyses and/or value engineering studies.
- Developing and updating project schedules and cost estimates.
- Developing and maintaining project risk management plans.
- Developing and using an EVMS and performing earned value analyses.

1.13 Behavioral

1.13.1 The candidate must possess a familiarity-level competency in **good people relations**. Expertise should be reflected in the following characteristics:

- Team Building.

1.13.2 The candidate must possess a familiarity-level competency in **self-management**. Expertise should be reflected in the following characteristics:

- Dealing with ambiguity.
- Problem solving.

- Ethics and values.
- Being action oriented.

1.13.3 The candidate must possess a familiarity-level competency in **good work processes**. Expertise should be reflected in the following characteristics:

- Drive for results.
- Priority setting.
- Managing and measuring.

1.13.4 The candidate must possess a working-level competency in **creating purpose**. Expertise should be reflected in the following characteristics:

- Strategic agility.
- Managing vision and purpose.

LEVEL 2

The candidate must have successfully completed all the Level 1 requirements.

2.1 General Project Management

2.1.1 The candidate must demonstrate a familiarity-level knowledge of systems engineering **or** successfully complete the following courses or their equivalents: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- The use of the systems engineering model in project management.
- Functional allocation and functional requirements definition as used in systems engineering.
- Design reviews (conceptual, preliminary, critical, system, etc.).
- System architecture development including trade-off analyses.
- Configuration management from a systems engineering perspective.
- Test and evaluation planning.

2.1.2 The candidate must demonstrate a familiarity-level knowledge of Value Management **or** successfully complete the following courses or their equivalents: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- Basics of Value Management and the steps in implementing a value management program in DOE.
- DOE policy and Federal Acquisition Regulations (FAR) requirements with respect to Value Management.
- The use of Value Management in decision-making.
- Conducting trade-off studies and alternatives evaluation.

2.1.3 The candidate must demonstrate a familiarity-level knowledge in the area of pre-project planning **or** successfully complete the following courses or their equivalents: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- The use of up-front project definition in developing project scope.

- Stakeholder alignment techniques.
- The use of the Project Definition Rating Index.
- Project alternatives analyses, including cost-benefit analyses.

2.1.4 The candidate must demonstrate a working-level knowledge of facilitation techniques and conflict resolution **or** successfully complete the following course or its equivalent: *Leadership/Supervision*. Expertise should include:

- Problem solving and conflict resolution.
- Facilitation techniques and facilitating discussions/meetings.

2.2 Leadership/Team Building

2.2.1 The candidate must demonstrate a working-level knowledge of leadership principles **or** successfully complete the following course or its equivalent: *Leadership/Supervision*. Expertise should include:

- Developing and communicating clear goals and vision.
- Recognizing individual and team performance.
- Effective leadership styles for different situations.
- Leading integrated project teams.
- Developing and implementing operating procedures and systems.
- Working with external project stakeholders.

2.2.2 The candidate must demonstrate a working-level knowledge in the area of human resources supervision and motivational techniques **or** successfully complete the following course or its equivalent: *Leadership/Supervision*. Expertise should include:

- Motivational techniques.
- Assigning and evaluating work.
- Identifying individual team members' strengths and weaknesses.
- Individual performance planning and reviews.

2.2.3 The candidate must demonstrate a working-level knowledge in the area of integrated project team building **or** successfully complete the following course or its equivalent: *Leadership/Supervision*. Expertise should include:

- Project staffing requirements analysis, interviewing, and position management.
- Consensus building.
- Developing trust and confidence among team members.
- Organizing teams.
- Effectively planning and managing multiple tasks among team members.
- Monitoring and tracking results.
- Assigning work.

2.3 Scope Management

There are no specific competencies required in this category for Level 2 project directors.

2.4 Communication Management

2.4.1 The candidate must demonstrate a working-level knowledge in effective briefing techniques **or** successfully complete the following course or its equivalent: *Advanced Project Management Concepts*. Expertise should include:

- Making formal presentations to senior management.
- Communicating with diverse audiences.
- Making persuasive communications with well-founded convincing arguments.
- Communicating with multiple types of stakeholders demonstrated ability.

2.5 Quality/Safety Management

2.5.1 The candidate must demonstrate a familiarity-level knowledge of Integrated Safety Management (ISM) **or** successfully complete the following courses or their equivalents: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- DOE P 411.1, *Safety Management Functions, Responsibilities, and Authorities Policy*; P 450.4, *Safety Management System Policy*; and the DOE G 450.4, *Integrated Safety Management System Guide For Use With Safety Management System Policies*.
- The requirements of Safeguard and Security policies and procedures.
- Conducting ISM systems verifications.
- Write/reviewing PSARs and final safety analysis reports.
- The requirements of DOE Orders 420.1A, *Facility Safety*; 425.1C, *Startup and Restart of Nuclear Facilities*; and DOE G 421-1-2, *Implementation Guide For Use In Developing Documented Safety Analyses To Meet Subpart B of 10 CFR 830*.

2.5.2 The candidate must demonstrate a familiarity-level knowledge of Quality Management **or** successfully complete the following courses or their equivalent: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- Developing/interpreting Quality Assurance and Quality Control plans and procedures.
- Systems and component testing and inspection processes.
- The requirements of DOE Order 414.1A, *Quality Assurance*, and 10 CFR 830.120.
- Time Quality Management principles.
- The quality auditing process.

2.6 Cost Management

There are no specific competencies required in this category for Level 2 project directors.

2.7 Time Management

2.7.1 The candidate must demonstrate a familiarity-level knowledge of automated scheduling software **or** successfully complete the following courses or their equivalent: *Advanced Project Management Concepts* and *Project Management Simulation*. Expertise should include:

- The use of automated scheduling tools.
- Performing schedule analysis, crashing, and resource-leveling.

2.8 Risk Management

2.8.1 The candidate must demonstrate a working-level knowledge in project risk management **or** successfully complete the following course or its equivalent: *Project Risk Management* (or possess a current PMP Certification). Expertise should include:

- Preparing a risk management plan.
- Assigning risk responsibility.
- Managing contingency.
- Project management and control tools to assist in managing identified risks.
- Risk response plans.
- Communicating risks effectively to project stakeholders.

2.9 Contract Management

There are no specific competencies required in this category for Level 2 project directors.

2.10 Integration Management

There are no specific competencies required in this category for Level 2 project directors.

2.11 Training/Electives

To attain Level 2 certification, the candidate must appropriately demonstrate Level 2 competencies or successfully complete the following five Level 2 core courses and one elective course (or possess a current PMP certification):

Advanced Project Management Concepts or its equivalent.

Project Simulation Course or its equivalent.

Project Risk Management Course or its equivalent **or** possess a current PMP certification.

Leadership/Supervision or its equivalent.

Project Management Supervision or its equivalent.

The PMCDP offers five electives for Level 2 candidates. To attain certification at Level 2, the candidate must select at least one elective from the following group and complete the competency requirements for the elective selected or possess a current PMP certification:

2.11.1 The candidate must demonstrate an expert-level knowledge of cost and schedule estimating processes **or** successfully complete the following course or its equivalent: *Cost and Schedule Estimation*. Expertise should include:

- Conceptual estimating.
- Developing estimates by analogy, parametric estimating, and bottom up estimating.
- Contingency estimating and activity-based estimating.
- Direct and indirect project cost estimates.
- Applying earned value principles.
- Baseline development.
- Trending and forecasting techniques.
- Modeling techniques.
- Cost/benefit analysis.

2.11.2 The candidate must demonstrate an expert-level knowledge of the techniques used in scope management, baseline development and WBS development **or** successfully complete the following course or its equivalent: *Scope Management/Baseline Development/ Work Breakdown Structure Development*. Expertise should include:

- Baseline development techniques.
- Work Breakdown Structure development/decomposition.
- Identifying requirements as functional or non-functional and discretionary or non-discretionary.
- Prioritizing requirements.
- Recognizing and controlling scope changes.

2.11.3 The candidate must demonstrate an expert-level knowledge of value engineering **or** successfully complete the following course or its equivalent: *Value Engineering*. Expertise should include:

- Using value engineering to reduce cost.
- Understanding the difference between product cost and functional cost.
- Cost allocation.
- Ability to recognize benefits of value engineering.
- Understanding of the concept of value sales.

2.11.4 The candidate must demonstrate an expert-level knowledge of ISM **or** successfully complete the following course or its equivalent: *Integrated Safety Management*. Expertise should include:

- DOE P 450.4 and DOE G 450.4.
- Establishing and maintaining an Occupational Safety and Health program as an element of ISM.
- The health and safety responsibilities of line managers.
- The core functions and guiding principles of ISM.
- Implementing ISM on construction projects.

2.11.5 The candidate must demonstrate an expert-level knowledge of the Federal budget process **or** successfully complete the following course or its equivalent: *The Federal Budget Process*. Expertise should include:

- The budget formulation process.
- The budget execution process.
- The impact of the Government Performance and Results Act on the budget process.
- Implementing DOE Order 135.1, *Budget Execution - Funds Distribution and Control*.
- Congressional and OMB roles and requirements in budget formulation.
- Responding to OMB and Congressional inquiries, questions & answers, etc.

2.12 Work and Development Activities

To achieve certification the candidate must perform developmental assignments or show experience that demonstrates application of the required knowledge and skills. The following are the required developmental assignments:

2.12.1 Work for a minimum of two years as a Level 1 project director. The following activities are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Performing as a project director on a Level 1 or higher project.
- Serving as a deputy project director on a Level 3 or higher Level project.
- Serving as a functional manager on a Level 4 or higher project as a member of an IPT.
- Making formal presentations to senior DOE management at the Senior Executive Schedule level.
- Participating on negotiations teams for contractor award fee or contract awards for contracts over \$100 million (M) in size.
- Participating as a member of a Source Evaluation Board, or as a Source Selection Official for a contract over \$100 M in size.

- Serving as a supervisor of project directors.
- Serving in a project management office with responsibilities for reviewing/approving Project Execution Plans, reviewing/approving Acquisition Plans, developing project management policy, and/or performing ESAAB Secretariat functions for Level 3 or higher projects.

2.12.2 One year of experience as a supervisor or as a team leader. The following activities are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Serving as a supervisor or a team leader in a capacity in which the individual assigns and evaluates the work of professional employees.

2.12.3 One year of project management experience on a post CD-3 phase project, serving as a project engineer with an Architect/Engineering firm or DOE M&O/M&I contractor, or a PE or RA license. This requirement will not apply to project directors who are incumbent project directors on DOE projects as of the effective date of DOE Order 361.1 1 (June 13, 2004) and are certified at Level 2 within 24 months of having all certification elements of the PMCDP in place (May 31, 2006). In addition, the Office of Engineering and Construction Management may waive this requirement, in consultation with the appropriate program directors and field managers, for project directors with more than 10 years of Federal experience in project management roles. The following activities are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Developing design documents such as drawings, specifications, etc.
- Performing construction walk-down and inspections.
- Directing field construction crews.
- Planning field construction work.
- Procuring materials and supplies for construction.
- Performing acceptance testing and/or accepting facilities, equipment, or deliverables from suppliers or sub-contractors.
- Writing Systems Engineering Management Plans or Test and Evaluation Management Plans.

2.13 Behavioral

2.13.1 The candidate must possess familiarity-level competency in **good people relations**. Expertise should be reflected in the following characteristics:

- Team Building.

2.13.2 The candidate must possess a familiarity-level competency in **self-management**. Expertise should be reflected in the following characteristics:

- Dealing with ambiguity.
- Problem solving.
- Ethics and values.
- Being action oriented.

2.13.2 The candidate must possess a familiarity-level competency in **creating purpose**. Expertise should be reflected in the following characteristics:

- Strategic agility.
- Managing vision and purpose.

2.13.3 The candidate must possess working-level competency in **good work processes**. Expertise should be reflected in the following characteristics:

- Drive for results.
- Priority setting.
- Managing and measuring.

LEVEL 3

To attain a Level 3 certification, all requirements for the Level 1 and Level 2 project director must have been previously met.

3.1 General Project Management

3.1.1 The candidate must demonstrate an expert-level knowledge of program management and portfolio analysis **or** successfully complete the following course or its equivalent: *Program Management & Project Portfolio Analysis*. Expertise should include:

- Understanding of DOE HQ-Field relationships and Lead Program Secretarial Officers.
- Responding to Congressional inquiries.
- Strategic planning and strategic goal establishment.
- Use of the Government Performance and Results Acts and performance measures.
- Information gathering and analysis for multiple projects.
- The working relationship between DOE and OMB.
- Resource allocation between multiple (competing) projects.
- Project portfolio analysis.

3.2 Leadership/Team Building

There are no specific required competencies in this category for Level 3 project directors.

3.3 Scope Management

There are no specific required competencies in this category for Level 3 project directors.

3.4 Communication Management

There are no specific required competencies in this category for Level 3 project directors.

3.5 Quality/Safety Management

There are no specific required competencies in this category for Level 3 project directors.

3.6 Cost Management

There are no specific required competencies in this category for Level 3 project directors.

3.7 Time Management

There are no specific required competencies in this category for Level 3 project directors.

3.8 Risk Management

There are no specific required competencies in this category for Level 3 project directors.

3.9 Contract Management

There are no specific required competencies in this category for Level 3 project directors.

3.10 Integration Management

There are no specific required competencies in this category for Level 3 project directors.

3.11 Training/ Electives

To attain Level 3 certification, the candidate must appropriately demonstrate Level 3 competencies or successfully complete the following course:

Program Management and Portfolio Analysis or its equivalent.

The PMCDP offers eight electives (two groups of four each) for Level 3 project directors. To attain certification at Level 3, candidates must successfully complete at least one elective from each group (Groups A and B).

3.11.A Group A.

3.11.A.1 The candidate must demonstrate a working-level knowledge of the Operational Readiness Review (ORR) process **or** successfully complete the following course or its equivalent: *Operational Readiness Reviews*. Expertise should include:

- The steps in the ORR process.
- The DOE role in the ORR process.
- Contractor requirements for ORRs.
- Developing a Safety Analysis Report.
- How safety systems are used at DOE facilities.
- Interpreting the hazards analysis results.
- Selecting ORR team members.
- The orientation and training requirements for ORRs.

3.11.A.2 The candidate must demonstrate an expert-level knowledge of pre-project planning and project alignment processes **or** successfully complete the following course or its equivalent: *Pre-Project Planning/Project Alignment*. Expertise should include:

- Developing project execution plans that meet the requirements of DOE Order 413.3.
- Scope baseline development techniques.
- WBS development/decomposition.
- Determination of project mission need.
- Determining stakeholder requirements.
- Evaluating project alternatives.
- Ordering project priorities.
- Stakeholder alignment.
- The techniques of value engineering.

3.11.A.3 The candidate must demonstrate a working-level knowledge of systems engineering **or** successfully complete the following course or its equivalent: *Systems Engineering*. Expertise should include:

- The systems engineering process.
- Directing the project requirements development process.
- Managing the system architecture development.
- Tradeoff analyses.
- Life-cycle cost analyses.
- Systems Integration.
- Writing scope of work and functional design criteria.
- Functional requirements decomposition.

3.11.A.4 The candidate must demonstrate an expert-level knowledge of the requirements of NEPA and DOE environmental regulations **or** successfully complete the following course or its equivalent: *NEPA and Environmental Regulations*. Expertise should include:

- The purpose of NEPA.
- The types of NEPA analyses and actions required based on the results.
- The project director's role in NEPA compliance.
- The requirements of RCRA, CERCLA, CAA, National Pollutant Discharge Elimination System, CWA and OSHA.

3.11.B Group B.

3.11.B.1 The candidate must demonstrate a working-level knowledge of labor management relations **or** successfully complete the following course or its equivalent: *Labor Management Relations*. Expertise should include:

- Labor agreements.
- The basic rights of employees and labor organizations.
- Union proposals and tactics in negotiation.

- Negotiating labor agreements.
- Dealing with labor unions regarding working conditions.
- Preventing unfair labor practices.
- Techniques and procedures of labor contract administration.

3.11.B.2 The candidate must demonstrate an expert-level knowledge of performance based contracting **or** successfully complete the following course or its equivalent: *Performance Based Contracting*. Expertise should include:

- Contract types and their application.
- FAR requirements.
- Acquisition planning.
- Establishing performance goals for the contractor.
- Contractor responses and behavior in a PBI contracting environment.
- Establishing performance incentives.
- Aligning performance incentives to DOE organizational goals.
- Lessons-learned in PBI contracting.

3.11.B.3 The candidate must demonstrate a working-level knowledge of negotiation strategies and techniques **or** successfully complete the following course or its equivalent: *Negotiating Strategies and Techniques*. Expertise should include:

- Negotiations theory.
- The steps in the negotiations process.
- Negotiating strategies and tactics.
- Developing a negotiations strategy or negotiations plan.
- Ethics in negotiations.
- The differences between competitive negotiated and sealed bid acquisitions.

- Planning, awarding and administering a negotiated acquisition.
- Preparing a source selection plan.
- Award fees negotiations.
- Negotiating performance-based contracting incentives.

3.11.B.4 The candidate must demonstrate a working-level knowledge of facilitation techniques and conflict resolution processes **or** successfully complete the following course or its equivalent: *Facilitation Techniques/Conflict Resolution*. Expertise should include:

- Recognizing potential conflict situations.
- Neutralizing conflict situations.
- Negotiating “win-win” solutions.
- Conducting negotiating sessions.
- Using interpersonal strategies to resolve/minimize conflict in groups and between employees.
- Facilitation techniques in resolving conflicts.
- Individual responses to conflict.
- Communications theory and styles.
- Active listening techniques.
- Mediation and settling differences.

3.12 Work and Development Activities

To achieve certification the candidate must also perform developmental assignments or show experience that demonstrates application of the required knowledge and skill. The following are the required developmental assignments for this competency category:

3.12.1 Work for a minimum of two years as a Level 2 project director. The following activities are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate’s experience in this area.

- Performing as a project director on a Level 2 or higher project.
- Serving as a deputy project director on a Level 4 or higher level project.
- Serving as a functional manager on a Level 4 project director or higher Level project as a member of an IPT.
- Serving at the office director level at DOE HQ in a program office.
- Serving as the Director of a project management office.
- Performing ORRs.
- Performing pre-project planning and project alignment for large, complex projects.
- Performing systems engineering activities and tasks.
- Performing NEPA and environmental regulatory analyses.
- Implementing PBI.
- Serving on Source Evaluation Board, as a Senior Selection Official, or on formal negotiations teams for contracts (over \$400 million).
- Negotiating collecting bargaining agreements and labor contracts.
- Serving as a member of the Senior Executive Service (SES) in a project management or project management oversight capacity.

3.12.2 Be mentored by a Level 4 project director for six months. The following activities are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area.

- Be formally mentored by a Level 4 project director.
- Be formally mentored for one year by a member of the SES.
- Serve as a member of the SES for two years (minimum).

3.12.3 Serve one year as a COR or currently is an incumbent project director eligible for Level 3 or 4 certification (incumbent project directors on DOE projects as of the effective date of DOE O 361.1 1 (June 13, 2004) and eligible for Level 3 or higher certification are determined to receive fulfillment for COR). The following activities

are provided to aid program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Serve as a COR.
- Serve for two years (minimum) as a formally-designated Technical Monitor.

3.13 Behavioral

3.13.1 The candidate must possess expert-level competency in **leading change**: continually striving to improve performance; maintain focus, intensity and persistence, even under adversity. Expertise should be reflected in the following characteristics:

- Motivating others to incorporate elements of quality management.
- Incorporating strategic planning.
- Identifying and integrating key organizational factors.
- Being open to change.
- Dealing with ambiguity.
- Dealing effectively with pressure.

3.13.2 The candidate must possess expert-level competency in **leading people**: maximizing people's potential and fostering high ethical standards. Expertise should be reflected in the following characteristics:

- Inspiring and motivating others toward goal accomplishment.
- Promoting quality by establishing performance standards and appraising accomplishments.
- Valuing cultural diversity and other differences.
- Fostering commitment and team spirit, trust, and pride.

3.12.3 The candidate must possess expert-level competency in **producing results**: accepting accountability and promoting continuous improvement: Expertise should be reflected in the following characteristics:

- Understanding linkage between administrative priorities and mission needs (including regulations, policies, and procedures); keeping current on issues, practices, and procedures in technical areas.
- Stressing results by formulating realistic short and long-term goals.
- Exercising good judgment in organizing work and balancing priorities.
- Identifying, diagnosing, and anticipating potential or actual problem areas relating to program implementation and goal achievement.
- Holding self and others accountable for achievement program standards.

3.13.4 The candidate must possess expert-level competency in **business acumen**: acquiring and managing resources to effectively and efficiently achieve project objectives. Expertise should be reflected in the following characteristics:

- Assessing current and future needs based on organizational goals and budget realities.
- Identifying cost-effective approaches; establishing and assuring the use of internal controls for financial systems.
- Ensuring effective administration of budgetary process, including preparing and justifying a budget and operating the budget under organizational and congressional procedures.
- Ensuring effective procurement and contracting procedures and processes are applied commensurate with program priorities and policies.
- Integrating and coordinating logistical operations.
- Ensuring the efficient and cost-effective development and utilization of management information systems and other technological resources that meet the organization's needs.

3.13.5 The candidate must possess expert-level competency in **building coalitions and communications**: maintaining the capacity to explain and advocate all project practices, serving as an experienced negotiator, and being effective in networking with project stakeholders. Expertise should be reflected in the following characteristics:

- Representing and speaking for the organizational unit and its work (e.g., presenting, explaining, selling, defining, and negotiating).

- Establishing and maintaining working relationships with internal organizational units (e.g., other program areas and staff support functions).
- Engaging in cross-functional activities; finding common ground with a widening range of stakeholders.
- Working effectively in groups and teams.
- Considering and responding appropriately to the needs, feelings, and capabilities of different people in different situations; being tactful and treating others with respect.
- Seeing that reports, memoranda, and other documents reflect the position and work of the organization in a clear, convincing, and organized manner.

3.14 Interview Requirement

Level 3 candidates must successfully complete DOE Certification Review Board (CRB) panel interviews. However, this requirement will not apply to project directors who were incumbents at Level 3 before the date of issuance of DOE O 361.1 1 (June 13, 2004). New DOE hires for positions requiring Level 3 certification must successfully complete CRB panel interviews. The procedures for these interviews are to be issued by the CRB.

LEVEL 4

To attain a Level 4 certification all requirements for the Level 1, Level 2, and Level 3 project directors must have been previously met.

4.1 General Project Management

There are no specific required competencies in this category.

4.2 Leadership/Team Building

4.2.1 The candidate must demonstrate an expert-level knowledge of OMB and Congressional Relations **or** successfully complete the following course or its equivalent: *Executive Communications* (Level Four Project Management Course). Expertise should include:

- Congressional hearings.
- Presentations to Congressional staff.
- Championing projects to OMB and Congressional officials.
- Congressional and GAO inquiries.
- Understanding/following protocols.
- Understanding the role of Congressional Affairs.
- Support for budget appropriation requests.
- Congressional Questions & Answers.

4.3 Scope Management

There are no specific required competencies in this category for Level 4 project directors.

4.4 Communication Management

4.4.1 The candidate must demonstrate a working-level knowledge of media relation techniques **or** successfully complete the following course or its equivalent: *Executive Communications* (Level Four PM Course). Expertise should include:

- Inter-agency representation.

- Effective interaction with external stakeholders.
- Communicating with Congressional, state and local political officials.
- Communicating/interfaces with external stakeholder group.
- Conducting telephone interviews.
- Conducting ambush interviews.
- Dealing with reporters.
- Roles and responsibilities of the Public Affairs Office.
- Public speaking techniques.
- Speaking at televised events.

4.4.2 The candidate must demonstrate a working-level knowledge of techniques used in conducting public hearings **or** successfully complete the following course or its equivalent: *Executive Communications* (Level Four PM Course). Expertise should include:

- Techniques for conducting public hearings.
- Communicating project issues to external stakeholders.
- Effective interaction with internal and external stakeholders.
- Communicating lessons-learned.
- Active listening techniques.
- Conflict resolution techniques.

4.5 Quality/Safety Management

There are no specific required competencies in this category for Level 4 project directors.

4.6 Cost Management

There are no specific required competencies in this category for Level 4 project directors.

4.7 Time Management

There are no specific required competencies in this category for Level 4 project directors.

4.8 Risk Management

There are no specific required competencies in this category for Level 4 project directors.

4.9 Contract Management

There are no specific required competencies in this category for Level 4 project directors.

4.10 Integration Management

There are no specific required competencies in this category for Level 4 project directors.

4.11 Training/Electives

To attain Level 4 certification, the candidate must appropriately demonstrate Level 4 competencies or successfully complete the following course:

Level 4 Project Management Course or its equivalent.

The PMCDP offers three elective courses for Level 4 project directors. To attain certification at Level 3, candidates must successfully complete at least one elective course.

4.11.1 The candidate must demonstrate a working-level knowledge of strategic planning processes **or** successfully complete the following course or its equivalent: *Strategic Planning*. Expertise should include:

- The Strategic Planning process.
- Establishing Organizational Mission and Vision.
- Situational Analysis.
- Competitive Analysis.
- Environmental scanning.

- Identifying Strategic Issues.
- Establishing Critical Success Factors and Core Competencies.
- Establishing Strategic Goals and Strategic Objectives.
- Writing a Strategic Plan.
- Developing quantitative performance measures.
- Operationalizing the Strategic Plan.
- Distinguishing between mission and mandates.

4.11.2 The candidate must demonstrate an expert-level knowledge of advanced leadership practices **or** successfully complete the following course or its equivalent: *Advanced Leadership*. Expertise should include:

- Effectively planning and managing multiple tasks.
- Leading a large multi-disciplined technical organization.
- Collaborative problem-solving and decision-making techniques.
- Developing trust and confidence among team members.
- Effectively applying methods to track team performance.
- Managing multi-program resources.
- Leadership theories, styles, models, and techniques.
- Situational leadership.
- Transactional leadership.
- Communicating organizational vision.
- Strategic thinking.
- Learning from historical leaders.
- Identifying individuals' strengths and weaknesses.

- Building effective teams.
- Communications theory.

4.11.3 The candidate must demonstrate an expert-level knowledge of practices in advanced risk management **or** successfully complete the following course or its equivalent: *Advanced Risk Management*. Expertise should include:

- Identifying critical issues and risks.
- Conducting root cause analysis.
- Applying risk categorization principles.
- Advanced techniques for project risk identification, quantification, and analysis.
- Using modeling tools and techniques in managing risk.
- Using simulations in risk analysis.
- Developing risk management plans for large projects.
- Applying lessons-learned from accident/incident investigations.

4.12 Work and Development Activities

To achieve certification the candidate must also perform developmental assignments or show experience that demonstrates application of the required knowledge and skill. The following are the required developmental assignments for this competency category:

4.12.1 Work for a minimum of two years as a Level 3 project director. The following activities are provided to aid the program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Performing as a project director on a Level 3 or higher project.
- Performing at the DOE Associate Deputy Assistant Secretary level or higher.
- Performing at the DOE Operations Office Assistant Manager level or higher.
- Performing as the DOE Field Office Manager.

- Leading large project teams or large organizations.
- Interfacing with Congressional officials or Congressional staff.
- Interfacing with officials from OMB or other Federal agencies.
- Interfacing with public officials and state and local government officials.
- Interfacing with the media.
- Conducting public hearings.
- Performing strategic planning and writing strategic plans.
- Performing advanced risk management for large, complex projects.

4.12.2 Perform program management duties at DOE HQ for one year (minimum). This requirement will not apply to project directors on DOE projects as of the effective date of DOE O 361.1 (June 13, 2004) who are certified at Level 4 within 24 months of having all certification elements of the PMCDP in place (May 31, 2006). The following activities are provided to aid the program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers) in evaluating the adequacy of the candidate's experience in this area:

- Performing program management duties at DOE HQ.
- Performing program management duties at another Federal agency's Washington, DC Headquarters.
- Establishing program performance measures.
- Making mission need determinations.
- Aligning project objects with program strategic goals and objectives.
- Performing program planning.
- Project management oversight.
- Performing oversight of field activities.
- Interfacing with Congressional staff.

- Responding to Congressional inquiries, including the GAO.
- Performing project reviews.
- Formulating and defending program level budget.
- Auditing and investigative work.
- Performing technology development work in support of project needs.
- Awarding grants and large contracts.

4.13 Behavioral

4.13.1 The candidate must demonstrate expert-level competency in **leading change**: continually striving to improve performance; maintain focus, intensity and persistence, even under adversity. Expertise should be reflected in the following characteristics:

- Exercising leadership.
- Motivating others to incorporate elements of quality management into the full range of the organization's activities.
- Incorporating vision in full range of organization's activities.
- Incorporating strategic planning.
- Identifying and integrating key organizational factors.
- Being open to change.
- Dealing with ambiguity.
- Displaying high level initiative.
- Dealing effectively with pressure maintaining focus and intensity and remaining persistent, even under adversity; recovering quickly from setbacks.

4.13.2 The candidate must demonstrate expert-level competency in **leading people**: maximizing people's potential and fostering high ethical standards. Expertise should be reflected in the following characteristics:

- Promoting leadership commensurate with the organizations strategic objectives.

- Inspiring and motivating others toward goal accomplishment.
- Empowering people by sharing power and authority.
- Promoting quality by establishing performance standards and appraising accomplishments.
- Valuing cultural diversity and other differences.
- Assessing developmental needs.
- Fostering commitment and team spirit, trust, and pride.
- Resolving conflicts in a constructive manner.

4.13.3 The candidate must demonstrate expert-level competency in **producing results**: accepting accountability and promoting continuous improvement. Expertise should be reflected in the following characteristics:

- Understanding and appropriately applying procedures, requirements, regulations, and policies related to specialized expertise; understanding linkage between administrative priorities and mission needs; keeping current on issues, practices, and procedures in technical areas.
- Stressing results by formulating realistic short and long-term goals.
- Exercising good judgment in organizing work and balancing priorities.
- Identifying, diagnosing, and anticipating potential or actual problem areas relating to program implementation and goal achievement.
- Holding self and others accountable for achievement program standards; acting decisively to identify modifications of standards that promote customer service and/or quality of programs and policies.
- Identifying opportunities to develop and market new products and services within or outside the organization.

4.13.4 The candidate must demonstrate expert-level competency in **business acumen**: acquiring and managing resources to effectively and efficiently achieve project objectives. Expertise should be reflected in the following characteristics:

- Assessing current and future staffing needs based on organizational goals and budget realities; applying merit principles that promote a diverse work force.

- Overseeing the allocation of financial resources; identifying cost-effective approaches; establishing and assuring the use of internal controls for financial systems.
- Ensuring effective administration of budgetary process, including preparing and justifying a budget and operating the budget under organizational and congressional procedures.
- Ensuring effective procurement and contracting procedures and processes are applied commensurate with program priorities and policies.
- Integrating and coordinating logistical operations.
- Ensuring the efficient and cost-effective development and utilization of management information systems and other technological resources that meet the organization's needs; understanding the impact of technological changes on the organization.

4.13.5 The candidate must possess expert-level competency in **building coalitions and communications**: maintaining the capacity to explain and advocate all project practices, serving as an experienced negotiator, and being effective in networking with project stakeholders. Expertise should be reflected in the following characteristics:

- Representing and speaking for the organizational unit and its work (e.g., presenting, explaining, selling, defining, and negotiating) to those within and outside the office (e.g., agency heads and other government executives, corporate executives, congressional members and staff, the media, and professional groups); making clear and convincing oral presentations to individuals and groups; listening effectively and clarifying information; facilitating an open exchange of ideas.
- Establishing and maintaining working relationships with internal organizational units (e.g., other program areas and staff support functions); approaching each problem situation with a clear perception of organizational and political reality; getting understanding and support from higher level management.
- Engaging effectively in alliances with external groups (e.g., other agencies or firms, state and local governments, Congress, and clientele groups); engaging in cross-functional activities; finding common ground with a widening range of stakeholders.
- Working effectively in groups and teams; gaining cooperation from others to obtain information and accomplish goals; facilitating win-win situations.

- Considering and responding appropriately to the needs, feelings, and capabilities of different people in different situations; being tactful and treating others with respect.
- Seeing that reports, memoranda, and other documents reflect the position and work of the organization in a clear, convincing, and organized manner.

4.14 Interview Requirement

Candidates for Level 4 certification who have successfully completed the panel interview for Level 3 certification and project directors who were incumbents at Level 4 before the date of issuance of DOE O 361.1 (June 13, 2004) do not require a panel interview to attain Level 4 certification. New DOE hires for positions requiring Level 4 certification must successfully complete CRB panel interviews. The procedures for these interviews are to be issued by the CRB.

7.0 EVALUATION REQUIREMENTS

The appropriate qualifying official may use the evaluation process identified below as a measuring tool for assessing whether the project management candidate has acquired the competencies outlined in this CEG.

- 7.1 Documented successful completion of the competencies, training requirements, and developmental assignments may be satisfied using any of the following methods:
- Training courses.
 - Developmental assignments.
 - On-the-job experience.
 - Written examination.
 - Documented oral examination.
 - Documented observance of performance.
- 7.2 Individual competencies will be approved by cognizant field personnel, including supervisors, program secretarial officers and field element managers (including operations offices, site offices, area offices, project offices, and service centers), and/or training administrators. Formal procedures for approval in ESS are detailed in the DOE Employee Self Service PMCDP Job Aid. This process shall be formalized, documented, and auditable. A formal training folder documenting the achievement of individual competencies shall be maintained in the field for each individual in the PMCDP.
- 7.3 The Office of Engineering and Construction Management and the National Nuclear Security Administration will grant the final certification for each Level.

8.0 CONTINUING EDUCATION REQUIREMENTS

Each certified project director is required to successfully complete 60 hours of training biennially to maintain certification. Certified project directors and Level 1 candidates should fulfill the CE credit requirements/requirements necessary to progress to the next level of certification and project authority by completing the training courses listed in DOE Order 361.1A, Section II of Chapter IV.

Certified project director and Level 1 candidates serving on IPTs may fulfill their training requirement and CE credits through various sources including colleges, universities, training vendors, short courses, and workshops. OECM will develop and maintain a list of training opportunities that support topics specified in DOE Order 361.1A, Chapter IV, Section II of Appendix A.

In addition to the subject areas listed in DOE Order 361.1A, Chapter IV, Section II of Appendix A, the director OECM or his/her designee will approve CE credits and education in subjects related to the management of highly technical DOE projects. These subject areas may include such topics as accounting, applied mathematics and statistics, engineering, physical sciences, hazardous material management, environmental management, maintenance management, and logistics.

Certified Level 4 project directors will have fulfilled all of the training requirements listed in Section II. It is, therefore, expected that these individuals will fulfill their CE requirements through completing the electives listed in Section II, leading project management-related workshops and seminars, and serving as mentors to Level 3 certification candidates (serving as a mentor to a Level 3 candidate for six months provides 30 CE credits). The Level 4 mentor is expected to take the Departmental mentoring course offered as part of the DOE Technical Leadership Development Program (see DOE M 426.1-1, Federal Technical Capability Manual, dated 6-5-00) and will receive CE credits in accordance with the description of CE credit assignments.