U.S. Department of Energy

Office of Energy Efficiency and Renewable Energy

Appendix of Standard Performance Reporting Questions and Templates for the Research, Development, Demonstration and Deployment Activities

Revised September 2011

Version History

Date	Revision No.	Summary of Changes
Sep-10	Original Document	Original Document
Apr-11	1	**Version History:** Added Version History section. **Approval Page:** Reduced number of signatories to include only the preparors and the Director of Field Performance Management, EERE. **Section 2:** Changed due date for Desktop Reviews from 10 working days to 30 calendar days after end of reporting period. **Section 2.1:** Added language to clarify the difference between Annual Plan Reviews and Desktop Reviews with an annual frequency. Expanded Desktop Review Form to capture more data on Corrective Action Plans, ancillary information on Recommendations/ Concerns/ Formal Findings, site visits, NEPA, and project closeout. **Section 3:** Expanded Onsite Review Form to capture ancillary information on Recommendations/ Concerns/ Formal Findings. Inserted Onsite Review question regarding NEPA documentation. Made minor edits to language in Trip Report Template and Project Management Plan to remove where appropriate reference to “conformance” or “compliance.”. Edited the Onsite Monitoring Trip Report Template to include information on staff conducting site visits.
Sep-11	2	**Section 2:** Added text boxes for risk information to Desktop Review Form. **Section 3:** Clarified goals of Onsite Review Form. Inserted Onsite Review question regarding Davis-Bacon compliance. Removed Davis-Bacon check-box from general regulatory compliance question. Added text boxes for risk information to Onsite Review Form.

Appendix of Standard Performance Reporting Questions and Templates for the Research, Development, Demonstration and Deployment Activities

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Table of Contents

1. Introduction to the Desktop and Onsite Review Process and Templates

This Appendix contains the standard performance reporting questions for the desktop and onsite review processes to be conducted as part of the oversight monitoring for the Research, Development, Demonstration and Deployment (RDD&D) activities in the Office of Energy Efficiency and Renewable Energy (EERE). These questions will be used in the online forms found in the central repository that will be the data warehouse for relevant oversight monitoring information of the EERE RDD&D activities. These activities include awards funded by the American Recovery and Reinvestment Act ("Recovery Act") and ongoing financial assistance award programs under EERE. This Appendix also includes the Project Management Plan (PMP) Template recommended for baseline formulation and assessment as well as the standard trip report template.

The purpose and use of these tools is explained in the accompanying RDD&D Monitoring Plan – the companion document to this Appendix. The online forms and templates used for the monitoring of EERE RDD&D activities should be completed in accordance with the review frequencies described in the table below.

Table 1.1: Review Frequency by Type

Award Size (Federal Share)	Desktop Review	Onsite Review	Project Plan Review
≤ $1M	Annually*	As needed	Annually
$1M<$20M	Quarterly	As needed	Annually
≥ $20M	Quarterly	Annually	Annually

***Note**: It is the responsibility of the Project Officer to determine whether a higher frequency of review is needed for a particular project. Quarterly desktop reviews are highly encouraged for a high-risk or "new Recipient" project of any value.

As situations arise that may call for more frequent examination and notification than stipulated above, it is incumbent upon the Project Officer (PO) to determine when those issues require upper management review and notification, especially when such issues surface between regular reporting intervals.

The review procedures outlined below rest on the understanding that the responsibility for assigning a risk categorization is made by the PO in accordance with his/her site's specific procedures and guidelines. In giving this assignment, the PO should take into consideration any concerns stipulated by the Program or Field Operations management and factor these concerns into the risk assignment.

The purpose of these monitoring tools is to document the observations and outcomes of desktop, onsite and plan reviews. The actions to be recommended and/or taken as a result of these reviews is at the discretion of the PO in consultation with other project management team members such as the Contracting Officer (CO), Contracting Specialists (CS) and others as appropriate. For example, POs may be asked to use results from the desktop review questions as an indicator of the need for onsite visits or other progress reviews. These results may also trigger additional progress reviews.

2. RDD&D Desktop Review: Online Forms

The desktop review process examines project progress and financial reports submitted by the Recipient. Upon completion of the review, the PO must submit an online form into the central repository answering five basic questions (see Table 2.1). The online form will be due 30 calendar days after the end of the reporting period. If the reporting is in order—reflecting correct period(s), providing complete information, and suggesting no inconsistencies—then the form should be easy and quick to complete. If the PO provides negative responses to Questions 2-5, additional queries will require more detailed information. Since project Annual Plan Reviews can occur at any time of the year and are often performed as part of the quarterly Desktop Review process, confirmation of the conduct of this review will be part of the Desktop Review process (see Table 2.1, final section).

The following terms are used in the desktop and onsite online forms and defined below:

- ***Recommendation*** occurs when a minor procedural item is identified that will improve the merits of the program and assist with compliance in program requirements;
- ***Concern*** arises when a problem is uncovered that could jeopardize the program and should be addressed for future success such as infrequent file omissions or not following the full intent of a guidance;
- ***Formal finding*** occurs when there is non-compliance with a Federal regulation or guidance or repeated issues on items already cited as concerns and not addressed over time, such as misuse of funds or inadequate financial management.

These terms are only used when the response to a question points to an underlying issue/s and dropdown questions are employed to identify the severity of the issue/s or provide further explanation.

Table 2.1: Desktop Review Process Outline: Standard Performance Reporting Questions

The following questions pertain to the POs' regular assessment of project performance, based upon technical, financial, and other reports submitted by the Recipient. For more information on the requirements and frequency of desktop reviews, see Section 3.1 of the Monitoring Plan for the Research, Development, Demonstration, and Deployment Activities and Section 1 (above) of the Appendix.

Desktop Reviews should not be confused with the POs' Annual Plan Review of Recipients' performance against a baseline understanding of the project. For more information about Annual Plan Reviews, see Section 3.2 of the Monitoring Plan.

Questions	Answer Selections
1. What risk classification would you assign this project/agreement this reporting period?	High/Medium/Low
2. Are the costs to date consistent with expected performance, as indicated in the spend plan[1]? Follow-up Questions: Check the severity that applies: □ Recommendation □ Concern □ Formal finding Check all issues that apply: □ Resources (personnel, equipment, etc.) □ Cost share □ External conditions (market conditions, natural disasters, etc.) □ Overly optimistic planning/changing plan parameters □ Unexpected/missed dependency □ Terms and conditions □ NEPA □ Other ________ □ Other—Describe any factors not listed above ____________	If yes → done (may include optional information) If no → see follow-up questions Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________
3. Based on Recipient reports, is the project on schedule? Follow-up Questions: Check the severity that applies: □ Recommendation □ Concern □ Formal finding Check all issues that apply: □ Resources (personnel, equipment, etc.) □ External conditions (market conditions, natural disasters, etc.)	If yes → done (may include optional information) If no → see follow-up questions Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________

[1] Projects without formal spend plans may substitute informal plans or other project documentation.

Questions	Answer Selections

□ Overly optimistic planning/changing plan parameters
□ Unexpected/missed dependency
□ Terms and conditions
  □ NEPA
  □ Other _____________
□ Other—Describe any factors not listed above ____________	

4. Is the Recipient working within the project scope, as defined in the award document and any modifications? Follow-up Questions: Check all issues that apply: □ Pending modification, date anticipated □ Deviation from terms and conditions □ Scope no longer consistent with NEPA determination □ Other— Describe any factors not listed above _____________	If yes → done (may include optional information) If no → see follow-up questions Please identify any prospective problems / emerging risks (Optional) ____________________________ Please provide any further details (Optional) ____________________________
5. 1. Has the Recipient submitted all reports as specified in the award document and any modifications? Follow-up Questions: Check the severity that applies □ Recommendation □ Concern □ Formal finding Please select the missing report(s): □ Progress How many reporting periods are they behind? □ One (1) □ Two (2) □ Three or more (3+) □ Financial How many reporting periods are they behind? □ One (1) □ Two (2)	If yes → done If no → see follow-up questions

Questions	Answer Selections
□ Three or more (3+) □ Recovery Act-related How many reporting periods are they behind? □ One (1) □ Two (2) □ Three or more (3+) □ Special Status Reports How many reporting periods are they behind? □ One (1) □ Two (2) □ Three or more (3+)	
2. Are the reports complete and contain information from the correct reporting period? Check the severity that applies: □ Recommendation □ Concern □ Formal finding Follow-up Questions: Please select the incomplete/inaccurate reports: □ Progress What information is missing? Describe___________ □ Financial What information is missing? Describe___________ □ Recovery Act-related What information is missing? Describe___________ □ Special status reports What information is missing? Describe___________	If yes → done If no → see follow-up questions
Has this information been missing in the past?	Yes/No

Questions	Answer Selections
Conditional Pop-Up Questions	
1. Based on the answers to questions 2-5, would you like to revisit the risk classification in Question 1?	Yes/No
2. Is a Corrective Action Plan (CAP) in place, or are actions being taken to initiate a CAP? Follow-up Questions: Date Initiated:___________ Check all issues that apply: □ Invoicing □ Financial management □ Equipment management □ Davis-Bacon Act □ Buy American Provision □ Resources (personnel, equipment, etc.) □ Cost share □ External conditions (market conditions, natural disasters, etc.) □ Overly optimistic planning/changing plan parameters □ Unexpected/missed dependency □ Terms and conditions □ NEPA □ Other ________ □ Other—Describe any factors not listed above ____________ Additional information (optional) ____________	If yes → see follow-up questions If no → done
3. 1. IMPACT identifies an open CAP from a previous review. Has this CAP been closed? 2. Is the Recipient adhering to terms of the CAP? Additional information (optional) ____________	If yes → Date Completed:___________ If no → Proceed to Q. 3-2 Yes/No
Annual Plan Review Questions	
1. By checking this box you confirm that a project plan review occurred during this reporting period. Please indicate any documents or processes used in the annual plan review:___________	□ Date Completed:___________

Questions	Answer Selections
Note: POs may submit any documents used in the annual plan review in this project's *Documents* tab in IMPACT.	
2. As a result of this review, have you changed your monitoring strategy for this award? Follow-up Question: Please select the change that applies: □ More frequent monitoring □ Less frequent monitoring □ Other – Describe any factors not listed above __________	If yes → see follow-up question If no → done
Site Visit Questions	
1. Are you currently planning a site visit for this award? Follow-up Question: What are the projected dates of the site visit? Note: Actual dates of the site visit may vary from projected dates.	If yes → see follow-up question If no → done Projected Dates of Visit:___________
2. (Conditional) IMPACT indicates that a site visit was planned for the current reporting period, but the Trip Report and Onsite Review Forms have not yet been submitted. Was the site visit conducted? Follow-up Questions: Has the site visit been cancelled? What are the current projected dates of the site visit? Note: Actual dates of the site visit may vary from projected dates.	If yes → done If no → see follow-up questions If yes → done If no → see follow-up questions
Project Closeout Questions	
1. By checking this box you indicate that this is the final desktop review to be reported for this project.	□ Closeout Date__________
2. Did this project achieve its technical objectives?	Yes/No
3. Was this project completed within budget, schedule, and scope?	Yes/No

3. RDD&D Onsite Review: Online Form and Onsite Monitoring Trip Report Template

The onsite review examines the Recipient's technical, managerial, and compliance (eg Davis-Bacon, Historic Preservation, NEPA) performance, based upon observations and documentation. Upon completion of the onsite review, the PO must answer a series of standard performance reporting questions housed in an online form found in the central repository. This form is specific to site visits. A dropdown approach is deployed for these questions similar to the desktop online form. See Section 2 for the definitions of recommendation, concern, and formal finding used in the dropdown questions.

Along with the form, POs must follow existing guidelines for preparing a trip report. A trip report template follows the table of onsite questions (see Table 2.2). POs should follow the Onsite Monitoring Trip Report Template as applicable to ensure coverage of all pertinent topics. The final trip report should be uploaded to the central repository identified by its agreement number and the date of the visit. The template is available in the central repository and can be copied to network or local drives for easy access and use.

Table 3.1: Onsite Review Process Outline: Standard Performance Reporting Questions

Questions	Answer Selections
1. During the onsite review, were there indications that previous outstanding issues were being addressed? Follow-up Questions: Explain the circumstances for the inaction: ______________________________	If yes → done If no → see follow-up question If not applicable → done
2. Is the Recipient demonstrating an ability to meet the goals and objectives of the award and any modifications? Follow-up Questions: Check the severity that applies: □ Recommendation □ Concern □ Formal finding— Specify________	If yes → done (may include optional information) If no → see follow-up question Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________
3. Did the onsite review uncover any issues with the budget?	If yes → see follow-up questions If no → done (may include optional

Questions	Answer Selections
Follow-up Questions: Check the severity that applies: □ Recommendation □ Concern □ Formal finding Check all issues that apply: □ Resources (personnel, equipment, etc.) □ Cost share □ External conditions (market conditions, natural disasters, etc.) □ Overly optimistic planning/changing plan parameters □ Unexpected/missed dependency □ Terms and conditions □ NEPA □ Other ______________ □ Other— Describe any factors not listed above _____________	information) Please identify any prospective problems / emerging risks (Optional) _____________________________ Please provide any further details (Optional) _____________________________
4. Did the onsite review uncover any issues with the schedule? Follow-up Questions: Check the severity that applies: □ Recommendation □ Concern □ Formal finding Check all issues that apply: □ Resources (personnel, equipment, etc.) □ External conditions (market conditions, natural disasters, etc.) □ Overly optimistic planning/changing plan parameters □ Unexpected/missed dependency □ Terms and conditions □ NEPA □ Other ______________ □ Other— Describe any factors not listed above _____________	If yes → see follow-up questions If no → done (may include optional information) Please identify any prospective problems / emerging risks (Optional) _____________________________ Please provide any further details (Optional) _____________________________

Questions	Answer Selections
5. Did the onsite review uncover any issues with the scope? Follow-up Questions: Check the severity that applies □ Recommendation □ Concern □ Formal finding Check all issues that apply: □ Pending award modification (temporary program direction); complete by ___________ □ Terms and conditions, specify ___________ □ Other – Describe any factors not listed above ___________	If yes → see follow-up questions If no → done (may include optional information) Please identify any prospective problems / emerging risks (Optional) _____________________________ Please provide any further details (Optional) _____________________________
6. Are there any NEPA requirements listed in the award documents for this project (e.g. Recipient must have a waste stream plan on file)? Follow-up Questions: If yes, is there documentation these requirements are being fulfilled? Explain the circumstances for the lack of documentation: _____________________________	If yes → see follow-up questions If no → done If yes → done If no → see follow-up questions
7. Is this project subject to Davis-Bacon and Related Acts (DBRA)? Follow-up Questions: Based upon reports, documentation, and Recipient communications: Is the Recipient receiving weekly certified payroll reports from each covered employer on their approved projects?	If yes → see follow-up questions If no → done (may include optional information) If not applicable → done Please identify any prospective problems / emerging risks (Optional) _____________________________ Please provide any further details (Optional) _____________________________

Questions	Answer Selections
Is the Recipient currently reviewing certified payroll reports, and conducting site visits and employee interviews to determine the employer's status of compliance with the DBRA? Has the Recipient recorded and reported interviews taken and investigations of covered employers completed by your office, and recorded violations found, including number of workers found to be paid in violation of DBRA, amount of DBRA back wages due each worker, and amount of DBRA back wages paid to each worker, due to your investigative effort? Has the Recipient taken any steps to educate and train Sub-Recipients and/or construction contractors on DBRA requirements?	
8. Did the Recipient confirm compliance with local, State, and Federal requirements and regulations? Follow-up Questions: Check all issues that apply: □ Environment (NEPA, Clean Air Act, etc.) □ Property management □ Buy American Provision □ Safety □ Reporting □ Other – Describe any factors not listed above ___________	If yes → done (may include optional information) If no → see follow-up questions Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________
9. Did the Recipient confirm adequate monitoring oversight of the Sub-Recipients? Follow-up Question: Check the severity that applies: □ Recommendation □ Concern □ Formal finding—specify __________	If yes → done (may include optional information) If no → see follow-up question Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________

Questions	Answer Selections
10. Did the Recipient confirm continued use of adequate financial systems and controls? Follow-up Question: Check the severity that applies: □ Recommendation □ Concern □ Formal finding—specify __________	If yes → done (may include optional information) If no → see follow-up question Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________
11. Did the Recipient confirm continued compliance with relevant Recovery Act requirements? Follow-up Question: Check the severity that applies: □ Recommendation □ Concern □ Formal finding—specify __________	If yes → done (may include optional information) If no → see follow-up question Please identify any prospective problems / emerging risks (Optional) ______________________________ Please provide any further details (Optional) ______________________________
12. Has the Recipient confirmed any changes, or did the review uncover any issues, that would measurably impact the risk classification of the award (including changes in ES&H, personnel, external influences, etc.)? Follow-up Question: Specify ___________	If yes → see follow-up question If no → done
13. Is there in existence or is action being taken for a Corrective Action Plan (CAP) on this project? Follow-up Questions: Specify date of implementation (or anticipated date): ___________ Please provide any further details ____	If yes → see follow-up questions If no → done

Questions	Answer Selections
14. Has the Recipient demonstrated any best practices you would like to share? Follow-up Question Please describe ___________	If yes → see follow-up questions If no → done

Onsite Monitoring Trip Report Template[2]

[Recipient Name]
[Award Number]
[Date of Report Submission]

1. General

A. Purpose

This site visit was conducted to satisfy:

- Annual monitoring requirements,
- Regular monitoring requirements (for projects with other than annual monitoring requirements),
- Follow-up on Corrective Actions
- Follow-up on a high-risk/high-profile award,
- Request from DOE/EERE/IG leadership, etc
- Other (Specify)

B. Scope

List:

- Recipient Organization
- Award Number
- Date or version number of award or most recent modification
- Period of Performance
- Date(s) of site visit

Document/Describe:

- Names and roles of team members conducting the site visit
- Names and roles of people interviewed during the site visit
- Key locations visited during this review
- When were the monitoring data entered into the central repository?

2. Monitoring

A. Technical and Administrative

Document/Describe:

- Technical progress and assistance
- Progress toward schedule and milestones
- Commercialization
- General administration and program management
- Personnel issues and training issues
- Progress toward milestones and schedule

[2] This template offers a broad set of review criteria against which POs are encouraged to respond; however, POs may omit any items that fall outside the bounds of their monitoring review or are not applicable to the project.

- Status of special award conditions
- Concerns/Findings (e.g., incomplete award file, incomplete or missing progress reports, incomplete GPRA data collection, lack of sub-recipient information in file, etc.)
- Recommendations

B. Financial

Document/Describe:

- Performance against budget
- Procurement
- Payroll and personnel
- Equipment, materials and supplies
- Procurement and subcontracts
- Financial management and administration
- Records management and retention
- Concerns/Findings (e.g., missing items such as reporting, etc.)
- Recommendations

C. Best Practices

Describe any programs, initiatives, or activities that may serve as models for other Recipients.

D. Corrective Actions

Describe any potentially problematic activities that warrant corrective action.

E. Comments

Optional: Describe any noteworthy issues or observations not captured elsewhere in this report.

Certification

I have conducted this monitoring visit and collected sufficient information to form an opinion on the Recipient’s general administration of the financial assistance award and compliance with program requirements.

4. Project Management Plan Template

When employed, the Recipient's Project Management Plan (PMP) is typically an approved document that defines how the Recipient will execute, monitor, and control the project to accomplish the objectives. The specific contents, level of detail, and inclusion of subsidiary planning documents are tailored according to the needs of the project. Consequently, each PMP will be different based on the risk, visibility, and/or complexity of the project and the Recipient's established processes, procedures, and systems (see Project Management Guidelines).[3] Other documents may stand in for a PMP to establish a baseline for the project and progress against these documents should be assessed for all projects on an annual basis as part of the Annual Plan Review.

Project professionals traditionally evaluate a project's success by its effectiveness in meeting its triple constraints – on time, on budget, to scope. These three project parameters are called the triple constraints because they collectively capture all of the project's required inputs and outputs. Moreover, each constraint impacts and is impacted by the other two. As one constraint changes, the others must adjust to compensate. Envisioning this concept as a triangle, with each constraint a side of that triangle, it is clear that one constraint cannot be changed without affecting the other; none act independently.

Quality is represented by the triangle's area. As the three constraints change, the quality of the project's performance is impacted, particularly if change reduces the area of the triangle. The PO must carefully plan to prevent that level of impact, however, if unavoidable, *the PMP should be updated and all adverse impacts to cost, schedule, scope and quality should be made known to Field Operations and EERE leadership.*

This PMP Template can be tailored based on project complexity, containing additional recommended sections, content descriptions, and sample graphs and charts. A less complex project is typically one performed by a partnership of fewer than three member organizations. A more complex project is defined as a multi-year project performed in phases by a partnership of three or more member organizations.

What follows is a complete PMP Template – from cover page to appendices – that is recommended as the format for establishing a baseline for a project plan. Each award has established requirements for varying levels of information from the Recipient in accordance with program requirements, size, complexity, and activity. This template serves as a means to compile consistent information across programs for Recovery Act-funded and ongoing projects. These methods should facilitate and expedite the processing of information for upper level reporting. The level of detail depicted in the completed templates will be determined by the PO and is dependent on the factors cited above.

[3] Specifically see the Guideline 8.1.3 of the Federal Project Management Center, Project Management Guidelines, 2008.

PROJECT MANAGEMENT PLAN

{Agreement Title}[4]

{Date Prepared}

WORK PERFORMED UNDER AGREEMENT

{xxxx}

SUBMITTED BY

{Organization Name}

{Organization Address}

{City, State, Zip Code}

PRINCIPAL INVESTIGATOR

{Name}

{Phone Number}

{Fax Number}

{E-Mail}

SUBMITTED TO

U. S. Department of Energy
{Site}
{Federal Project Manager Name}
{Federal Project Manager E-Mail}

[4] NOTE: { } denotes required information.

The Table of Contents (TOC) enables the reader to locate sections quickly. The tables and figures are listed after the TOC if applicable.

Table of Contents

Appendices

Tables

Figures

1. Executive Summary

The Executive Summary provides a description of the project that includes the project goals and objectives. The Executive Summary should also include a succinct project background and rationale. This information is a summary of pertinent content generally included in the original Project Narrative (found in the application), so that the PMP may function as a stand-alone document.

2. Risk Management

The Applicant (Recipient) shall provide a summary description of the proposed approach to identify, analyze, and respond to perceived risks associated with the proposed project. Project risk events are uncertain future events that, if realized, impact the success of the project. Since risk is inherent to all projects, regardless of the level of complexity, cost or visibility, project risk must be addressed to the appropriate level for every project. It is recognized that the depth of analysis and the complexity and cost of the resulting risk management approach (and plan) will differ from project to project and among organizations. Other commonly accepted approaches to risk management, such as those supported by The Project Management Institute's "A Guide to the Project Management Body of Knowledge," should also be considered.

At a minimum, the PMP should provide sufficient information to demonstrate an appropriate approach to managing risks during project execution. This must include the initial identification of significant technical, resource, and management issues that have the potential to impede project progress and strategies to minimize impacts from those issues. For fundamental research and modeling studies, it is anticipated that risks be focused on technical uncertainties that result from such research and studies.

3. Communications Management

Communications management describes the communications needs and expectations for the project team members. A communications plan may be formal or informal, highly detailed or broadly framed; it is based on the requirements of the project stakeholders.

4. Change Management

Change management defines the process for managing change on the project, describing how change will be monitored, controlled and documented within the project. This includes, but is not limited to, changes to the plan, schedule, scope, and resources.

5. Project Milestones

The Applicant (Recipient) is to provide milestones for each budget period of the project. Each milestone is to include a title, planned completion date and a description of the method/process/measure used to verify completion. The milestones should be quantitative and show progression toward project goals and/or the successful execution of budget. The Applicant (Recipient) will plan a milestone or milestones at least semi-annually or every six months of the project schedule: however, milestones should not be developed to meet this expected schedule. Milestones are different than success criteria (Section 6) in that milestones typically show progress through the execution of the budget period and project, whereas success criteria are used by the DOE to determine if specific goals were met at budget period ends or other appropriate points in project execution.

Project Officers should format the milestone log as follows:

Title: {Milestone Title}

Planned Date: {Planned Completion Date}

Verification Method: {Milestone Verification Method}

6. Funding and Costing Profile

The Applicant (Recipient) shall provide a table that shows, by budget period, the amount of government funding going to each member and cost share provided by members. The table shall also calculate totals and cost sharing percentages. Table 6.1 "Project Funding Profile" below is an example.

Table 6.1: "Project Funding Profile"

	FY 2010		FY 2011		FY 2012		FY 2013		Total	
	DOE Funds	Cost Share	DOE Funds	Cost Share	DOE Funds	Cost Share	DOE Funds	Cost Share	DOE Funds	Cost Share
Applicant										
Partner										
Total ($)										
Total Cost Share %										

(Optional) Budget by Subtask - the budget may be shown according to task and subtask for each budget period (see Table 6.2). This is not a required table for the PMP. Note that this is an additional table not shown in Appendix D of the Project Management Guidelines.

Table 6.2: Budget According to Task

Task No.	Task/Subtask Name	FY 2010 Budget ($)	FY 2011 Budget ($)	FY 2012 Budget ($)	FY 2013 Budget ($)	Total ($)
	Task Name					
	Subtask Name					
	Total ($)					

Project Spend Plan - the Applicant (Recipient) shall provide a table that projects (at a minimum), by month, the expenditure of the government funds in the current budget period (see Table 6.3). Although out-year costing profiles can be less certain and the nature of specific tasks are typically dependent on the successful or unsuccessful completion of the current RDD&D approach, the Applicant (Recipient) should provide estimates of out-year costs to the extent practical. For additional information, refer to the Work Breakdown Structure (WBS) Element Definitions (Appendix A), which shows spend plans by task and subtask.

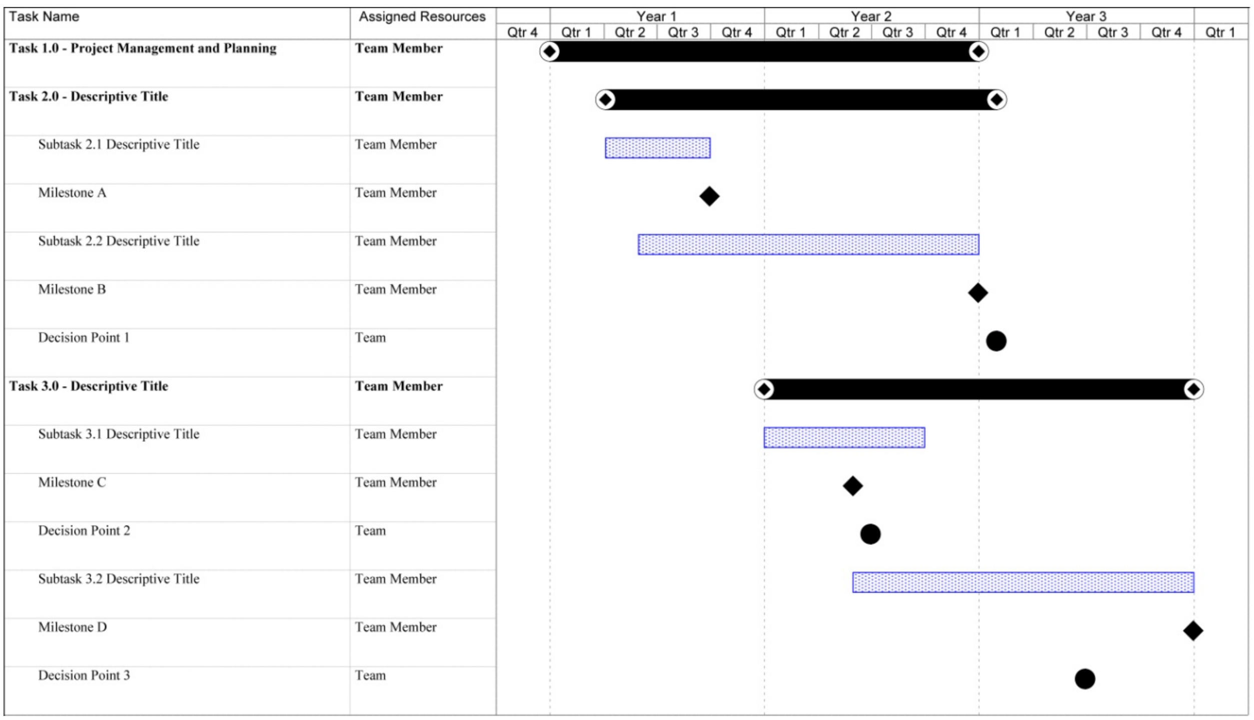
Table 6.3: Spend Plan by Month

Month	FY 2010 ($)	FY 2011 ($)	FY 2012 ($)	FY 2013 ($)
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total ($)				

7. Project Schedule

The Applicant (Recipient) shall provide a timeline of the project broken down by each task and subtask. Additional task information may include a start date, end date, and team members participating on the task. The timeline should also show any interdependencies with other tasks and note the milestones identified in the Milestone Log. The Applicant (Recipient) should consider using a commercial software package (i.e., Microsoft Project, Project.net) to generate the project schedule as a Gantt chart or other applicable format (see Figure 7.1).

Figure 7.1: Project Timeline (Gantt Chart)



8. Success Criteria and Decision Points

The success criteria should be objective and stated in terms of specific, measurable, and repeatable data. Usually, the success criteria pertain to desired outcomes, results, and observations from the experimental efforts. The success criteria should not be based on interpretations. Typically, the expected performance parameters are established with a technical and economic comparison made to the competing technologies or methods. A discussion on the probable advantages and possible disadvantages of these technologies should be included. Advantages could include, but are not limited to:

- Validation/confirmation/identification of scientific/engineering knowledge
- Cost savings expected over existing technologies
- Performance enhancements to existing technologies

- Reduction in health and safety risks to the public and workers, and reduction in environmental risks.
- Ease of installation, operation, and maintenance.
- Decrease in capital, operating, and maintenance cost.
- Success Criteria are different than milestones (Section 5) in that milestones typically show progress through the execution of the budget period and project, whereas success criteria are used by the DOE to determine if specific goals and objectives were met at budget period ends. Typically, these goals and objectives represent requirements established by the RDD&D program as evidence of progress in advancing a technology area or scientific/engineering knowledge. The success criteria may be used to assist DOE in deciding whether to proceed into subsequent budget period(s), if required.

9. Scope Management Plan

The Scope Management plan describes how the scope will be defined, developed and verified and how the WBS will be created and defined. It also provides guidance on how the project scope will be managed and controlled by the project team.

10. Agreement Statement of Project Objectives

The Statement of Project Objectives (SOPO) from the Agreement will be inserted here. Note that Task 1.0 (or other designation) of the SOPO entails the work necessary to manage the project and to update the Project Management Plan submitted with the application. The PMP submitted as a work product under Task 1.0 (or other designation) serves as the basis for project cost, schedule, and scope, and for reporting quarterly progress in the Progress Report as defined in the "Federal Assistance Reporting Checklist and Instructions."

Recommended Sections

The following sections are recommended for all project types and especially those that are complex and/or require a large project team and extensive funding.

11. Reporting Requirements

Project reporting requirements may outline the types and formats of required reports, frequency of reporting, and the information needed from the project team. The reporting requirements should also describe both internal and external reporting activities.

12. Financial Management

The Financial Management section describes how funds will be tracked and disbursed. As organizations track costs differently, the Recipient must specify the way funds are managed. The Financial Management section describes how funds will be disbursed to subcontractors/sub-recipients, and how financial auditing is conducted. These activities demonstrate accountability within the project and confirm to stakeholders that adequate financial controls are in place.

13. Configuration Management

The Configuration Management plan provides an overview of the organization, activities, overall tasks, and objectives of Configuration Management for the project. It also defines the formal change control process for all items that fall under its management.

14. Project Organization and Structure

The Project Organization and Structure section describes how several complex activities require the coordination of multiple entities. Recipients may mirror their organizational structure with the task/work element structure in the Project Organization and Structure. Additional subsections may include:

- **Project Organization –** defines the roles and responsibilities of each participant in the project, and defines the reporting relationships among project participants. The project organization consists of a chart, as well as role definitions and assignments, for all key members. To develop a project organization, the project management is defined and project team and support roles are identified.
- **Technical Area Team Organization Charts –** enumerate functions of key technical teams. These sub-organizational charts may accompany the overall organizational chart to expand upon the various roles within the project.
- **Project Organization Matrices –** identify major project roles along with contact information are listed here. Include individuals who fill a key role, or multiple roles, in the project.

15. Work Breakdown Structure

The WBS should present the overall project effort as discrete, interconnected work elements (based on a logical workflow). This may be based on a decomposition of the program work activities, deliverables, and products that will be produced by the project, or a combination of all. If the SOPO organizes the work to be done into tasks and subtasks, for example, then the WBS elements can be modeled in the same way (i.e., each subtask would constitute an individual WBS work element). The goal is to progressively divide the work to the point of individual elements that can be assigned to an organizational unit or to an individual.

A WBS hierarchy illustrates the project's tasks as individual elements. The top level component is the Project Title. The elements beneath the top level component are then organized according to task and subtask.

16. Project Deliverables

A deliverable is any unique and verifiable product, result, or capability to perform a service. A deliverable signifies the completion of a process, phase, or project. Examples of deliverables are quarterly progress reports, scheduled status and coordination meetings with DOE, or periodic presentations; these types of deliverables are typically used for communications.

Project Officers should report in this section a list of deliverables with planned dates of completion and resources assigned. A number (identifier) should be assigned to the deliverable and each corresponding subtask(s).

17. Quality Assurance

The Recipient must establish a consistent, high-level approach to ensure the quality of its products and/or services. It is in the best interest of the program for project teams to establish and buy-in to a consistent approach. At a minimum, each team should document their approach and include:

- Pre-screening mechanism for evaluating potential subcontractors and suppliers to assess capabilities and adherence to quality standard
- Upfront planning and communications to clarify roles and expectations
- Evaluation (and education/training if necessary) during project execution; may include site visits and periodic communications to answer questions/clarify requirements; may employ use of forms/checklists.
- Verification of adherence to requirements; may include site visits, performance testing, and inspections Communication of results eliciting response and feedback to be included in lessons learned and opportunities for additional improvement

The Recipient must clearly state project objectives during early stages, establish integrated review points, and use iteration as a strategy to meet quality requirements. The project should have an advisor who is involved in developing a quality assurance plan.

If the project involves safety and health concerns, a plan may be included in the PMP to address these issues. This should involve an advisor who can accurately assess the issues, and develop a plan to resolve them so that project goals and objectives are not compromised.

Appendix A – Acronyms

If the PMP utilizes acronyms, include a list so that the reader can quickly identify any encountered in the PMP. As a rule, acronyms are used only if the term appears in the document more than twice. The list may appear at the beginning of the document (as illustrated below) or as an appendix.

DOE	Department of Energy
NETL	National Energy Technology Laboratory
PMP	Project Management Plan
SOPO	Statement of Project Objectives
WBS	Work Breakdown Structure

Appendix B – WBS Element Definitions

The following WBS Element Definitions chart shows task and subtask information which originates from the WBS Index. These definitions include the WBS Code, WBS Element Title, and the Element Task Description.

1. Project Title/Participant <Project Title>	**2. Date** <Date>	**3. Identification Number** <Number>
4. WBS Code	**5. WBS Element Title**	
6. Index Line No.	**7. Revised**	**8. Date**
9. Approved Changes		
10. System Design Description		**11. Budget / Report Number**

12. Element Task Description

a. Responsibility –

b. Start Date –

c. Completion Date –

d. Estimated Costs

Labor

Fringe Benefits

Material

Travel

Overhead

Subcontractors

Other

Total

e. Objective

f. Description of Work

g. Relationship to Other WBS Elements

Appendix C – Resource Loaded Schedule

The inclusion of a resource-loaded schedule is at the discretion of the Project Officer as well as the format chosen. It is strongly encouraged that Project Officers use such a tool for the management of complex projects and include it as part of the project management plan.

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References

Ernst & Young, Engagement and Project Management, 1996.

Federal Project Management Center, Project Management Guidelines, 2008.

Project Management Institute, A Guide to the Project Management Body of Knowledge, Third Edition, PMI: Pennsylvania, 2004.

Project Management Institute, A Guide to the Project Management Body of Knowledge, Fourth Edition, PMI: Pennsylvania, 2008.