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2nd Edition

Environmental Management

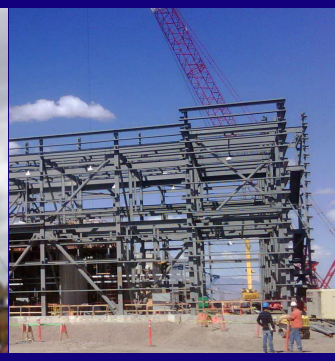
Safety ▪ Performance ▪ Cleanup ▪ Closure

Standard Review Plan (SRP)

Integrated Project Team (IPT) Review Module







Corporate Critical Decision (CD) Review and Approval Framework Associated with Nuclear Facility Capital and Major Construction Projects

March 2010

Office of Environmental Management
U.S. Department of Energy
Washington D. C. 20585

OFFICE OF ENVIRONMENTAL MANAGEMENT

Standard Review Plan (SRP)

Integrated Project Team (IPT)

Review Module

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

March 2010

This Review Module was piloted at the OR U 233 Disposition Project in 2009. Lessons learned have been incorporated in the Review Module.

FOREWORD

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

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

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

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

TABLE OF CONTENTS

ACRONYMS

CD	Critical Decision
IPT	Integrated Project Team
DNFSB	Defense Nuclear Facility Safety Board
DOE	Department of Energy
EM	Office of Environmental Management
EVMS	Earned Value Management System
FPD	Federal Project Director
FRAM	Functions, Responsibilities, and Authorities Manual
HQ	Headquarters
IPT	Integrated Project Team
LOIs	Lines of Inquiry
OECM	Office of Engineering and Construction Management
OSHA	Occupational Safety and Health Administration
PEP	Project Execution Plan
QA	Quality Assurance
SME	Subject Matter Expert
TA	Technical Authority

I. INTRODUCTION

The Integrated Project Team (IPT) is an essential element of the Department's acquisition process and will be utilized during all phases of a project life cycle. The IPT is a team of professionals representing diverse disciplines with the specific knowledge, skills, and abilities necessary to support the successful execution of projects. The Federal Project Directors (FPDs), contracting offices, safety and quality, legal, and engineering and scientific personnel in technical disciplines compose the membership of typical IPT.

The need for and the roles and responsibilities of the IPT are identified in Department of Energy (DOE) O 413.3A, *Program and Project Management for the Acquisition of Capital Assets*. DOE O 413.3A states:

> *The Integrated Project Team, organized and led by the Federal Project Director, is an essential element in DOE's acquisition process and is used during all phases of a project's life cycle. This team consists of professionals representing diverse disciplines with the specific knowledge, skills and abilities to support the Federal Project Director in successfully executing a project.*

The importance of the IPT to the overall success of the project has been recognized by the Office of Environmental Management (EM) for some time and has resulted in two reviews of IPT use in EM capital projects. The first review was completed in April 2007 and was a general overview regarding the makeup and the composition of the IPTs. The review identified a path forward that included a review of the IPT member qualifications with specific lines of inquiry developed to address this area. The second review was documented in December 2008 and was an external assessment of the technical and engineering capabilities of the EM IPTs. The 2008 review resulted in several recommendations regarding IPT composition, qualification and roles and responsibilities.

Additional IPT guidance is provided by DOE G 413.3-18 dated September 2008 and Office of Engineering and Construction Management (OECM) IPT Guide, Revision E, dated June 2003.

II. PURPOSE

The IPT Review Module is a tool that assists FPDs in evaluating the adequacy and functional effectiveness of the IPT to ensure the success of the project. The IPT review module is designed to be used by the FPD, the IPTs for self assessment or for an external review team to review and evaluate the adequacy of the IPT established for a specific project. This review module does not contain the "how-to" information or the criteria required to effectively establish, train IPT members, and operate an effective IPT.

III. ROLES AND RESPONSIBILITIES

A successful IPT depends on an experienced and qualified team. The team should be augmented with appropriate Subject Matter Experts (SMEs) selected to complement the specific technical concerns of the project. The specific types of expertise needed will be dependent on the type of

facility or project being supported, as well as other factors such as complexity, hazards, and risks.

The IPT is the principal management organization for project management and the key tool used by the FPD to ensure that the project is adequately managed and successful. As a result, it is essential that the FPD be sure that the IPT identified for the project is adequately staffed, contains the appropriate expertise and is functioning appropriately to ensure the success of the project. The ultimate responsibility for the IPT falls to the FPDs to assess the IPT process and effectiveness from its initiation early in the project to the final project completion.

The roles and responsibilities for all involved in the IPT review must be clear and consistent with various requirements of DOE O 413.3A and the DOE *Functions, Responsibilities, and Authorities Manual* (FRAM). The table below provides a compilation of IPT review roles and responsibilities.

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

Position	Responsibility
	Leads the on-site portion of the review.
	Ensures the review team members complete and document their portions of the review and characterizes the findings.
	Coordinates incorporation of factual accuracy comments by Federal and Contractor personnel on the draft report.
	Forwards the final review report to the Acquisition Executive for consideration in making the decision to authorize approval of the CD.
	Participates, as necessary in the closure verification of the findings from the review report.
Review Team Member	Refines and finalizes the criteria for assigned area of the review.
	Develops and provides the data call of documents, briefings, interviews, and presentations needed for his or her area of the review.
	Completes training and orientation activities necessary for the review. Conducts any necessary pre visit document review.
	Participates in the on-site review activities, conducts interviews, document reviews, walk downs, and observations as necessary.
	Based on the criteria and review approaches in the Review Plan, assesses whether his or her assigned criteria have been met.
	Documents the results of the review for his or her areas. Prepares input to the review report.
	Makes recommendations to the Review Team Leader for characterization of findings in his or her area of review.
	Resolves applicable Federal and Contractor factual accuracy comments on the draft review report.
	Prepares the final review report for his or her area of review.

IV. REVIEW SCOPE AND CRITERIA

This IPT review module provides a set of review criteria that are organized based on the key technical and safety areas and disciplines identified in the DOE Orders as well as guidance with addition of previous assessments and recommendations. These review areas are summarized below and include safety guidance and requirements, hazards identification, key safety decisions, risks to project safety decisions, safety analysis approach and plan, and safety design integration team interactions.

For each review area, Appendix A of this Module provides overall performance objectives and then a subset of review criteria that satisfy each performance objective. These performance objectives and review criteria will provide consistent guidance to project-specific IPT review teams to develop their Lines of Inquiry (LOIs). The Performance Objectives and Criteria provided in Appendix A are based on the current DOE requirements, guidance and recent assessment results/recommendations related to the use of IPTs to improve management of EM Capital Asset Projects. Some of the elements identified in Appendix A address implementation of these recent recommendations and best management practices – these have been identified in italics to set them apart from the remaining requirements. The FPDs and IPT members are encouraged to implement these elements to the maximum extent practicable to improve the overall performance of the IPT in management of EM projects.

General Attributes

This area of the review is intended to ensure that the IPT has clearly identified roles, responsibilities, authority and accountability and that the personnel supporting the project as IPT members have sufficient time available and a commitment from their management to fulfill their responsibilities on the IPT. Since high performance IPTs, have a clear chain of command for reporting and all members receive training related to IPT benefits, appropriate IPT behavior, personal expectations, IPT processes and IPT commitment or allegiance, these areas are included in this review module.

Project Management Attributes

It is essential that the IPT contain personnel with strong project management plus engineering skills, scientific skills and backgrounds. This review area verifies the adequacy of the IPT membership with regard to Project Management. Effective Project Management requires that the FPD employ a myriad of skills possessed by themselves as well those of the Project IPT. This review area will confirm the adequacy of employing a variety of skill sets on the Project.

Technical Attributes

The purpose of this review area is to ensure that the IPT membership contains sufficient personnel with the proper training and expertise to support the project. Specifically, numerous DOE projects are highly technically complex and depend on technologies that are being developed or yet to be developed. It is essential that the IPT be technically capable to manage technology aspects of the project effectively.

Engineering Attributes

The purpose of this review area is to ensure that the IPT membership contains sufficient personnel with the proper engineering training, expertise and program experience to support the project. Specifically, numerous DOE projects are highly technically complex and require a multitude of engineering and scientific skills to ensure a comprehensive understanding of the many issues that will require resolution in a timely manner. It is essential that the IPT be technically capable to manage the project effectively.

Construction Oversight Attributes

Another key area that is essential to the success of a project is effective construction oversight. This review area ensures that the IPT membership contains personnel with the appropriate training, experience and that the team has adequate programs, processes and metrics in place to ensure the success of the project with regard to construction oversight.

Readiness Review Attributes

Another key area that is essential to the success of a project is the effective readiness review oversight. This review area ensures that the IPT membership contains experienced and qualified

personnel to oversee technology, engineering, design, testing, acceptance of facility systems and equipment, and conduct of readiness review prior to CD-4 approval for start of operations.

Quality Assurance Attributes

Another key area that is essential to the success of a project is the effective implementation of the applicable Quality Assurance (QA) requirements. This review area ensures that the IPT membership contains personnel with the appropriate training, experience and that the team has adequate programs, processes and metrics in place to ensure the success of the project with regard to QA requirements.

Safety Review Attributes

Another key area that is essential to the success of a project is the effective implementation of the applicable safety requirements. This review area ensures that the IPT membership contains personnel with the appropriate training, experience and that the team has adequate programs, processes, metrics and audit control systems in place to ensure the success of the project with regard to safety.

V. REVIEW PLANS AND DOCUMENTATION

The execution of a review of the IPT as directed by the FPD is essentially an internal review. Documentation of this review should be consistent with management assessment and self assessment programs and identified deficiencies or opportunities for improvement must be clearly identified and tracked to closure to ensure the effectiveness of the IPT, federal project team, and the ultimate success of the project.

VI. REFERENCE MATERIAL

- DOE O 413.3A, *Program and Project Management for the Acquisition of Capital Assets*
- DOE M 413.3-1, *Project Management for the Acquisition of Capital Assets*
- DOE G 413.3-18, *Integrated Project Teams Guide for Use with DOE O 413.3A*
- OECM, *Project Management Practices, Integrated Project Teams*, Rev E, dated June 2003
- Letter April 18, 2007, Dae Chung to Jim Rispoli, *Integrated Project Team Capability Review for Office of Environmental Management (EM) Capital Projects*
- Letter December 16, 2008, James Burritt, et al. to Mr. Mark Gilbertson, *External Assessment of Technical and Engineering Capabilities of Integrated Project Teams in EM*

APPENDIX A: PERFORMANCE OBJECTIVES AND CRITERIA

Legend of IPT Review Topics

Review Topical Area	Identifier
General Attributes	GA
Project Management Attributes	PM
Technical Attributes	TA
Engineering Attributes	EA
Construction Oversight	CO
Readiness Review Attributes	RR
Quality Assurance Attributes	QA
Safety Review Attributes	SA

ID #	Performance Objectives and Criteria[2] [3]	Met?
General Attributes		
GA-1	*Does the Project Integrated Project Team (IPT) have a champion within DOE EM-HQ serving as the central point of contact at HQ for the Project IPT?*	
	Has the DOE EM-HQ champion been identified and charged with responsibility for monitoring the progress of the Project? ***(GA-1.1)***	
	Is the champion serving as the primary point of contact at HQ for all matters originating in the field? ***(GA-1.2)***	
	Is the champion is working closely with the Federal Project Director (FPD) and Project IPT to ensure full HQ support for all field requirements? ***(GA-1.3)***	
	Does the champion monitor and coordinate all external reviews emanating from or authorized by HQ, assist visits, and then like to try to minimize the impact of these visits on the IP? ***(GA-1.4)***	
GA-2	Has the project established and chartered an IPT?	
	Has there been between CD-0 and CD-1 approvals and a FPD identified to manage the project? **(GA-2.1)**	
	Between CD-0 and CD-1 approvals, has the key technical membership of an IPT been constituted? **(GA-2.2)**	
	Do the FPD and some of the key IPT members have a sense of ownership of the technology to be utilized and have introduced a greater level of rigor in areas such as risk assessment and technology planning prior to CD-1? **(GA-2.3)**	
	Has IPT been fully established and chartered prior to Critical Decision-1 (CD-1) approval? **(GA-2.4)**	
GA-3	Are the IPT roles, responsibilities, authority and accountability defined and implemented?	
	DO the IPT members understand and fulfill their individual roles, responsibilities, authority and accountability as defined in DOE O 413.3A,	

[2] *Italicized text reflects Best Management Practices.*
[3] *The site should provide the technical bases and assumptions that support the answers provided to each Line of Inquiry. If possible, the review teams should independently verify the technical bases and assumptions.*

ID #	Performance Objectives and Criteria[2] [3]	Met?
	DOE G 413.3-18, the OECM 2003 IPT Guide, and DOE M 413.3-1, including: • Support to the FPD • A consistent understanding of the benefits that a well functioning IPT can provide and what an IPT can be expected to accomplish • Identification, definition and managing of environmental, safety, health, security and QA (as applicable) on the project • Development of a project contracting strategy • Identification and definition of appropriate and adequate project technical scope, schedule and cost parameters • Ensuring that project interfaces are identified, defined, and managed to completion • Performing periodic reviews and assessments of project performance and status against established performance parameters, baselines, milestones and deliverables • Planning and participating in project reviews, audits and appraisals as necessary • Participating, as required, in operational readiness reviews or readiness assessments • Reviewing change requests (as appropriate) and supporting change control boards as requested • Reviewing and approving project deliverables? **(GA-3.1)**	
	Is the required commitment of the IPT member to the project clear and accepted by the FPD, the IPT member's manager and the IPT member? Is the commitment, including the amount of time the IPT member is expected to devote to the project documented? **(GA-3.2)**	
	Does the IPT designated individuals with other responsibilities actually have sufficient time and availability to support the IPT in the necessary manner to ensure the success of the IPT? **(GA-3.3)**	
	Does the SDS identify safety design criteria to be applied to the project (overarching requirements are sufficient, e.g., commitment to DOE G 420.1-1, -2)? **(GA-3.4)**	
GA-4	Are the IPT charter and Project Execution Plan (PEP) adequate and implemented?	
	Does the IPT Charter and PEP been approved, in place, and up to date? **(GA-4.1)**	
	Does the IPT Charter and PEP provide useful guidance to the IPT including clear statements of roles, responsibilities, authorities and accountabilities? **(GA-4.2)**	
	Has the FPD actively sought out Best Industry IPT Practices and included appropriate attributes within his Project IPT documentation and everyday practices? ***(GA-4.3)***	
GA-5	Is the IPT staffing and training adequate for the project?	
	Is the IPT appropriately staffed with an adequate number of qualified members who have relevant knowledge and experience regarding project-specific issues? **(GA-5.1)**	
	Have IPT members received appropriate orientation and training to function effectively as an IPT? **(GA-5.2)**	

ID #	Performance Objectives and Criteria[2] [3]	Met?
	IPT members have met the specific functional area competency requirements associated with the Federal Technical Capability Program. **(GA-5.3)**	
	Has the FPD been certified? Is the Certification Level appropriate for the project based on project cost, size, and complexity? **(GA-5.4)**	
GA-6	Is the IPT fully integrated and located to support the project?	
	Is the IPT contains both Federal and Contractor members fully integrated and to the extent practicable and co-located or near-located to support the project? **(GA-6.1)**	
	Do SME Contractors that are either identified to assist the federal IPT or are satisfying the IPT function readily available and qualified to do their work? **(GA-6.2)**	
GA-7	Do IPT operating procedures exist and are they adequate?	
	Have procedures to guide the operation of the IPT been developed and are being followed? **(GA-7.1)**	
	Do IPT procedures include schedules for meetings, agendas, required attendance, minutes and action item tracking? **(GA-7.2)**	
	Do IPT procedures include protocol and coordination with external review teams such as DNFSB, Technical Authority review team, Safety Basis Review Team, and Headquarters review teams such as the External Independent Review team? **(GA-7.3)**	
GA-8	Do the IPT procedures ensure timely resolution and closing of issues and actions resulting from external review teams such as DNFSB, Technical Authority (TA) review, Safety Basis Review Team, and Headquarters review teams such as the External Independent Review team?	
Project Management Attributes		
PM-1	*Doe the FPD use the Project IPT as the principal management organization for project management and the key tool to ensure that the project is adequately managed and successful?*	
PM-2	Is the Project IPT fully integrated and populated with appropriate federal and contractor personnel, aligned as a team with the common goal of succeeding on the Project?	
	Has the operation of the IPT been assisted by specific team-building efforts? ***(PM-2.1)***	
	Is a senior representative of the contractor IPT a member of this federal IPT and located near the project site or co-located? **(PM-2.2)**	
	Do the FPD and the Senior Contactor Member both have significant roles in the operation of the Integrated Project IPT? **(PM-2.3)**	
	Does the Integrated Federal/Contractor IPT not preclude having proprietary IPT business conducted by each side without the other? **(PM-2.4)**	
	Is the DOE EM-HQ champion a member of the Project IPT? ***(PM-2.5)***	
	Has the fully integrated IPT integrate the master schedule that includes both federal and contractor key milestones, reviews and adjunct activities that are necessary to ensure the common goal of successful project completion within time and budget constraints? **(PM-2.6)**	

ID #	Performance Objectives and Criteria[2] [3]	Met?
PM-3	Is there a defined reporting chain of command that extends from the FPD to the Acquisition Executive including the roles, responsibility, authority, and accountability of management between the FPD and the Acquisition Executive? **(PM-3.1)**	
PM-4	Does the FPD have an annual engineering and technical support plan to ensure that IPT personnel resources including contractor SMEs are identified sufficiently to ensure the composition of the IPT matches the project as it evolves and that funding for these resources has been allocated?	
PM-5	Does the FPD have a cohesive plan in which to access SMEs from contractors, academia or other federal entities in a timely manner to support project needs?	
PM-6	Does the IPT include personnel that have adequate training and experience in the project management aspects of DOE programs and the specific project?	
	Designated individual(s) have appropriate DOE training in assigned functions (controls, cost, estimating, EVMS, contract management, etc.) **(PM-6.1)**	
	Designated individual(s) have been certified in their respective disciplines, including the Federal Project Director. **(PM-6.2)**	
PM-7	Does the IPT include personnel that have adequate working experience in the project management aspects of DOE programs and the specific project?	
	The IPT members have adequate experience in preparing and/or reviewing key project documents including Mission Need Statement, Risk Management Plan, Acquisition Strategy, and Project Execution Plan. **(PM-7.1)**	
	The IPT members have adequate experience in preparing and/or reviewing project areas including, engineering and construction products and deliverables, budget, capital planning, contract management, cost estimating, contingency, earned-value management, procurement, risk management, and scheduling. **(PM-7.2)**	
PM-8	Do the FPD and Project IPT maintain a Code of Record and a Design History that document contracted requirements plus important technology, engineering and management decisions for the project?	
PM-9	Do the FPD and IPT agree that the Project Requirements are sufficient to define the desired goals and objectives for the project?	
PM-10	Does the FPD agree that he has the appropriate level of authority and autonomy for successful oversight of the Project?	
PM-11	Does the FPD have the ability to influence the annual performance rating of matrixes federal personnel on the Project IPT and shorter term federal SME's employees to assist the Project IPT?	
Technical Attributes (Technology)		
TA-1	Does the IPT have adequate knowledge and experience?	
	Does the IPT contain an adequate number of persons with appropriate technology development knowledge and experience? **(TA-1.1)**	
	Do the IPT personnel understand the technical capabilities, risks, and maturity of the technology (or technologies) being implemented on the project? **(TA-1.2)**	

ID #	Performance Objectives and Criteria[2] [3]	Met?
TA-2	Do the IPT members understand the technology selection and the associated technical risks?	
	Do the members of the IPT understand the technical basis for selection of the technology? **(TA-2.1)**	
	Does the IPT ensure that technology is suitable for meeting the project's technical, cost, schedule, and performance objectives? **(TA-2.2)**	
	Does the IPT ensure that the identified risks are managed in accordance with the risk management plan? **(TA-2.3)**	
TA-3	Does the IPT have confidence in the readiness of the technology to achieve the project objectives?	
	Do the members of the IPT have confidence and quality evidence that the technology selected for the project can perform as required? **(TA-3.1)**	
	Is the IPT confidence in the technology based on previous development and testing or a technology development program that will yield a suitable technology capable of supporting the project's cost, schedule and performance? **(TA-3.2)**	
TA-4	Does the IPT have adequate access to SMEs as needed?	
	Can the IPT access appropriate SMEs to evaluate or assist with the development, validation, and implementation of the technology selected for the project including resolution of technical issues? **(TA-4.1)**	
TA-5	Does the IPT have adequate authority to direct additional testing or engineering analysis?	
	Does the IPT (through the FPD) have the authority and resources to direct the performance of additional testing or validation of a technology for the project? **(TA-5.1)**	
Engineering Attributes		
EA-1	Does the IPT have adequate engineering knowledge and experience?	
	Does the IPT contain an adequate number of persons with the appropriate level of engineering/scientific knowledge and experience? **(EA-1.1)**	
	Does the IPT have engineering knowledge and experience that is adequate to understand the design requirements for the project including the development and implementation of requirements? **(EA-1.2)**	
EA-2	Does the IPT have an adequate number of qualified persons?	
	Does the IPT contains or have access to an adequate number of qualified persons to ensure, on a timely basis, the quality of engineering design being developed and its implementation? **(EA-2)**	
EA-3	Does the IPT have an adequate assessment and review process in place for the project?	
	Is the IPT assessment and review process adequate to: • Identify all relevant engineering requirements and standards for the project • Evaluate and manage impacts of any changing requirements; and • Assure that all requirements are incorporated effectively by those performing the design? **(EA-3.1)**	
EA-4	Does the IPT oversee the design process?	
	Does the IPT participate in frequent (daily or weekly) interactions with the contractor and periodic, in-depth design reviews for the project? **(EA-4.1)**	

ID #	Performance Objectives and Criteria[2 3]	Met?
	Does the IPT conduct appropriate follow-up on findings identified in reviews to ensure that they have been properly acted upon? **(EA-4.2)**	
EA-5	Does the IPT have systems in place to ensure the project meets its technical and engineering objectives?	
Construction Oversight Attributes		
CO-1	Do IPT team members have adequate experience and training to perform the required construction oversight activities required for successful completion of the project?	
	Are there designated individuals that have construction management experience on nuclear/radioactive waste projects that invoke NQA-1 type requirements? **(CO-1.1)**	
	Are there designated individuals that have appropriate experience with the type of construction that will be involved in the project? **(CO-1.2)**	
	Are there designated individuals that have appropriate experience to ensure that the project is constructed in accordance with the project design? **(CO-1.3)**	
	Are there designated individuals that have construction safety experience to assure the project is complying with 10 CFR Part 851 on worker safety and health and 29 CFR Part 1926 on Occupational Safety and Health Administration (OSHA) safety and health regulations for construction? **(CO-1.4)**	
	Are there designated Project IPT members that have experience in component testing and integrated system testing that occurs during construction to ensure the initial project startup/testing will proceed as expected? **(CO-1.5)**	
CO-2	Does the Project IPT have adequate IPT programs, processes, metrics, and audit/control systems in place to ensure the success of the project with regard to all Construction related requirements?	
Readiness Review Attributes		
RR-1	Do IPT personnel have the appropriate training and experience to oversee the commissioning/startup of the project?	
	Do designated individuals have appropriate skills to assess the startup test requirements? **(RR-1.1)**	
	Do designated individuals have appropriated skills to assess test results and their incorporation into the operational readiness planning? **(RR-1.2)**	
RR-2	Do IPT personnel have the appropriate training and experience to oversee the readiness reviews prior to CD-4 approval for start of operation?	
	Do designated individuals have appropriate skills to assess the contractor's pre readiness review activities readiness review strategy (including management self-assessment), and corrective action strategy? **(RR-2.1)**	
	Do Designated individuals have the appropriate skill to participate in the DOE pre readiness review activities, readiness review strategy (including management self-assessment), and corrective action strategy? **(RR-2.2)**	
Quality Assurance Attributes		
QA-1	Do IPT personnel have the appropriate QA experience and training necessary to support the project and ensure its success?	
	Do designated individuals have appropriate quality assurance skills based on experience and/or education? **(QA-1.1)**	

ID #	Performance Objectives and Criteria[2 3]	Met?
	Do Designated individuals have experience in the associate QA disciplines directly or in an oversight/review role? **(QA-1.2)**	
	Do designated individuals have sufficient experience in engineering systems design to ensure that the QA requirements have been appropriately and judicially flowed down, allocated in the project design requirements, and incorporated into the design? **(QA-1.3)**	
	Do designated individuals have experience in auditing, surveillance and assessment of design and/or construction activities of nuclear/radioactive waste facilities regarding applications of appropriate standards(DOE O 414.1C, NQA-1, 10 CFR 50 Appendix B, RW-0333P)? **(QA-1.4)**	
QA-2	Does the Project IPT have adequate IPT programs, processes, metrics and audit/control systems in place to ensure the success of the project with regard to QA requirements?	
Safety Review Attributes		
SA-1	Do IPT team members have the appropriate technical skills with regard to safety based on experience and education?	
	Do the designated individuals have experience in the associated safety-related discipline directly or in an oversight/review role? **(SA-1.1)**	
	Do the designated individuals have sufficient experience in engineering systems design to ensure that the safety-related requirements have been judicially flowed down, allocated in the project design requirements, and incorporated into the design? **(SA-1.2)**	
	Do the designated individuals have experience in reviewing and evaluating safety procedure of post-operations facilities to identify vulnerabilities and necessary corrective actions, particularly in areas that may require design revision or modification? **(SA-1.3)**	
	Have the designated individuals had sufficient experience to work with the designated Safety Basis Approval Authority and the Safety Basis Review Team to resolve any safety basis issues during the DOE review of the safety basis reports and activities? **(SA-1.4)**	
SA-2	Does the Project IPT have adequate IPT programs, processes, metrics and audit/control systems in place to ensure the success of the project with regard to safety requirements?	