

U.S. Department of Energy (DOE) Office of Project Assistance and Assurance (EM-11) Standard Operating Procedures (SOP)		
Title: EM-11 Office of Environmental Management Standard Operating Procedure, SOP 009 Rev 0 June 1, 2010: Performing Independent Project Reviews (IPR)		
EM ORG: EM-11	SOP #: 009	Revision #: 0
Effective Date: 7/01/10		

1. **POLICY:** This Office of Project Assistance and Assurance (EM-11) procedure is essential to properly plan and execute Independent Project Reviews (IPRs). The process outlined in this IPR procedure can be tailored for small projects. Additional, the review may be conducted remotely.

2. **OBJECTIVES:** The purpose of the IPR is to provide reasonable assurance that a project's work activities can be accomplished within the stated cost, schedule, and scope baselines. The IPR ensures that all the baseline supporting documents are prepared and approved and the project team is ready to proceed to the next step of execution. IPRs are conducted to certify baselines for the Assistant Secretary for Environmental Management (EM-1) as Acquisition Executive (AE). Certification of a project's performance baseline is a prerequisite for the Assistant Secretary's approval of Critical Decision (CD)-2/3 per DOE Order 413.3A.

3. **CANCELLATIONS:** None

4. **APPLICABILITY:** The provisions of this procedure will apply to EM-11 personnel responsible for conducting IPRs.

5. **REFERENCES:**
 - a. DOE Order 413.3A, Program and Project Management for the Acquisition of Capital Assets, dated July 28, 2006
 - b. DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets, working draft version, dated December 14, 2009
 - c. DOE Guide 413.3-7, Risk Management Guide, dated September 16, 2008
 - d. DOE Guide 413.3-8, Environmental Management (EM) Cleanup Projects, dated September 24, 2008
 - e. DOE Guide 413.3-9, Department of Energy Project Review Guide for Capital Asset Projects, dated September 23, 2008
 - f. DOE Guide 413.3-12, U.S. Department of Energy Project Definition Rating Index Guide, RevCom draft, dated March 22, 2010
 - g. EM-PDRI (Project Definition Rating Index) Manual and related materials
 - h. Office of Engineering and Construction Management (OECM) External Independent Review Standard Operating Procedure, July 2008
 - i. Protocol for Environmental Management Cleanup Projects, James Rispoli Memorandum, April 24, 2007

6. **CONTACT:** Lowell Ely, Office of Project Assistance and Assurance, EM-11, 301-903-6821, Lowell.Ely@em.doe.gov

7. **DEFINITIONS:**

- a. Acquisition Executive (AE): Per DOE Order 413.3A, the individual designated by the Secretary of Energy to integrate and unify the management system for a program portfolio of projects, and implement prescribed policies and practices. More specifically, the Senior Executive Service manager designated as AE with the authority to approve and disapprove CDs for Line Item Construction and Cleanup Projects.
- b. Critical Decision (CD): A CD is a formal determination or decision at a specific point in a project's life cycle that allows the project to proceed to the next phase and commit resources. The CDs are used as review points to ensure the Program Secretarial Officer (PSO) and Secretarial Acquisition Executive/Acquisition Executive (SAE/AE) that the project is ready to proceed (or continue, for Cleanup projects) into the next phase and remains a valid and current mission need.
- c. Deputy Assistant Secretary (DAS): The DASs are responsible for managing the assigned program elements and supporting the Program Secretarial Officer (PSO) in the management of the overall EM program including providing advice on CD actions.
- d. Federal Project Director (FPD): The FPD is the DOE employee assigned the responsibility and accountability for all project management activities, including project oversight. The FPD is the single point of contact between the government staff and the contractor staff on all matters relating to the project and its execution, including preparing and presenting CD actions to the SAE/AE and hosting the IPR. The FPD supports the process with resources, time, data, and personnel.
- e. Independent Project Review (IPR): Per DOE Order 413.3A, IPRs are important project management tools and serve to verify the project's mission, organization, development, processes, technical requirements, baselines, progress, etc. An IPR is performed by reviewers from within or outside the Program, but its team members have no association with the project being reviewed.
- f. IPR Team: A cross-functional group of people skilled in project management that conducts the IPR. It consists of a Team Leader and team members with expertise in Cost Estimation, Scheduling, Technical Scope, and Management and Control Systems. The size of the team depends on the size and complexity of the project under review.
- g. Energy Systems Acquisition Advisory Board (ESAAB): The ESAAB is an advisory body to the Secretarial Acquisition Executive (SAE) and is comprised of senior DOE Management and Program Secretarial Officers (e.g., the Office of General Counsel, the Office of Science (SC), the Office of Engineering and Construction Management (OECM), the National Nuclear Security

Administration (NNSA), the Office of Management and Administration (MA), the Chief Financial Officer (CFO). ESAAB meetings are an integral part of the process by which the SAE reviews and makes decisions on major system projects' CDs.

- h. Environmental Management Acquisition Advisory Board (EMAAB): The EMAAB is an advisory body to the AE and is comprised of EM DASs and non-EM personnel (e.g., OECM, SC, and NNSA) as documented in the EMAAB Charter. EMAAB meetings are an integral part of the process by which the EM AE reviews and makes decisions on CDs for non-major system Line Item Construction and Cleanup projects.
- i. Project Definition Rating Index (PDRI): A project management tool that provides a numerical assessment of how well a project is defined.

8. REQUIREMENTS:

- a. Reviews: Reviews are performed by EM-11 and staffed primarily with Federal employees and are performed in lieu of External Independent Reviews (EIRs) on capital asset projects in which the Total Project Cost (TPC) is less than \$100M. Attachment A contains a table of various review types, requirements, and timing.
- b. IPR Review Package: The FPD should transmit required IPR documents electronically by e-mail, by mailing via CD-ROM disk (or similar media), or establish a web portal for placement and access by the IPR Team.
- c. Records: All official CD records will be maintained in the EM correspondence center. The site should establish a web portal for placement and access to IPR documents. EM-11 will maintain a copy of all decision memoranda and related documents on the EM Portal.
- d. Corrective Action Plans (CAPs): The site will perform all corrective actions identified by the IPR Team as necessary to achieve certification. The FPD will ensure that all corrective actions have been satisfactorily completed and closed-out. The FPD will then follow up with the IPR Team Leader.

9. ROLES & RESPONSIBILITIES:

- a. Acquisition Executive: The AE will use the results of either OECM's EIR validation review or the EM IPR in approving the performance baseline at CD-2.
- b. Deputy Secretary (as the SAE), Program Secretarial Officer, Operations/ Field Office Manager, Program Managers, and Federal Project Directors: Can authorize IPRs. IPRs can be conducted on all projects under DOE Order 431.3A (i.e., TPC greater than or equal to \$5M).
- c. Federal Project Directors: Prepare necessary IPR documents and submit to IPR Team three weeks prior to its site visit; conduct in-briefing at commencement of site visit; provide factual accuracy comments and negotiate a corrective action

plan; and present IPR corrective actions at Pre-EMAAB, ESAAB Readiness Review, EMAAB, and ESAAB.

- d. EM-11, Office of Project Assistance and Assurance. As EM's PMSO, EM-11 (i.e., EM-11) normally leads and/or coordinates all IPRs for capital asset projects. Prior to initiating an IPR review, the EM-11 Director should issue a "charge" memorandum to the IPR Team. The team leader coordinates team membership with other EM offices and invites OECM participation in EM IPRs. The team leader is responsible for coordinating, with site participation, OECM agreement regarding which projects receive IPRs and which are to receive OECM-lead EIRs. EM-11 is also responsible for the following:
 - i. Performing Performance Baseline Validation IPRs and other IPRs as required by the Program Secretarial Officer.
 - ii. Coordinating with OECM regarding which projects receive IPRs.
- e. Integrated Project Team (IPT): A cross-functional group of people actively involved in the project that have a working knowledge of the scope, cost, schedule, and project risks. The project must be able to demonstrate and otherwise provide evidence of a functioning IPT during the IPR.
- f. Contractor personnel:
 - i. Prepare a well-documented basis of estimate, Work Breakdown Structure (WBS) dictionary, baseline estimate, and schedules in accordance with DOE requirements.
 - ii. Provide hard copies of IPR documents in a central location. Have supporting backup readily available.
 - iii. Coordinate with the Federal staff in preparing for the IPR including attendance at weekly and daily meetings, if necessary, during the preparation phase.
 - iv. Work with DOE in development of the Federal risk register and differentiation of contractor-owned and DOE-owned risks.
 - v. Provide hard and electronic copies of all baseline estimates and schedules.
- f. IPR Team Leader: Lead the IPR Team in all aspects of review including:
 - i. Plan and coordinate the review.
 - ii. Develop review plan.
 - iii. Lead the IPR scoping meeting and finalize review plan.
 - iv. Make team assignments.
 - v. Provide guidance to team on rating of projects using PDRI.
 - vi. Conduct daily meetings with Team to discuss Findings and Observations.
 - vii. Become directly involved with the review by completing PDRI for some aspects of the project such as external factors.
 - viii. Conduct closeout briefing at conclusion of site visit.
 - ix. Report writing.
 - x. Follow-up on completion and close-out of each action on the corrective action plan.

10. PROCEDURES:

- a. IPR Planning Cycle:
 - i. An IPR will be conducted on projects with TPCs that are less than \$100M; otherwise, an EIR will be conducted. There may be exceptions as agreed upon by project and headquarters personnel.
 - ii. Limited IPRs will be conducted on projects after award of contracts resulting in a performance baseline exceeding previously validated or certified Federal baselines by 15 percent or more, increases schedule by a year, or modifies scope significantly.
 - iii. A joint EIR/IPR may be conducted at a site where multiple projects require validation.
 - iv. Each year EM-11 develops an IPR projection of a listing of the projects that will require an IPR during the next fiscal year; estimated Total Project Costs for capital asset projects; and estimated start dates for the IPRs.
 - v. EM-11 will plan, implement, and monitor contractual arrangements for any approved IPR services.

- b. IPR Process Overview: The IPR consists of the following primary steps, which are discussed in more detail in this procedure:
 - i. IPR planning, scoping
 - ii. Off-site data review
 - iii. Site visit – Interviews, PDRI Scoring
 - iv. Draft and Final Report
 - v. Corrective Action Plan
 - vi. Corrective Action Plan follow-up and close-out.

- c. IPR Team Selection:
 - i. The IPR Review Team should be comprised of a Team Leader and review team members with skills and experience in cost estimation, scheduling, technical aspects of environmental restoration, risk management, and project management.
 - ii. The need for special skills and subject matter experts (SMEs) will be determined during the IPR scoping meeting. To fill these special skill sets, the Program/FPD may suggest individuals to augment the IPR Team. Suggested team members may reside within DOE or could be a contracted employee but should be independent with no interest or equity in the project.
 - iii. The Team Leader plans and coordinates the review and will make team assignments.

- d. IPR Scoping Meeting:
 - i. A teleconference/video conference should be held between the IPR Team and the Program/FPD to discuss the IPR and finalize the scope of the review.
 - ii. The date for receipt of project documentation and target dates for the IPR are established in this meeting.
 - iii. The site often will prepare a tailoring strategy for the IPR (i.e., identify the specific Line Item and/or capital asset projects to be reviewed and which aspects require special treatment). The site also will be normally expected

to perform a self assessment using the EM PDRI. The project specific tailoring strategy will be indicated in the note field on the PDRI Matrix showing any review items that are deemed not applicable or where other than normal review criteria should be applied based on the unique requirement(s) of the project(s) to be reviewed. The IPR Team will finalize the scope of the review, as well as any specific lines of inquiry that are to be included during the scoping meeting plus identify those lines of inquiry specifically excluded. The next step is development of the review plan.

- e. Review Plan and Remote Kickoff Meeting:
 - i. The IPR Team should prepare a Draft Review Plan for review and comment by the Program/FPD. The IPR Team Leader will lead development of the Review Plan.
 - ii. The Review Plan will include: the scope of the review; lines of inquiry plus identify any lines of inquiry specifically excluded from the review; review and deliverables schedule; details of the IPR Team; and discussion of logistics for working on site.
 - iii. The Program/FPD should prepare written comments to the Draft Review Plan.
 - iv. The IPR Team should remotely conduct a pre-visit kickoff meeting to discuss the Draft Review Plan and other details.
 - v. All comments should be resolved and incorporated into the Final Review Plan approved by the team leader.
 - vi. The Final Review Plan will be accompanied by specific IPR questions that must be addressed by the Program/FPD before or during the on-site review.

See Example IPR Review Plan Outline in Appendix B.

- f. Documentation Requirements:
 - i. The Program/FPD is expected to provide documentation to each review team member by the date agreed to in the kickoff meeting teleconference, which is usually three weeks prior to the site visit.
 - ii. Documentation should be loaded onto compact discs and overnight express mailed to addresses provided by the Team Leader. Other arrangements for distribution may be made. The following documentation must be included for all IPRs (this list is not all inclusive):
 1. Complete Work Breakdown Structure
 2. Work Breakdown Structure Dictionary
 3. Resource Loaded Schedule in native format and not in a PDF file. (The resource loaded schedule should be prepared in the DOE standard Primavera P6.)
 4. Basis of Estimate at the Work Package Level
 5. Risk Management Plan(s)
 6. Project Control System Description
 7. Project Execution Plan and Integrated Project Team Charter(s)
 8. Quality Assurance Plan

- 9. Safety Documentation as described in the PDRI definitions
- 10. Project Assumptions
- 11. Technical and Functional Requirements and Specifications as applicable to the PDRI definitions
- iii. Scope and required documentation may vary for specific projects depending on the types of activities being performed.
- g. Initial Data Review:
 - i. After receipt of project documentation, the IPR Team will review the material in detail prior to the site visit.
 - ii. The IPR Team should develop specific questions to be answered during the site visit for each of their respective areas. These questions may be shared with the project team prior to the on-site visit.
 - iii. The IPR Team should begin project assessment using the PDRI during the initial data review in order to get ahead prior to the site visit. Note the PDRI should only be completed after face-to-face interviews and questions are resolved.
- h. Site Visit and Logistics:
 - i. The IPR Team will require a conference room for the in-brief and out-brief sessions, as well as a conference room to conduct daily team meetings.
 - ii. To perform the IPR, office space must be available for the review team members to conduct interviews, review written materials, and develop narratives for findings and observations.
 - iii. Review team members will have their own laptop computers; however, the Program/FPD must plan to provide two desktop computers with connection to a printer for IPR Team use.
 - iv. At least one of the desktop computers must have Internet access. Also, a copier must be made available at the site for IPR Team use.
 - v. On the first day of the site visit, an in-briefing will be given by the FPD and a site tour may be provided. The Site Manager will support the FPD as required.
 - vi. The IPR Team Leader will work with the site point of contact to get information required to satisfy any additional security requirements for facility access.
 - vii. The IPR Team should request presentations by the FPD on the overall site systems and methods being used for estimating, scheduling, project controls, and baseline management at the beginning of the site visit in order to gain a quicker understanding of how the site operates and the baseline is being managed.
 - viii. The IPR Team Leader should work with the FPD to schedule individual face-to-face interviews prior to arrival on site. The interview schedule will be adjusted as necessary and finalized on the first day of the site visit.
 - ix. The IPR Team will interview project personnel to answer questions and clarify issues.
 - x. The IPR Team should plan to have team-only meeting time each day to discuss potential Findings and Observations among the team as well as

complete the PDRI for their respective areas and to hold project brainstorming exercises.

- xi. During the site visit, the IPR Team Leader is expected to provide guidance to IPR Team members on how to properly assess and score the projects using the PDRI.
- xii. The IPR Team Leader is to provide guidance on what constitutes a Finding versus an Observation. Daily team-only meetings are recommended to discuss potential Findings. The goal is for the IPR Team to be properly oriented and trained to use and interpret the criteria in the same manner.
- xiii. At the end of each day on site, the IPR Team should meet with the Program/FPD counterparts to plan interviews, clarify documentation requirements, and discuss other activities for the following day.
- xiv. The IPR Team will conduct a closeout briefing at the end of the on-site visit. It is during this briefing that draft PDRI scores may be given to the Program/FPD. It should be emphasized that the scores are preliminary and subject to change upon further review and analysis.
- xv. If the IPR Team makes sufficient progress during the week, the closeout briefing may be moved to an earlier time.

i. Assessment of Projects Using the PDRI:

- i. EM-11 relies heavily on the EM-PDRI for performing IPRs. EM-11 will use the EM-PDRI in essentially all instances when a project is in any planning stage. The PDRI covers five broad topical areas – Technical Scope, Schedule, Cost, Management Planning and Control, and External Factors. Listed under each of the five topical areas are primary lines of inquiry known as rating index criteria.
- ii. The IPR Team will utilize the PDRI to assess each project's baseline. (Refer to EM's website for information on PDRI: <http://www.em.doe.gov/pages/pdri.aspx>.)
- iii. The IPR Team will select the proper PDRI based on the type of project (traditional construction; environmental restoration; facility disposition projects). This will be determined in advance by the Team Leader.
- iv. When applying the PDRI against baselines, the IPR Team will utilize the CD-2/3 Target Values for Operating Projects and CD-3 Target Values for Facility Disposition Projects. The IPR Team will utilize the documentation submitted by the site as well as on-site interviews to numerically rate each line of inquiry provided by the PDRI matrix with narrative, findings, and/or observations reported for each line of inquiry. A numerical score of 1000 for each project is the goal.
- vii. The IPR Team will score each project using the PDRI prior to concluding the site visit.
- viii. The IPR Team Leader will be directly involved with the review for example by completing the PDRI for External Factors and assess smaller, less complex PBSs.
- ix. Preliminary findings and observations should be presented at the out-briefing by the IPR Team Leader at the conclusion of the site visit.

- x. PDRI scores are finalized at a later date after the site visit and during the report writing phase.
- g. Findings and Observations:
- i. In addition to rating each project's using the PDRI, the IPR Team will record Findings and Observations during the review.
 - ii. Findings are defined as issues that require resolution prior to EMAAB consideration of CD-2/3.
 - iii. Observations are issues identified by the IPR Team for the use of the Program/FPD to utilize in improving project planning, control, and execution. Observations do not require corrective action prior to EMAAB consideration; however, the site is encouraged to implement corrective actions for observations as soon as possible.
 - iv. Draft findings will be presented at the site visit out-briefing by the IPR Team Leader.
- k. IPR Schedule:
- i. The total duration of the IPR from receipt of review materials to final report is approximately 11 weeks.
 - ii. The primary steps of the IPR and general timeline are as follows:

1. Obtain, evaluate pre-review documents	start
2. Initial data review off-site	3 weeks
3. IPR Team on-site	1 week
4. Draft score project using PDRI	while onsite
5. Draft report	2 weeks
6. Factual accuracy review	1 week
7. CAP preparation and submittal by site	1 week
8. CAP review and acceptance	1 week
9. Final report	2 weeks
- l. IPR Report:
- i. A draft report will be provided to the Program/FPD for factual accuracy review approximately two weeks after the site visit. An example of an IPR Report table of contents is provided in Appendix C.
 - ii. The IPR report will be structured according to the EM PDRI lines of inquiry and include all Findings and Observations noted by the IPR Team.
 - iii. The report will include an Executive Summary and recommendation for either validation/certification or corrective actions that must be addressed in order to receive recommendation for validation/ certification.
 - iv. Factual accuracy comments will be discussed and agreed upon in teleconferences with the Program/FPD within one week after receipt of the draft report.
 - v. After factual accuracy comments are incorporated into the draft report, the final report (together with the final PDRI scores) will be complete within two weeks after an appropriate Corrective Action Plan has been submitted by the Program/FPD and has been accepted by the IPR Team (see below).
- m. Corrective Action Plan:

- i. Submission of a Corrective Action Plan is required if the IPR Review Report contains any Findings. The Corrective Action Plan shall address all of the Findings. Observations are not required to be addressed in the Corrective Action Plan. Following agreement by the IPR Team and the Project Team on the IPR Report's factual accuracy, a Corrective Action Plan must be prepared by the site and submitted to EM-11 for concurrence.
- ii. Upon approval, corrective actions should begin expeditiously and should be completed by the date indicated in the Correction Action Plan. EM-11 will verify completion and provide a closure report to the responsible field element.
- iii. Once EM-11 agrees that all corrective actions have been satisfactorily closed, the project's baseline will be certified, and an EM Acquisition Advisory Board meeting will be scheduled for Acquisition Executive consideration of CD-2/3.

11. **APPENDICES**

- a. Appendix A – Types of Project Reviews in Support of Critical Decision (CD) Milestones
- b. Appendix B – Example IPR Review Plan Outline
- c. Appendix C – Example Table of Contents for an IPR Final Report

Approved By: Lowell Ely

Signature:  _____

Name and Title: Lowell Ely, Director of Project Assistance and Assurance, EM-11

Date: 6/30/10 _____

**APPENDIX A
TYPES OF PROJECT REVIEWS IN SUPPORT OF CRITICAL DECISION
MILESTONES (DOE Order 413.3A)**

Review Type	Accomplished Prior to CD	Required or Optional	Responsible Organization	Type of Review
Mission Need	CD-0	Required for Major System (MS) Projects	Program Secretarial Officer (PSO)/Deputy Administrator.	Independent Project Review (IPR). Also, the Office of Program Analysis and Evaluation must review the Mission Need Statements and provide a recommendation to the PSO/Deputy Administrator for projects with a TPC greater than or equal to \$100M.
Technical IPR/Design Review	CD-1	As part of the Design Review, IPR required for high risk, high hazard, Hazard Category 1, 2 and 3 nuclear facilities. Design Review required of the Conceptual Design and continuing through the life of the project, as appropriate.	PSO/Deputy Administrator.	IPR and Design Reviews. Technical IPRs and Design Reviews for Hazard Category 1, 2, and 3 facilities should identify substantial safety issues earlier in the design process, determine a satisfactory resolution for these issues, and ensure this task will be accomplished prior to CD-1.
Acquisition Strategy	CD-1	Required for MS Projects	OECM for MS Projects	Review of Acquisition Strategy Document by OECM and provide recommendation to the PSO/Deputy Administrator.
Alternative Selection and Cost Range	CD-1	Optional	PSO/Deputy Administrator	IPR
Design Reviews	Beginning at CD-1 and continuing through the life of the project as appropriate.	Required for projects with a TPC equal or greater than \$20M. Optional for Projects greater or equal to \$5M and < \$20M	PSO/Deputy Administrator or as further delegated.	Design Review by technical qualified individuals internal and external to the project.
Performance Baseline	CD-2	Required	OECM for projects with TPC greater or equal to \$100M. For projects with a TPC <\$100M the Project Management Support Office (PMSO).	External Independent Review (EIR) for TPC equal or greater than \$100M. IPR for projects with a TPC < \$100M (see Note 1).
Performance Baseline Validation Review as a result of a Deviation	After CD-2 and prior to approval of the proposed new baseline through a	Required	OECM for projects with a TPC >/= \$100M or where the Secretarial Acquisition Executive (SAE) is the approval authority for	External Independent Review (EIR) for projects with a TPC equal or greater than \$100M or where S-2 is the approval authority for the BCP. IPR for projects with a TPC <

Review Type	Accomplished Prior to CD	Required or Optional	Responsible Organization	Type of Review
	Baseline Change Proposal (BCP).		the BCP. Where TPC <\$100M, and the BCP is below the SAE approval authority, the PMSO.	\$100M and the BCP is below the SAE approval authority (see Note 1).
Construction or Execution Readiness Review	CD-3	Required for MS Projects. Optional for Non-MS Projects when justification is provided and waiver is granted by the Acquisition Executive authority.	OECM for MS projects; PSO/ Deputy Administrator for Non-MS projects	EIR for MS projects; IPR for Non-MS Projects

Note 1: The Acquisition Executive may request an EIR in lieu of and IPR through OECM, and must do so if the Acquisition Executive has no Project Management Support Office to perform the review.

APPENDIX B

EXAMPLE IPR REVIEW PLAN OUTLINE

- 1.0 IPR Scope and Approach
 - 1.1 Review Objective (*what is purpose and object of review*)
 - 1.2 Lines of Inquiry (*discussion of PDRI line of inquiries to be utilized*)
 - 1.3 Scope of IPR (*summarize scope of IPR – PBSs to be reviewed*)
 - 1.3 IPR Process and Methodology (*discussion of overall IPR process*)
 - 1.4 Review Team (*discussion of review team members and contact info*)
 - 1.4 Draft and Final Report (*discussion of report process and content*)
- 2.0 General Project Background (*discussion of individual PBS SOW*)
- 3.0 Project Documentation (*listing of documents required from the site*)
- 4.0 Site Visit
 - 3.1 Logistics (*requirements and details regarding site visit*)
 - 3.2 Meetings (*summary of required meetings, briefs, team only time*)
 - 3.3 Interview Schedule (*summary of interview schedule*)
 - 3.2 Required Resources (*such as computers, printers, phones, Internet*)
- 5.0 Schedule (*schedule envisioned for the IPR from receipt of documentation through Final Report*)

Appendices

Appendix X Definitions for Lines of Inquiry

Appendix X Rating Element Forms

APPENDIX C
EXAMPLE TABLE OF CONTENTS FOR AN IPR FINAL REPORT

- 1.0 Executive Summary
- 2.0 Introduction
- 3.0 Background
 - 3.1 Review Objectives
 - 3.2 Approach
- 4.0 Recommendations and Findings
- 5.0 Detailed Review Results
 - 5.1 Cost
 - 5.2 Schedule
 - 5.3 Scope/Technical
 - 5.4 Management Planning and Control
 - 5.5 External Factors
- 6.0 Independent Project Review Team

Appendices

Appendix A: PDRI Definitions and Score Sheet