



# U.S. Department of Energy Office of Engineering and Construction Management

## Project Plan for the Project Assessment and Reporting System (PARS II)

Version 2.0a (Public)  
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## Title Page

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## Change Control Page

The change control page is used to record information about the changes (i.e., additions, modifications, deletions) that have been made to this document.

| Revision Date | Section & Title | Page Numbers | Summary Of Changes  | Author                              |
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# 1 INTRODUCTION

## 1.1 Executive Overview

In September 2006, the Office of Engineering and Construction Management (OECM) commissioned Energy Enterprise Solutions, LLC (EES) to replace the Project Assessment and Reporting System (PARS). The new system, PARS II, will use a Commercial Off-The-Shelf (COTS) software suite of tools from Dekker, LTD. PARS II provides three major improvements.

- A web-enabled application for collecting project information.
- Detailed cost and schedule information from contractors on their project performance.
- Analytical and reporting tools for assessing and forecasting the status of projects.

Following completion of the requirements and Concept of Operations, this project plan proposes the path forward for building and implementing PARS II. Figure 1 presents a high-level view of the phases, major milestones, and major deliverables for the project. The strategy for the project approach is summarized below.

- Develop the Oversight and Assessment (OA) module and the Contractor Project Performance (CPP) module in parallel. (See the System Overview of the *Concept of Operations for PARS II, V1.0* for details.)
  - The OA module collects project information currently contained in PARS and ART and provides analytical and reporting tools.
  - The CPP module collects detailed cost and schedule information, risk logs, and management reserve from contractors and provides variance analysis.
- Iteratively develop the modules using a discovery/build/test approach. Iterative development and early testing at sites is especially important for the CPP module.
- Deploy out-of-the-box functionality to a few field sites to determine its viability and understand field readiness. *Note: Additional ongoing deployment and assistance to field sites during the configuration of the software is out of scope of this plan and may require an additional task.*
- Begin transition planning, particularly for the CPP module, early in the project life cycle so that the DOE project community has sufficient time to prepare for the change.
- Conduct pilot of the software, documentation, training, and processes with selected sites/projects before implementing the system for all DOE projects

- Incorporate three checkpoints where the knowledge and experience gained to-date are assessed and plans are reviewed and if necessary modified to reflect the findings.

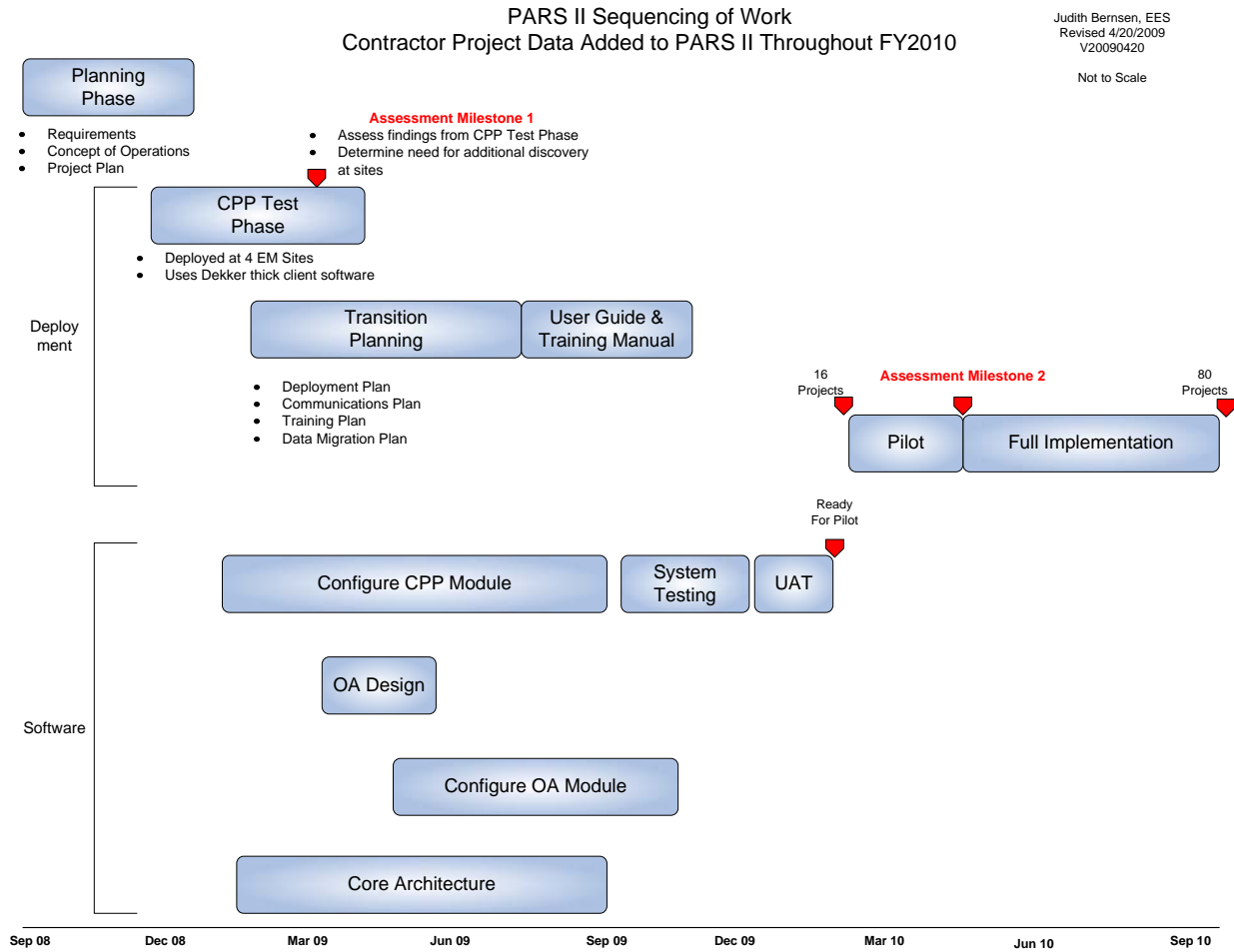


Figure 1 – PARS II Sequencing of Work

The dates for the major milestones are listed in Table 1 below.

| <b>Table 1<br/>PARS II Major Milestones</b>    |   |                     |
|--|---|---------------------|
| <b>Milestone</b>                               | <b>Description</b>  | <b>Planned Date</b> |
| 1.1.2.1 - Planning Phase Completed             | Concept of Operations and PARS II plan completed and software and consulting services acquired  | 1/16/2009           |
| 1.4.11 - CPP Test Phase Completed              | Deployment of Dekker thick client software to four field sites for purposes of determining software viability and understanding field readiness is completed.   | 4/30/2009           |
| 1.10 - CPP Transition Planning Completed       | Communications, transition, training and data migration planning completed  | 7/17/2009           |
| 1.7.2.1 - CPP Software Configuration Completed | Dekker software configured to accept detailed project data from contractors and ready for acceptance testing  | 10/28/2009          |
| 1.7.2.2 - OA Software Configuration Completed  | Dekker software configured to accept project data from Federal staff and ready for acceptance testing   | 12/31/2009          |
| 1.11.7 - PARS II Acceptance Testing Completed  | PARS II software validated against DOE requirements and accepted for operational use  | 2/2/2010            |
| 1.13.7 - PARS II Pilot Begins                  | PARS II ready to begin deploying to contractors, Federal Project Directors, OECM and programs to report, review and analyze project data  | 2/3/2010            |
| 1.13.11 - PARS II Full Implementation Begins   | OECM and DOE programs are using PARS II for project reporting and analysis for all DOE projects; initial set of contractors are reporting project performance data monthly to PARS II; PARS I is no longer in use | 5/3/2010            |
| 1.13.20 - PARS II Deployment Completed         | All DOE contractors are reporting project performance data monthly to PARS II   | 9/30/2010           |

## 1.2 Purpose of Document

The purpose of this document is to present the plan for designing and configuring the Dekker software suite for use at DOE and for planning for and implementing the deployment and transition to the new system.

This plan was updated in April 2009 to reflect schedule slippage and cost increases as follows.

| <b>Milestone</b>    | <b>Original Baseline Date</b> | <b>Revised Date</b> | <b>Change</b> |
|---------------------|-------------------------------|---------------------|---------------|
| CPP Module Deployed | 9/1/2009                      | 2/4/2010            | 5 months      |
| OA Module Deployed  | 11/2/2009                     | 2/4/2010            | 3 months      |

The scope, cost, and schedule cited in this document are based on the following Microsoft Project version.

PARS II WBS 20090415c V2.0



## 1.3 Background

In 2001, the DOE Office of Engineering and Construction Management (OECM) MA-50, contracted with the Project Performance Corporation (PPC) to develop the Project Assessment and Reporting System (PARS). It is a web-enabled database application based on Earned Value Management System (EVMS) standards. Currently it is hosted by PPC at the <https://pars.energy.gov> site.

Since its creation, PARS has adapted to the changes in DOE'S requirements associated with project management oversight by using its original design and functionality. However, key stakeholders and users of PARS have reported deficiencies with the application.<sup>1</sup> As a result, in September 2006, the Office of Engineering and Construction Management (OECM) commissioned Energy Enterprise Solutions, LLC (EES) to enhance PARS or acquire and implement a new Commercial Off-The-Shelf (COTS) application to replace the current PARS.

Activities which have occurred since project inception in 2006 are listed below.

|                  |  |
|------------------|--|
| 2006 - September | PARS II requirements developed<br>PARS II database, forms and reports prototyped                               |
| 2008 - May       | Vendor selection process completed with the selection of Dekker LTD, and OCEM notified EES on such a decision. |
| 2008 – June      | OECM subtask order to EES to acquire and implement a COTS application  |
| 2008 – December  | Dekker subcontract to EES established<br>Concept of Operations for PARS II, V1.0 completed                     |

## 1.4 Project Objectives

The primary goal of this project is to replace PARS with the Dekker PMIS software product and to implement the application in such a way that it provides management, analysts and users with a “single source of truth” of data, to be presented in useful and meaningful formats. The primary objectives for the system are listed below.

- To implement PARS II CPP module data collection and reporting capabilities from DOE contractors at a lower level of detail, thereby providing transparency into contract project performance.

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<sup>1</sup> See the *Concept of Operations for PARS II, V1.0*, for further discussion of the background and PARS deficiencies.

- To implement the PARS II OA module at locations across the complex, to collect and validate summary-level information, to integrate this summary-level information with contractor project performance data, and to provide stakeholders with a powerful and robust reporting system.
- To implement other required functionality, as described in the section titled “Scope of System” in the *Concept of Operations for PARS II, VI*.
- To address the deficiencies and limitations described in the Deficiencies Section in the *Concept of Operations for PARS II, VI*.

Figure 2 shows the major scope features and user roles for PARS II.

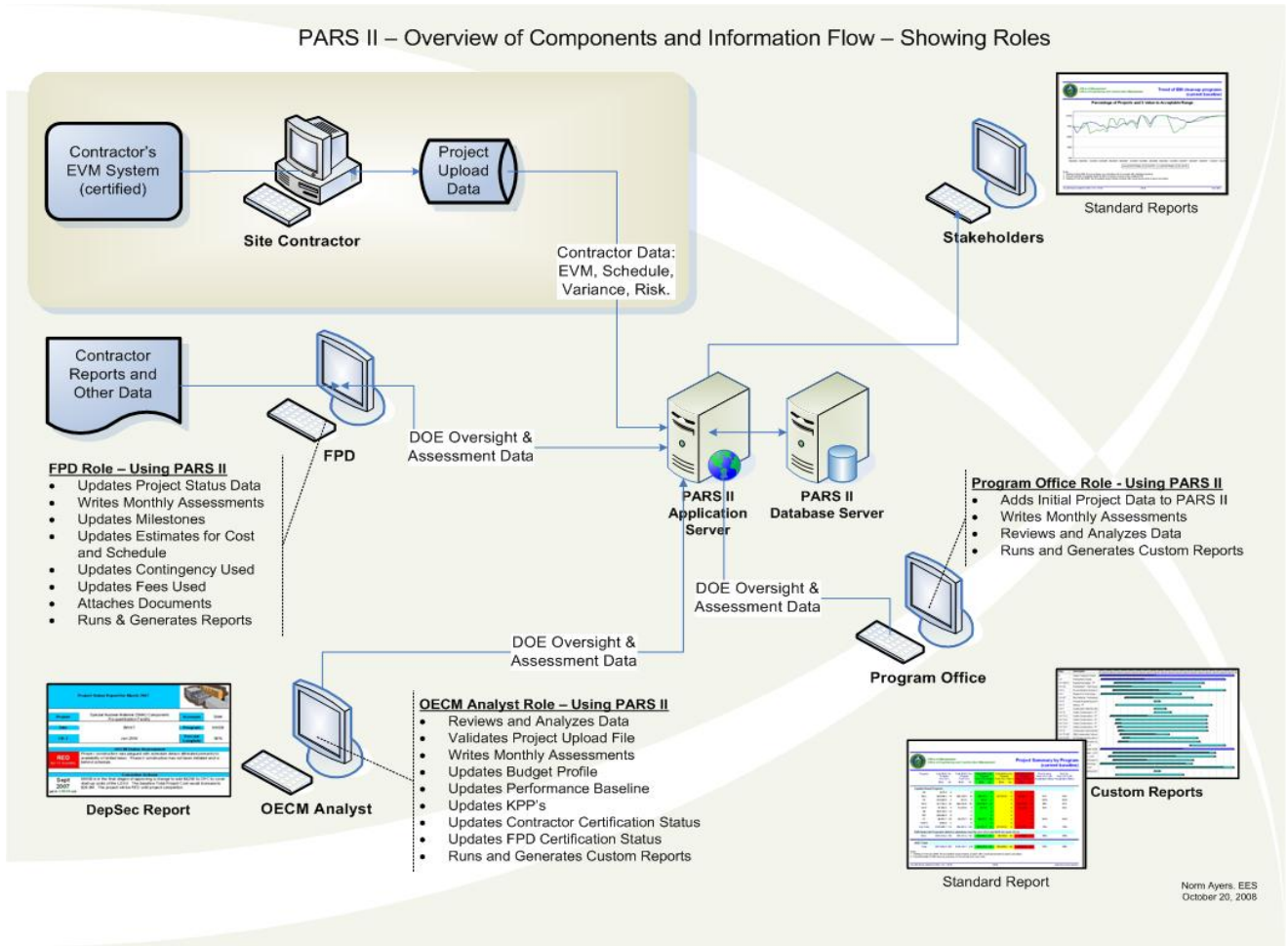


Figure 2 - Overview of PARS II Components and Roles

## 2 SCOPE

The scope of the PARS II project is described in Table 3. Changes to scope since the plan was published in January are discussed in the table.

| <b>Table 3<br/>PARS II Scope</b> |                                   |   |
|----------------------------------|-----------------------------------|---|
| <b>WBS #</b>                     | <b>WBS Element</b>                | <b>Description</b>  |
| 1                                | PARS II System                    | The system, documentation, and services (training and help desk, etc.) requested by OECM and the project management and services needed to support the construction of the solution.  |
| 1.0                              | PARS II Software/Vendor Selection | CLIN 1 work completed prior to FY2008, including PARS II requirements and evaluation and selection of a COTS product and vendor.  |
| 1.1                              | Project Management                | Activities and documents related to managing the PARS II project until the system is fully operational. Including project planning, execution, monitoring, and reporting.   |
| 1.2                              | PARS II Concept of Operations     | The description of how the PARS II system is expected to operate in its intended environment. This document is non-technical in nature and is presented from the viewpoints of the various stakeholders. Includes work on the data dictionary. The duration and effort for the data dictionary were increased because the original assumption that the data elements were well-defined and near completion was too optimistic. Data elements will continue to be refined throughout the Oversight and Assessment Functional Design task (see 1.5 below) and therefore will require a continued low level of effort.   |
| 1.3                              | PARS II Requirements              | The user requirements that the PARS II products must meet in order to be accepted. The majority of the requirements have been identified, documented and approved at this point. However, there will be ongoing requirements management for the remainder of the project life. The duration and effort for the requirements management were increased because the original assumption that the requirements were well-defined and near completion was too optimistic. The requirements will continue to be refined throughout the Oversight and Assessment Functional Design task (see 1.5 below) and therefore will require a continued low level of effort. |
| 1.4                              | CPP Test Phase                    | The deployment of Dekker thick client software to four field sites for purposes of determining its viability and understanding field readiness. Projects for two additional EM sites, Savannah River and Oak Ridge, were added in February and March at the request of EM and the duration and effort of the task were increased to address the expanded scope of this task.  |

| <b>Table 3<br/>PARS II Scope</b> |  |  |
|----------------------------------|--|--|
| <b>WBS #</b>                     | <b>WBS Element</b>                       | <b>Description</b>   |
| 1.5                              | PARS II Software Configuration           | The configuration of the Dekker software suite to meet DOE's requirements as discussed in the PARS II Requirements Document and the PARS II Concept of Operations. Includes effort to make software corrections resulting from EES independent testing and user acceptance testing. A new subtask, Oversight and Assessment Functional Design has been added. Effort has been added for EES staff to work jointly with Dekker staff on this task (previously the design work had been subsumed under 1.5.7, Dekker Software Integration and Oversight, with limited EES involvement). Effort and duration have been added also for three more OECM working group meetings. |
| 1.6                              | PARS II Collaboration Center             | A portal or web page that will provide news and links for users to register for an account and log in to PARS II.  |
| 1.7                              | EES Software Quality Assurance           | Independent systems testing and quality assurance by EES of Dekker configured software. Focuses on verifying that the software meets the functional and technical requirements and the concept of operations. Includes developing a test plan, conducting the testing, preparing a test evaluation summary and test results report, and tracking defects.  |
| 1.8                              | PARS II Technical and User Documentation | Documentation to operate, maintain and use the PARS II system.   |
| 1.9                              | C&A Certification                        | Documents and activities related to obtaining Authority to Operate (ATO). Also includes participating in testing and reviews of PARS II with the CFO Cyber Security Team.  |
| 1.10                             | PARS II Transition Planning              | Planning documents that focus on the requirements for deploying the PARS II system. Includes deployment/transition plan, communications plan, training plan, and data migration plan.  |
| 1.11                             | Transition Preparation                   | Development of the documents and services needed to support the installation and deployment of the PARS II system. The transition planning documents have defined the requirements for these deliverables which include training materials, set up of the AHE training and production environments, establishment of help desk support, and data migration procedures. The effort and duration for the data migration scripts were reduced because it has been decided to use manual data entry rather than automated scripts to transfer data from PARS I and ART to PARS II. Help desk support provided under 1.11.6.2 has been combined with 1.13.6.                    |

| <b>Table 3<br/>PARS II Scope</b> |                                 |   |
|----------------------------------|---------------------------------|---|
| <b>WBS #</b>                     | <b>WBS Element</b>              | <b>Description</b>  |
| 1.12                             | PARS II Project Support         | Activities related to supporting the project team as it develops and deploys the system, documentation, training, and services. Includes training of the project team on the Dekker software, setting up the development and test AHE environments, configuration management, and quality assurance. A low level of effort was added for two new tasks, Risk Management and Maintain Servers, throughout 2009 (work will be done under 1.13 in 2010).   |
| 1.13                             | PARS II Deployment              | This task has been combined with 1.14 and includes all training, help desk, maintenance, data migration, and support for the PARS II pilot and full implementation. It includes milestones for the start/end of the pilot and of full implementation as well as milestones for each group of projects beginning official monthly reporting to PARS II.  |
| 1.14                             | PARS II 2010 O&M and Deployment | This subtask has been combined with 1.13.   |
| 1.15                             | CPP Transition/Rollout Support  | The primary purpose of this task is to support the rollout of PARS II to the field sites/projects. It includes checking files provided by projects for data accuracy and providing information to field sites. It does not include analyzing the contractor's project control systems or assisting them to determine the source of any problems in their systems. Additionally, the task includes ad hoc support focused on disseminating information about PARS II, including briefings, software demonstrations, Integrated Project Team (IPT) support, portal content and preparing/delivering communications. Based upon the experience gained during the CPP Field test, more effort has been added to this task to ensure that there is sufficient support during the transition. |
| 1.16                             | Other Direct Cost (ODC)         | The cost for the Dekker PMIS purchase, AHE Hosting Fees, Dekker PMIS maintenance fee, and Flash software for Web training were consolidated under this subtask. Additionally, the cost for Documentum licenses and setup were removed from the plan as it has been decided that Documentum is not needed for storing PARS II documents.   |

A detailed breakdown of the project scope is contained in Appendix A.

Table 4 lists the PARS II deliverables and the planned completion dates for draft versions.

| <b>Table 4<br/>PARS II Deliverables</b> |                       |                       |
|---|-----------------------|-----------------------|
| <b>Deliverable</b>                      | <b>Draft Due Date</b> | <b>Final Due Date</b> |
| PARS II Project Plan V1.0               | 12/12/2008            | 1/16/2009             |

| <b>Table 4<br/>PARS II Deliverables</b>  |                       |                       |
|--|-----------------------|-----------------------|
| <b>Deliverable</b>   | <b>Draft Due Date</b> | <b>Final Due Date</b> |
| PARS II Project V1.1   | 4/23/2009             | 4/30/2009             |
| PARS II Project Plan V1.2  | 3/21/2010             | 3/31/2010             |
| Project Status Reports   | Weekly                | N/A                   |
| Meeting Minutes  | As Required           | N/A                   |
| PARS II Concept of Operations V1.0   | 10/31/2008            | 11/30/2008            |
| Site Deployments at up to four pilot sites   | 4/30/2009             | 4/30/2009             |
| Security Documents (included unsigned MOU) V1.0 (Security Plan, COOP, Configuration Management Plan, ST&E Scripts) Ready for Delivery to Cyber Security Team | 6/15/2009             | N/A                   |
| Demonstrations of PARS II Screens and Reports  | As Required           | N/A                   |
| PARS II Deployment/Transition Plan V1.0  | 5/14/2009             | 5/28/2009             |
| PARS II Communications Plan V1.0   | 4/30/2009             | 5/7/2009              |
| PARS II Training Plan V1.0   | 6/24/2009             | 7/7/2009              |
| PARS II System Test Plan   | 8/28/2009             | 9/11/2009             |
| PARS II Data Migration Plan  | 7/10/2009             | 7/24/2009             |
| PARS II User Guide V1.0  | 9/4/2009              | 9/18/2009             |
| PARS II Training Materials V1.0  | 8/21/2009             | 8/28/2009             |
| PARS II Training Materials V1.1  | 10/21/2009            | 11/4/2009             |
| PARS II Web Training   | 1/15/2010             | 1/29/2010             |
| PARS II COTS Software Configured V1.0 for Production   | 12/31/2009            | 12/31/2009            |
| PARS II Help Desk Operational  | 1/21/2010             | 1/21/2010             |
| PARS II Data Migration for Pilot   | 2/3//2010             | 2/3/2010              |
| PARS II Training V1.0  | *                     | *                     |

| <b>Table 4<br/>PARS II Deliverables</b>            |                       |                       |
|--|-----------------------|-----------------------|
| <b>Deliverable</b>                                 | <b>Draft Due Date</b> | <b>Final Due Date</b> |
| PARS II Training V1.1                              | *                     | *                     |
| AHE Test Environment                               | 11/3/2008             | 11/3/2008             |
| AHE Development Environment                        | 2/6/2009              | 2/6/2009              |
| AHE Training Environment                           | 5/29/2009             | 5/29/2009             |
| AHE Production Environment                         | 11/12/2009            | 11/12/2009            |
| Subcontract for Procurement of COTS Software       | 10/9/2008             | 10/9/2008             |
| Subcontract for Procurement of Consulting Services | 9/23/2008             | 9/23/2008             |

\*Due dates for completion of training for the initial deployment of PARS II will be established in the PARS II Training Plan.

Changes to deliverables formally accepted by OECCM will go through the Change Control Process. All Requested Changes are reviewed and evaluated by the team, submitted by the Project Manager, and approved by the PARS II system owner before they are implemented on the system. Changes to the PARS II scope, as represented in the PARS II WBS in appendix A, will be formally negotiated between EES and OECCM.

The Change Control and Configuration Management processes will be discussed in more detail in the PARS II Configuration Management Plan.



### 3 SCHEDULE

The implementation of the PARS II system is a significant undertaking, and requires extensive effort in design/configuration and deployment. The team recommends the PARS II work be divided into three major phases – Planning, Implementation (including design, configuration and testing), and Deployment. Figure 3 presents a high-level view of the major phases, milestones, and deliverables for the project to show the proposed sequencing of work.

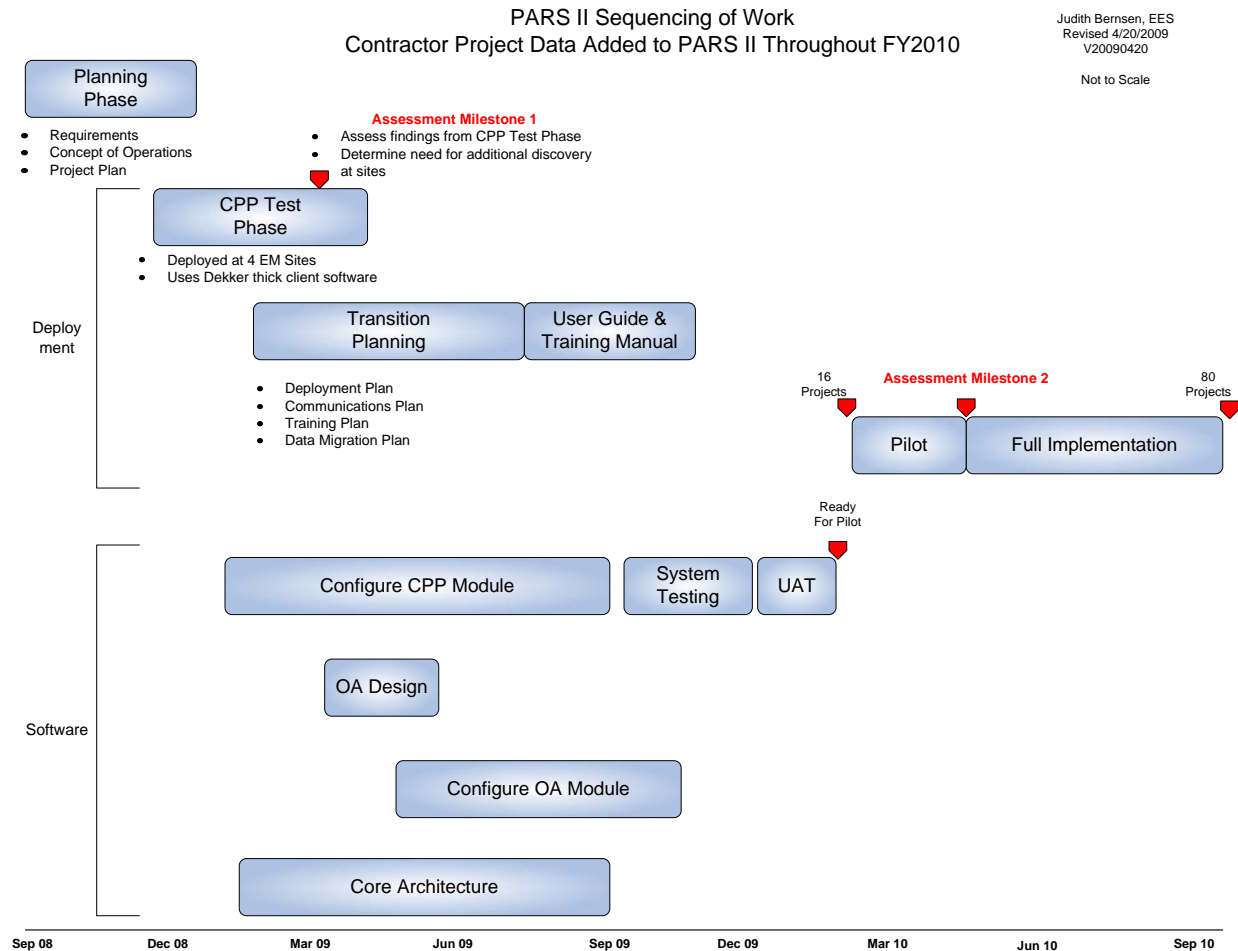


Figure 3 - PARS II Sequencing of Work

Phase 1 (September 2008 – December 2008) consists of project startup, acquisition, concept of operations and project planning for the PARS II application.

Phase 2 (December 2008 – January 2010) consists of configuring the Dekker software to meet DOE’s requirements and preparing for its full implementation. The phase configuring the Dekker software suite, developing documentation and training, certification and accreditation of the system, system testing, and acceptance testing.

Phase 3 (May 2009 – September 2010) consists of deploying PARS II initially for a subset of projects and then deploying it for all DOE projects. Projects will be prioritized and grouped and begin reporting monthly to PARS II once the contractor is able to provide the required data. It is expected that all contractors will be reporting monthly to PARS II by the end of FY2010.

The PARS Maintenance Phase starting in FY2011 is not addressed in this Plan.

EES plans to review the PARS II Project Plan three times during the project lifecycle as follows.

- Assessment Milestone 1 – occurs at the end of the CPP Test Phase. After assessing the findings from this phase, we determine, in concert with OECM, whether the CPP Test Phase should be extended to additional field sites and whether the information gained from the Phase changes any assumptions upon which the planned scope, cost, and schedule were developed for configuration of the CPP module. If additional intensive consulting with sites/contractors is needed to help them produce the data, EES and OECM will determine the best way to provide this assistance separate from this Plan.
- Assessment Milestone 2 – occurs at the end of the PARS II Pilot. After assessing the results of the Pilot, we determine whether any assumptions upon which the planned scope, cost, and schedule that were developed have changed.
- Assessment Milestone 3 – occurs at the end of the FY2010. As PARS II nears the end of full implementation, we can more accurately determine the level of effort and schedule required to operate and maintain PARS II in FY2011.

Table 5 lists the PARS II major milestones and their planned completion dates.

| <b>Table 5<br/>PARS II Major Milestones</b>    |   |                     |
|--|---|---------------------|
| <b>Milestone</b>                               | <b>Description</b>  | <b>Planned Date</b> |
| 1.1.2.1 - Planning Phase Completed             | Concept of Operations and PARS II plan completed and software and consulting services acquired  | 1/16/2009           |
| 1.4.11 - CPP Test Phase Completed              | Deployment of Dekker thick client software to four field sites for purposes of determining software viability and understanding field readiness is completed.   | 4/30/2009           |
| 1.10 - CPP Transition Planning Completed       | Communications, transition, training and data migration planning completed  | 7/17/2009           |
| 1.7.2.1 - CPP Software Configuration Completed | Dekker software configured to accept detailed project data from contractors and ready for acceptance testing  | 10/28/2009          |
| 1.7.2.2 - OA Software Configuration Completed  | Dekker software configured to accept project data from Federal staff and ready for acceptance testing   | 12/31/2009          |
| 1.11.7 - PARS II Acceptance Testing Completed  | PARS II software validated against DOE requirements and accepted for operational use  | 2/2/2010            |
| 1.13.7 - PARS II Pilot Begins                  | PARS II ready to begin deploying to contractors, Federal Project Directors, OECM and programs to report, review and analyze project data  | 2/3/2010            |
| 1.13.11 - PARS II Full Implementation Begins   | OECM and DOE programs are using PARS II for project reporting and analysis for all DOE projects; initial set of contractors are reporting project performance data monthly to PARS II; PARS I is no longer in use | 5/3/2010            |
| 1.13.20 - PARS II Deployment Completed         | All DOE contractors are reporting project performance data monthly to PARS II   | 9/30/2010           |

The project schedule for the Level 3 WBS is contained in Appendix B.

## 4 COST

The cost for the design, configuration and implementation of PARS II is not presented in this version.

## 5 PROJECT ORGANIZATION

The primary organizations involved in the implementation and deployment of PARS II are listed below.

OECM – the system owner with overall management and financial responsibility for the design, configuration, and deployment of PARS II

PARS II Integrated Project Team (IPT) – a multi functional group that supports the PARS II Project Manager and is involved in resolving issues and making recommendations

DOE Programs – the DOE organizations that will participate in the CPP Test Phase, design and configuration activities, and the transition and deployment of PARS II

DOE Federal Project Directors (FPD) – the individuals who are the primary point of contact for working with the DOE contractors

DOE Contractors – the organizations who will work with EES and Dekker to provide project performance data

EES – the system integrator with overall management and financial responsibility for the implementation of the solution requested by OECM

Dekker – the software vendor with responsibility for the design and configuration of its software suite to meet OECM’s requirements and concept of operations

The roles and responsibilities of the primary project team members are described in Table 8.

| <b>Table 8<br/>PARS II Project Roles and Responsibilities</b> |                   |            |  |
|---|-------------------|------------|--|
| <b>Role</b>   | <b>Name</b>       | <b>Org</b> | <b>Responsibility</b>  |
| System Owner/<br>Technical<br>Monitor                         | John<br>Makepeace | MA-50      | <ul style="list-style-type: none"> <li>• Overall system, data and financial responsibility and accountability</li> <li>• Determines whether changes fall within scope of the PARS Statement of Work</li> <li>• Provides direction, support and guidance to the project team</li> <li>• Approves changes to PARS</li> </ul> |
| EES Project<br>Manager  | Kai Mong          | EES        | <ul style="list-style-type: none"> <li>• Project Management</li> <li>• AHE Setup/Coordination</li> <li>• PARS II Portal</li> <li>• Technical Design</li> <li>• Field Technical Support</li> </ul>  |

**Table 8  
PARS II Project Roles and Responsibilities**

| <b>Role</b>                                    | <b>Name</b>      | <b>Org</b> | <b>Responsibility</b>  |
|--|------------------|------------|--|
| EES Program Manager                            | Larry Flanigan   | EES        | <ul style="list-style-type: none"> <li>• Support and guidance to the Project Manager and team</li> <li>• Project staffing and funding</li> <li>• Resolves and facilitates communications between system owner and support group</li> </ul>   |
| EES Associate VP SDE                           | Dennis McDermitt | EES        | <ul style="list-style-type: none"> <li>• Support and guidance to the Program Manager, Project Manager and team</li> <li>• Project staffing and funding</li> <li>• Issue resolution</li> </ul>  |
| System Analyst                                 | Norm Ayers       | EES        | <ul style="list-style-type: none"> <li>• Concept of Operations</li> <li>• Field CPP Test Lead</li> <li>• Software Design and Configuration Oversight</li> <li>• Training</li> <li>• Transition Support</li> </ul>  |
| System Analyst                                 | Steve Baker      | EES        | <ul style="list-style-type: none"> <li>• Certification and Accreditation</li> <li>• Help Desk Lead</li> <li>• Testing</li> </ul>   |
| System Analyst                                 | (TBD)            | EES        | <ul style="list-style-type: none"> <li>• Requirements Management</li> <li>• Testing Lead</li> <li>• Data Migration</li> <li>• Configuration Management</li> <li>• Configuration Parameters Document</li> </ul>   |
| Quality Assurance                              | Ruth Ann Smith   | EES        | <ul style="list-style-type: none"> <li>• Guidance and assistance on process</li> <li>• EES Quality Reviews</li> </ul>  |
| Sr. Principal Information Engineer             | Judith Bernsen   | PMC        | <ul style="list-style-type: none"> <li>• Project Planning</li> <li>• Transition Planning and Support</li> <li>• Access Control Manual</li> <li>• User Guide</li> </ul>   |
| Dekker Implementation Team Engagement Director | Simon Dekker     | Dekker     | <ul style="list-style-type: none"> <li>• Responsible for overall system training and consulting for each engagement</li> <li>• Provide methodologies guidance</li> <li>• Provide Dekker TRAKKER® implementation support resource</li> <li>• Provide application and methodologies training resource</li> <li>• Provide proceduralized system with training collateral</li> </ul> |
| Dekker Lead Consultant                         | Greg Ward        | Dekker     | <ul style="list-style-type: none"> <li>• Responsible for the day-to-day contact with the Customer's Core Implementation Team.</li> <li>• Serve as Dekker Management Consultants, Accounts, and Process Engineers</li> </ul>  |

**Table 8  
PARS II Project Roles and Responsibilities**

| <b>Role</b>                   | <b>Name</b>              | <b>Org</b> | <b>Responsibility</b>  |
|-------------------------------|--------------------------|------------|--|
| Dekker Software Engineer      | Andrew Polis, and Others | Dekker     | <ul style="list-style-type: none"> <li>• Software design</li> <li>• Liaison between Dekker's Development Staff, Lead Consultant, and the Customer's Core Implementation Team.</li> <li>• Serve as Dekker Programmers, Database Administrators, System Engineers</li> </ul> |
| Dekker Application Consultant | Mark Landry              | Dekker     | <ul style="list-style-type: none"> <li>• Training Core Implementation Team</li> <li>• Supports user training</li> <li>• Liaison between the Lead Consultant and Dekker's Customer Support Staff.</li> <li>• Dekker user and technical documentation</li> </ul>             |

## 6 RISK

Risk Management is implemented throughout the lifetime of the PARS II project. The project follows EES' risk management policy and procedures.

An initial risk register is presented in Table 9. Risks are assigned to members of the PARS II team. The risk owner is responsible for monitoring the risk, reporting its status, and escalating it to management when necessary. Identified risks and issues are reviewed and documented on a monthly basis.

| <b>Table 9<br/>PARS II Risk Register</b> |   |   |                    |               |
|--|---|---|--------------------|---------------|
|  | <b>Risk</b>   | <b>Mitigation</b>   | <b>Probability</b> | <b>Impact</b> |
| 1  | Dekker LTD software cannot fully fulfill OEMC and OCIO requirements for PARS II<br>(WBS 1.5)  | <ul style="list-style-type: none"> <li>• Create a Concept of Operations and set up a test environment as soon as possible so that Dekker can assess its ability to meet DOE's detailed requirements</li> <li>• Review DOE's security requirements with Dekker and write the PARS II Security Plan</li> <li>• Develop functional design for PARS II</li> </ul> | Low                | High          |
| 2  | AHE does not have the capacity to host PARS II. Currently AHE cannot provide other instances of PARS II or a Citrix environment to house the Dekker thick clients in the timeframe required by PARS II<br>(WBS 1.0) | <ul style="list-style-type: none"> <li>• Give AHE the PARS II requirements for servers and disk space in the Storage Area Network (SAN) with sufficient lead time for them to meet them</li> </ul>  | Low                | Medium        |



**Table 9  
PARS II Risk Register**

|   | <b>Risk</b>   | <b>Mitigation</b>  | <b>Probability</b> | <b>Impact</b> |
|---|---|--|--------------------|---------------|
| 3 | The DOE wide-area network (DOENet) infrastructure at the field sites does not provide satisfactory performance<br>(WBS 1.0)         | <ul style="list-style-type: none"> <li>• Have field site users test in the early stages of the project to discover any serious performance issues</li> <li>• Develop workarounds such as putting large upload files on a CD and mailing to DOE HQ</li> <li>• Request that the OCIO identify bottlenecks and develop viable alternatives or solution</li> </ul> | Medium             | High          |
| 4 | Some field site contractors may not be able to produce the project data as required by OECM (especially schedule data)<br>(WBS 1.0) | <ul style="list-style-type: none"> <li>• Only require a minimum set of data (e.g., do not require schedule data)</li> <li>• Provide software and/or consulting services to assist the contractor</li> <li>• Make the data a requirement for future awards</li> </ul>   | Medium             | High          |
| 5 | DAA approval for PARS II takes more than two months to receive and delays the deployment of PARS II<br>(WBS 1.0)                    | <ul style="list-style-type: none"> <li>• Complete C&amp;A documents as soon as possible and forward to the CFO Cyber Security team for review as each is completed</li> <li>• OECM and the DAAR escalate the need for certification if approval is not received within two months of DAAR approval</li> </ul>  | Low                | High          |
| 6 | PARS II cannot get permission from the sites to use DOENet<br>(WBS 1.0)   | <ul style="list-style-type: none"> <li>• Develop workarounds such as putting large upload files on a CD and mailing to DOE HQ</li> <li>• Develop alternatives to using DOENet</li> </ul>   | Low                | Medium        |
| 7 | The aggressive schedule for configuring the software cannot be met  | <ul style="list-style-type: none"> <li>• Adhere to a standard bi-weekly meeting schedule to review and discuss software as it is being developed</li> <li>• Obtain quick decisions from OECM</li> </ul>  | Medium             | Medium        |

**Table 9  
PARS II Risk Register**

|    | <b>Risk</b>  | <b>Mitigation</b>   | <b>Probability</b> | <b>Impact</b> |
|----|--|---|--------------------|---------------|
| 8  | PARS II software cannot be supported and maintained once Dekker completes software configuration   | <ul style="list-style-type: none"> <li>• Provide technical training to the EES support staff on the Dekker software</li> <li>• Maintain a contract with Dekker to modify the software during system testing and Acceptance testing</li> <li>• Involve the EES support staff in the configuration</li> </ul> | Low                | Low           |
| 9  | Customizations to PMIS by Dekker could result in a software version unique to DOE, thereby limiting DOE's ability to upgrade to new PMIS releases and committing DOE to Dekker resources for required changes. | <ul style="list-style-type: none"> <li>• EES communicates to Dekker that unique DOE customizations cannot be made to PMIS</li> </ul>  | Low                | Medium        |
| 10 | PARS II needs updated, consolidated, and baselined requirements. Lack of this information will inhibit development and design and testing  | <ul style="list-style-type: none"> <li>• Consolidate requirements from previous requirements documents and conference records.</li> <li>• Update consolidated list with inputs from the OECM Working Group and IPT meetings</li> </ul>  | High               | High          |
| 11 | PARS II and Dekker software may not meet the security standards for DOE systems accessed via the internet  | <ul style="list-style-type: none"> <li>• Complete CPP module and perform C&amp;A testing</li> <li>• Work with Dekker to get appropriate changes for security</li> </ul>   | Medium             | High          |

## 7 QUALITY

The project follows EES' policy and procedure for quality assurance. The PARS II Project Manager ensures that products are developed in accordance with EES policies, procedures, and templates. The EES Quality Assurance (QA) Manager conducts independent audits to verify that EES quality procedures are followed. The audit is also used to assess compliance with the Capability Maturity Model Integration (CMMI) Level III Methodologies as required by DOE.

Peer reviews are planned and documented on the following documents.

- Concept of Operations
- Security Plan
- Configuration Management Plan
- COOP
- Transition/Deployment Plan
- Communications Plan
- Training Plan
- Data Migration Plan
- System Test Plan
- User Guide
- Training Materials
- Project Plan

EES also conducts independent testing of the Dekker configured software to ensure that it meets OECCM requirements and concept of operations.

## 8 COMMUNICATIONS

The deployment of PARS II will require frequent communications to a large number of stakeholders. These communications will be addressed in the PARS II Communications Plan.

Regular communications regarding PARS II project status are identified in Table 10.

| <b>Table 10<br/>PARS II Communications</b> |                      |                  |   |   |
|--|----------------------|------------------|---|---|
| <b>By</b>                                  | <b>To</b>            | <b>Frequency</b> | <b>Medium</b>   | <b>Content</b>  |
| PARS II Team Members                       | PARS II System Owner | Weekly           | <ul style="list-style-type: none"> <li>WebEx Web Conf</li> </ul>          | <ul style="list-style-type: none"> <li>Agenda on PARS II Project activities</li> <li>Review of action items</li> <li>System Owner comments</li> </ul>   |
| EES Team Member                            | EES Project Manager  | Weekly           | <ul style="list-style-type: none"> <li>Email</li> </ul>                   | <ul style="list-style-type: none"> <li>Weekly accomplishments</li> <li>Work in Progress</li> <li>Open Issues</li> </ul>   |
| Dekker                                     | EES Project Manager  | Weekly           | <ul style="list-style-type: none"> <li>Status Report</li> </ul>           | <ul style="list-style-type: none"> <li>Weekly accomplishments</li> <li>Actual hours for week</li> <li>Work to Start or in Progress</li> <li>Questions and Concerns</li> </ul>                                   |
| EES Project Manager                        | PARS II System Owner | Weekly           | <ul style="list-style-type: none"> <li>Status Report</li> </ul>           | <ul style="list-style-type: none"> <li>Weekly accomplishments</li> <li>Work in progress</li> <li>Actions to be completed by next week</li> <li>Deliverables</li> <li>Open Issues</li> </ul>                     |
| EES Project Manager                        | PARS II System Owner | Monthly          | <ul style="list-style-type: none"> <li>Monthly Activity Report</li> </ul> | <ul style="list-style-type: none"> <li>Completed Tasks for the month</li> <li>Work in Progress</li> <li>Future Activities</li> <li>Stuffing</li> <li>Open Issues</li> <li>Deliverables</li> <li>Risk</li> </ul> |

## 9 PROCUREMENT

A core component of the solution to the PARS II project is the Dekker PMIS suite of Project Management Information System. Accordingly, EES has entered into a contract with Dekker to procure consulting services in addition to software licenses for the Dekker PMIS suite.

A team of EES and Dekker staff is working together to implement this PMIS suite within the DOE Application Hosting Environment (AHE), the IT infrastructure environment for DOE Headquarter maintained by the CIO Office. In the early stage of this effort, EES manages the technical work the Dekker development team provides, and makes sure they can be implemented on the DOE network in accordance with applicable DOE Guidance. In the later stage, the Dekker team ramps down with knowledge transferred to EES Support.

Dekker is providing with EES with costs by at the WBS Level 2. Costs are broken out by labor category and other direct costs. Dekker submits weekly status reports on accomplishments and actual labor hours. Monthly they submit an invoice for the costs.

## 10 PROJECT TRACKING AND CONTROL

- EES tracks completion of tasks and deliverables to the fourth level of the WBS for all EES work and to the third level of the Dekker WBS for all Dekker work. Actual hours are collected from all team members on a weekly basis. Actual hours, percent complete, and estimated time to complete are tracked using Microsoft Project 2003 software.
- EES meets weekly with the OECM client to discuss project status and delivers a weekly status report.
- EES prepares a monthly status report that addresses actual scope, cost and schedule against the planned baseline. If necessary, Corrective Action Plans (CAP) will be prepared to identify actions necessary to bring the project back into line with the baseline.
- Schedule and cost are monitored by the EES Program Manager.
- The PARS II project baseline will be reviewed and assessed at three distinct milestones. If the information and experience to-date reveals that the scope, cost and/or schedule of future phases of the project should be revised, EES will propose a revised plan to OECM.
- PARS II action items are recorded, tracked and reviewed on a weekly basis. Action items are maintained in a Microsoft Excel spreadsheet. Information maintained on the action items includes date opened, date due, date closed, priority, responsible party, and status.

# 11 ASSUMPTIONS AND CONSTRAINTS

## 11.1 Assumptions

Assumptions that were used in developing V1.0 of the PARS II project plan are listed in Table 11. At each reassessment of the project plan, the assumptions will be reviewed to determine if they still are valid.

| <b>Table 11<br/>PARS II Assumptions</b> |  |
|---|--|
|   | <b>Assumption</b>  |
| 1                                       | The Dekker PMIS software suite can be enhanced and configured to provide all the OECM requirements for PARS II.  |
| 2                                       | The Dekker PMIS software security module can meet DOE's security requirements.   |
| 3                                       | AHE has the capacity to provide all the required server elements to host PARS II at DOE HQ, and with no performance issues.  |
| 4                                       | PARS II will be granted Authority to Operate (ATO) by the Organizational Designated Approving Authority (DAA) within two months following approval by the DAA Representative (DAAR). |
| 5.                                      | (Deleted)  |
| 6                                       | OECM has sufficient resources to define requirements, provide guidance, and validate/approve project deliverables in a timely manner.  |
| 7                                       | OECM will be able to provide adequate funding to support the course of the PARS II project.  |
| 8                                       | Field Site Contractors will be able to provide Contractor Performance Data file in a format specified by the PARS II application.  |
| 9                                       | The primary data source for PARS II is ART; a secondary source is PARS, which has some administrative data that needs to be converted.   |
| 10                                      | No CBT training is planned for FY2009; training will consist of classroom, Webinar, and on-the-job training.   |
| 11                                      | The project cost estimate is based on the assumption that PARS II will not use document management software for V1.0.  |
| 12                                      | Support for an interim out-of-the-box Dekker solution for EM sites is provided by a separate sub-project and is not included in the scope of the plan for the PARS II solution.      |

| <b>Table 11<br/>PARS II Assumptions</b> |  |
|---|--|
| <b>Assumption</b>                       |  |
| 16                                      | It is assumed that each site uses the same project control systems for all its projects and therefore there is little additional effort to bring on the two or more projects per site versus one project per site. Effort planned for the CPP Transition/Rollout is based upon approximately 80 projects at 20 sites and the experience gained during the CPP Test Phase, which used approximately 200 hours per site. |
| 13                                      | Training costs are based upon developing training and training users in PARS II only; costs do not include training users in Dekker's thick-client tools.  |
| 14                                      | Assistance to field sites during deployment does not include analyzing field site systems and helping field sites determine how to generate the file upload from their systems. It does include providing assistance on data are needed and the file layout for the data.  |
| 15                                      | No travel to field sites is planned for the deployment of PARS II (other than travel costs included in 1.4 – CPP Test Phase).  |

## 11.2 Constraints

Constraints that affect the implementation and deployment of PARS II are listed in Table 12. At each reassessment of the project plan, the constraints will be reviewed to determine if they still are valid.

| <b>Table 12<br/>PARS II Constraints</b> |   |
|---|---|
| <b>Constraint</b>                       |   |
| 1                                       | Team members work in different geographic locations and in different time zones making it difficult to establish a common working environment. The team needs to use WebEX web conference technology to collaborate on a weekly basis in addition to phone conferences. |
| 2                                       | Meetings, demonstrations and presentations where Dekker personnel will be present onsite should be made at least two weeks in advance so that travel costs can be minimized.  |
| 3                                       | The Dekker development team has no access to the DOE network making the development and deployment of the application more difficult.   |
| 4                                       | The team has little control of the availabilities of certain personnel outside of the core team and it may impede the progress of the project. Obtaining field site visit authorization is such an example.   |
| 5                                       | The PARS II application must be certified and accredited and given Authority to Operate (ATO) in accordance with DOE cyber security requirements.   |



| <b>Table 12<br/>PARS II Constraints</b> |   |
|---|---|
|   | <b>Constraint</b>   |
| 6                                       | PARS II must follow the policies and procedures of the DOE Headquarter Application Hosting Environment (AHE). |

## 12 APPROVALS

### 12.1 Management Approval

*This section describes the internal management approval process for the Project Plan.*

This Project Plan is to be reviewed by all PARS II team members in order to obtain concurrence. It will then be reviewed by the EES Program Manager and the Associate VP SDE for approval.

### 12.2 Client Approval

*This section describes the client approval process for the Project Plan.*

After the internal approval process, this Project Plan is to be reviewed by the PARS II system owner and the OEMC management for approval.

Once the Project Plan is approved, EES will provide the PARS II system owner a formal Client Acceptance Letter to accept the product as a deliverable required by the DOE Statement of Work to EES.

## 13 RECORDS

*This section describes the plan for maintaining and storing project records.*

All PARS II project documentations, deliverables, conference records and contract agreements are stored in an EES Repository available to the system owner.

Application version control will be kept in the PARS II Servers maintained by AHE.

## 14 REFERENCES

- PARS II WBS 20090415c v2.0
- Concept of Operation for PARS II Draft Version 1.0, October 31, 2008
- Proposed Data Elements for PARS II, Version 1.7, November 3, 2008
- PARS II Project Plan for Field Site Visit Version 1.0, November 26, 2008
- United States Department of Energy Order 413.3A, July 28, 2006
- United States Department of Energy Manual 413.3-1, March 31, 2003
- United States Department of Energy Guide 413.3-10, “Earned Value Management System”, May 6, 2008
- OECM “ART Database”, developed by OECM (Brian Kong, OECM)
- National Defense Industrial Association Program Management Systems Committee “Earned Value Management Systems Intent Guide” (for ANSI/EIA 748-A), November 2006 Edition.
- IPABS-IS and PARS System Integration, Concept of Operation Plan, March 19, 2004
- Project Assessment and Reporting System (PARS) User Manual version 3.5, March 3005
- PARS Data Input Requirements, March 23, 2006 (PPC)
- Gather Requirement & Conduct Market Research for the Project Assessment Report System (PARS), September 2006
- Function Requirements Document for PARS (Draft), June 20, 2007
- System Architecture Schematic (Dekker Ltd.)
- Dekker TRAKKER and Dekker iPursuit Technology Recommendations (Dekker Ltd.)
- General Implementation Plan (Dekker Ltd.)
- ROM For DOE (EES), Dekker, Ltd. August 18, 2008
- Technical Information, Dekker, Ltd. August 26, 2008
- Project Plan Template (EES)
- Software Engineering Institute’s CMMI<sup>®</sup> for Development (CMMI-DEV), Version 1.2 2006

## APPENDIX A – PARS II WORK BREAKDOWN STRUCTURE

| PARS II Work Breakdown Structure |                                    |  |
|----------------------------------|------------------------------------|--|
| WBS #                            | WBS Element                        | Description  |
| 1                                | PARS II System                     | The system, documentation, and services (training and help desk, etc.) requested by OECM and the project management and services needed to support the construction of the solution.   |
| 1.0                              | PARS II Software/Vendor Selection  | CLIN 1 work completed prior to FY2008, including PARS II requirements and evaluation and selection of a COTS product and vendor.   |
| 1.1                              | Project Management                 | Activities and documents related to managing the PARS II project until the system is fully operational. Including project planning, execution, monitoring, and reporting.  |
| 1.1.1                            | Project Startup                    | Activities associated with staffing and initial planning of work following receipt of DOE work order.  |
| 1.1.2                            | Project Planning                   | The plan for implementing the PARS II system   |
| 1.1.2.1                          | Project Plan V1.0                  | The initial plan, based upon work accomplished and knowledge gained at the end of the Requirements and Concept of Operations.  |
| 1.1.2.2                          | Project Plan V1.1                  | Review and revise project plan upon completion of the CPP Test Phase   |
| 1.1.2.3                          | Project Plan V1.2                  | Review and revise project plan upon the completion of the PARS II pilot  |
| 1.1.3                            | Execution & Control                | Ongoing management, control, and reporting of project activities including assigning and reviewing work, assessing and communicating status, risk management, and acquisition management (procure software/services and manage subcontract).   |
| 1.1.4                            | Program Management Support         | EES quality and schedule/cost control, task management, financial management, and project oversight.   |
| 1.2                              | PARS II Concept of Operations      | The description of how the PARS II system is expected to operate in its intended environment. This document is non-technical in nature and is presented from the viewpoints of the various stakeholders. Includes work on the data dictionary. |
| 1.2.1                            | PARS II Concept of Operations V1.0 | The initial version of the Concept of Operations. Includes writing the draft version, peer reviews, reviews with customer, and modifications based on feedback from customer reviews. Note: Includes work on Data Dictionary V1.0.             |
| 1.2.2                            | PARS II Concept of Operations V1.1 | Review and revise the Concept of Operations and Data Dictionary during the software configuration. Includes editing, peer review, review with customer, and modifications.   |
| 1.2.4                            | PARS II Data Dictionary V1.1       | Review and revise the Data Dictionary. Includes editing, input from Dekker, peer review, review with customer, and modifications.  |

| <b>PARS II Work Breakdown Structure</b> |  |   |
|---|--|---|
| <b>WBS #</b>                            | <b>WBS Element</b>                               | <b>Description</b>  |
| 1.3                                     | PARS II Requirements                             | The user requirements that the PARS II products must meet in order to be accepted. The majority of the requirements have been identified, documented and approved at this point. However, there will be ongoing requirements management for the remainder of the project life.  |
| 1.3.1                                   | Requirements Management                          | Ongoing review and maintenance of the PARS II requirements during configuration of the software.  |
| 1.4                                     | CPP Test Phase                                   | The deployment of Dekker thick client software to field sites for purposes of determining its viability and understanding field readiness. The initial phase is to deploy at two to four EM sites. A second phase is planned to deploy the COTS software to two to four more sites. These sites would include non-EM sites. |
| 1.4.1                                   | Dekker PMIS Purchase                             | Moved to 1.16.1   |
| 1.4.2                                   | Publish Project Plan for CPP Test Phase Module   | Prepare and deliver a plan identifying the tasks, responsibilities, cost and schedule for the CPP Test Phase.   |
| 1.4.3                                   | Provide Informal Help Desk Support for CPP Sites | Assist test sites as they are using Dekker tools and extracting data from their systems.  |
| 1.4.4                                   | Implement CPP Test Phase 3 EM Sites              | Conduct discovery and configure Dekker thick client software at sites. Work with sites to obtain contract data.   |
| 1.4.4.1                                 | Prepare for Site Visits                          | Planning and preparing for site visits.   |
| 1.4.4.2                                 | Conduct Discovery & Configuration at Site 1      | Working with Site 1 to obtain data, including installing and configuring Dekker thick client software (WTP)   |
| 1.4.4.3                                 | Conduct Discovery & Configuration at Site 2      | Working with Site 2 to obtain data, including installing and configuring Dekker thick client software (ID)  |
| 1.4.4.4                                 | Conduct CPP Briefing for OECM & EM               | Brief OECM and EM on the findings and status of the work at the first two field sites.  |
| 1.4.4.5                                 | Conduct Discovery & Configuration at Site 3      | Working with Site 3 to obtain data, including installing and configuring Dekker thick client software (SR)  |
| 1.4.4.7                                 | Conduct Discovery & Configuration at Site 4      | Working with Site 4 to obtain data, including installing and configuring Dekker thick client software (OR)  |
| 1.4.5                                   | Configure CPP Module for Test Phase              | Configure the Dekker software for demonstrating the CPP module.   |
| 1.4.6                                   | Demonstrate CPP Test to EM & OECM Management     | Demonstrate the initial configuration of the CPP module to management and present findings and results of the work at the four EM sites.  |
| 1.4.7                                   | Continue to collect data from Sites 1 and 2      | Continue to work with WTP and ID to obtain contractor project performance data (following the completion of the site visits in 1.4.4.2 and 1.4.4.3)   |
| 1.5                                     | PARS II Software Configuration                   | The configuration of the Dekker software suite to meet DOE's requirements as discussed in the PARS II Requirements Document and the PARS II Concept of Operations.  |
| 1.5.1                                   | Configure CPP Module V1.0                        | Includes configuring the CPP module for the upload of schedule and EVM data, risk logs, and management reserve and for variance analysis.   |

| <b>PARS II Work Breakdown Structure</b> |  |   |
|---|--|---|
| <b>WBS #</b>                            | <b>WBS Element</b>                             | <b>Description</b>  |
| 1.5.2                                   | Configure the OA Module V1.0                   | Includes configuring the OA module for use by Federal staff to manage and review critical decisions, key performance parameters, contingencies, project attributes, and contacts. Also includes setting up dashboards and reports.  |
| 1.5.3                                   | Systems Configuration                          | Includes configuring menus and security, publishing reports from iPortfolio, and setting up document management.  |
| 1.5.4                                   | DOE EES/Dekker Reviews and Briefings           | Meetings to review software during design and configuration.  |
| 1.5.5                                   | Integrated Quality and Testing                 | Ongoing quality assurance and testing by Dekker of its software configuration.  |
| 1.5.6                                   | Software Corrective Action                     | Changes to the configured software resulting from the EES independent testing and user acceptance testing.  |
| 1.5.7                                   | Dekker Software Integration and Oversight      | Providing insight on requirements to software engineers providing overall management of the software configuration  |
| 1.5.8                                   | PARS II OA Software Ready for EES Test         | Milestone identifying when Dekker will deliver the OA software for independent testing by EES   |
| 1.5.9                                   | PARS II CPP Software Ready for EES Test        | Milestone identifying when Dekker will deliver the CPP software for independent testing by EES  |
| 1.5.10                                  | OA Functional Design & Requirements Validation | The functional design of the OA module, including validation of the requirements and data elements defined earlier in the project   |
| 1.6                                     | PARS II Collaboration Center                   | A portal or web page that will provide news and links for users to register for an account and log in to PARS II.   |
| 1.6.1                                   | PARS II Collaboration Center Prototype         | Includes research on technology available at DOE, definition of requirements, development of a prototype website, and demonstration to OECM.  |
| 1.6.2                                   | PARS II Collaboration Center V1.0              | Revise prototype based on feedback from OECM demonstration.   |
| 1.7                                     | EES Software Quality Assurance                 | Independent systems testing and quality assurance by EES of Dekker configured software. Focuses on verifying that the software meets the functional and technical requirements and the concept of operations. Includes developing a test plan, conducting the testing, preparing a test evaluation summary and test results report, and tracking defects.   |
| 1.7.1                                   | PARS II System Test Plan                       | Provides the information necessary to plan and control the test effort for the PARS II system. It identifies the items to be tested, and identifies the environmental, staffing, and other resources required to test. It also identifies the criteria for categorizing defects (e.g., low, medium, high). Includes writing draft document and test cases, peer review, and modifications to the test plan. |

| <b>PARS II Work Breakdown Structure</b> |   |  |
|---|---|--|
| <b>WBS #</b>                            | <b>WBS Element</b>                        | <b>Description</b>   |
| 1.7.2                                   | PARS II System Testing                    | Includes testing of the system, documenting and tracking software defects, determining how to handle defects, and preparing a report on the test results. Also includes retesting.   |
| 1.7.2.1                                 | PARS II V1.0 System Testing               | System testing of PARS II V1.0 - CPP module  |
| 1.7.2.2                                 | PARS II V1.1 System Testing               | System testing of PARS II V1.1 - OA module   |
| 1.7.3                                   | EES Software Integration                  | Working with Dekker to ensure that the software is configured to meet DOE's requirements.  |
| 1.8                                     | PARS II Technical and User Documentation  | Documentation for the PARS II system required to operate, maintain and use the system.   |
| 1.8.1                                   | PARS II User Guide                        | Role-based manual that instructs the FPD, program and OEM analysts, and DOE executives in the use of the system. Also provides instructions to contractors on the project file upload process.   |
| 1.8.1.1                                 | Dekker Role-Based User Guide              | Role-based guide provided by Dekker to EES.  |
| 1.8.1.2                                 | PARS II User Guide V1.0                   | Updates to the Dekker Role-Based User Guide, such as help desk information, url to access application, and Doe-specific information. May include additional short user materials such as a one page reference sheet.   |
| 1.8.2                                   | PARS II Configuration Parameters Document | Documents how the DOE implementation of the Dekker software suite was tailored to DOE's specific requirements. Specific information on how various configurations are developed or captured in the software is documented in the Dekker technical documents. ~25 pp plus additional supporting material.   |
| 1.8.3                                   | PARS II Technical Design Document         | Provides a technical specification of PARS II including (1) the set of environments (development, test, training, and production) that will be built and maintained (2) the network configuration in which PARS II will be deployed (3) the design of PARS II interfaces with other systems and (4) how the design meets key PARS non-functional requirements for performance, availability, reliability, scalability, support and maintainability, and security requirements. The document will be delivered at system deployment as a description of the "as built" system to aid in system maintenance. The document audience includes AHE technical staff, the system integrators developing and maintaining the system, Security evaluators, and the parties who will assess the architecture and design. ~ 50-75 pp. |



| <b>PARS II Work Breakdown Structure</b> |  |  |
|---|--|--|
| <b>WBS #</b>                            | <b>WBS Element</b>                             | <b>Description</b>   |
| 1.8.4                                   | PARS II Access Control Policies and Procedures | Documents procedures for requesting and approving user accounts, removing access to PARS II, handling lost/compromised passwords, managing user profiles, and reviewing access authorizations periodically. Includes client discussions, writing the draft version, peer reviews, reviews with customer, and modifications based on feedback from customer reviews. ~50-75 pp. |
| 1.9                                     | C&A Certification                              | Documents and activities related to obtaining Authority to Operate (ATO). Also includes participating in testing and reviews of PARS II with the CFO Cyber Security Team.  |
| 1.9.1                                   | PARS II Security Plan                          | Includes writing draft document, peer review, reviews with customer and security assessors, and modifications based on feedback. Includes C&A planning, system categorization, and draft MOU.  |
| 1.9.2                                   | PARS II COOP/DR                                | Includes writing draft document, peer review, reviews with customer and security assessors, and modifications based on feedback.   |
| 1.9.3                                   | PARS II Configuration Management Plan          | Includes writing draft document, peer review, reviews with customer and security assessors, and modifications based on feedback.   |
| 1.9.4                                   | PARS II ST&E Scripts                           | Includes creating ST&E scripts, peer review, review with assessors and modifications based on feedback.  |
| 1.9.5                                   | PARS II Security Reviews and Testing           | Participation by PARS II team members in the Security Risk Assessment and ST&E testing and responding to questions from the CFO Cyber Security Team.   |
| 1.9.6                                   | C&A Modifications                              | Modifications to PARS II C&A documentation following review by the CFO Cyber Security Team.  |
| 1.9.9                                   | Independent Security Testing                   | Testing of PARS II security controls by the CFO Cyber Security Team.   |
| 1.9.12                                  | Participate in Security Risk Assessment        | Assist the CF-40 team in its assessment of PARS II   |
| 1.9.13                                  | Perform e-Authentication                       | Independent activity performed by CF-40  |
| 1.9.14                                  | Create C&A package                             | Independent activity performed by CF-40  |
| 1.9.8                                   | PARS II DAAR Approval                          | Approval received from DAAR for PARS II.   |
| 1.9.7                                   | PARS II C&A Accreditation                      | Approval received from DAA for PARS II.  |
| 1.10                                    | PARS II Transition Planning                    | Planning documents that focus on the requirements for deploying the PARS II system. Includes deployment/transition plan, communications plan, training plan, and data migration plan.  |

| <b>PARS II Work Breakdown Structure</b> |                             |   |
|---|-----------------------------|---|
| <b>WBS #</b>                            | <b>WBS Element</b>          | <b>Description</b>  |
| 1.10.1                                  | PARS II Deployment Plan     | Describes the strategy for deploying the PARS II Contract Project Performance module to the DOE sites and for transitioning from PARS I to PARS II. It identifies the deployment team and its members' roles and responsibilities, describes the deployment milestones and schedule, discusses user acceptance testing, and addresses support that will be required during the deployment. It requires many discussions with the customer over a period of time and should be developed iteratively. It includes writing draft document, peer review, reviews with customer, and modifications based on feedback. |
| 1.10.2                                  | PARS II Communications Plan | Document describes the strategy for communicating with PARS II stakeholders and users, including identifying the types of information to communicate and the methods of communication. Should be developed in parallel with the PARS II Deployment Plan. Includes writing draft document, peer review, discussions with customer, customer reviews, and modifications based on feedback.  |
| 1.10.3                                  | PARS II Training Plan       | Document describes the strategy for providing initial and ongoing training to PARS II users, including required resources and methods. Includes writing draft document, peer review, discussions with customer, customer reviews, and modifications based on feedback.  |
| 1.10.4                                  | PARS II Data Migration Plan | Includes analyzing data, writing draft document, peer review, discussions with customer, customer reviews, and modifications based on feedback.   |
| 1.11                                    | Transition Preparation      | Development of the documents and services needed to support the installation and deployment of the PARS II system. The transition planning documents have defined the requirements for these deliverables which include training materials, set up of the AHE hosting environments, establishment of help desk support, and data migration processes and procedures.  |
| 1.11.1                                  | AHE TRAIN Environment       | Set up of training environment for PARS II. Includes installation and set up of any necessary hardware and system software, installation and configuration of PARS II software components, LDAP, and network connectivity, providing specifications to AHE for Dekker/PARS II software, and coordination with AHE and Dekker.   |
| 1.11.2                                  | AHE PROD Environment        | Set up of production environment for PARS II.   |
| 1.11.3                                  | Site Surveys                | Collect information needed to assist sites with accessing PARS II. Develop survey, review with customer, distribute, follow-up.   |

| <b>PARS II Work Breakdown Structure</b> |   |   |
|---|---|---|
| <b>WBS #</b>                            | <b>WBS Element</b>                                      | <b>Description</b>  |
| 1.11.4                                  | ART and PARS I Data Conversion Processes and Procedures | Analyze PARS I/ART data and PARS II data structure, design, create and test processes and procedures for data migration. Based on the OECM decision to do a manual conversion of data from ART and PARS to PARS II.   |
| 1.11.5                                  | Training Materials & Data                               | Presentations, instructor materials, training manuals, training data and exercises, and training accounts needed to conduct training. Training will be role-based. Also includes logistics such as scheduling. Includes cost to develop training materials for PARS II; does not include costs to develop training materials for Dekker thick-client tools. |
| 1.11.5.1                                | PARS II Training Materials & Data for CPP               | Training materials and data for the CPP module. Includes developing draft materials, peer review, test training session, and modification of training materials.  |
| 1.11.5.2                                | PARS II Training Materials & Data for OA                | Training materials and data for the OA module. Includes developing draft materials, peer review, test training session, and modification of training materials.   |
| 1.11.5.3                                | PARS II Web Training                                    | Includes effort to write text, develop screenshots and graphics, record narrative, test, and modify. Assumes web-delivery and the cost of software are not included in the plan.  |
| 1.11.6                                  | PARS II Help Desk                                       | Establishment of a help desk for Tier 1 help desk support.  |
| 1.11.6.1                                | PARS II Help Desk Setup                                 | Includes defining how to configure help desk software, developing help desk procedures for escalation of calls, etc., and training help desk staff. Includes meetings with customer and CFO help desk staff.  |
|   |   | (Combined with 1.13.6)  |
| 1.11.7                                  | PARS II Acceptance Testing                              | Planning for and supporting PARS II stakeholders in their acceptance testing. Also includes deciding on defects and presenting findings to OECM.  |
| 1.11.7.1                                | PARS II CPP Acceptance Testing                          | Acceptance testing for CPP module - with 4 sites and HQ programs and OECM. OECM makes go-live decision following presentation of test findings.   |
| 1.11.7.2                                | PARS II OA Acceptance Testing                           | Acceptance testing for OA module - with HQ programs and OECM. OECM makes go-live decision following presentation of test findings.  |
| 1.11.8                                  | PARS II Transition Readiness Milestones                 | Major milestones representing the readiness to go-live with PARS II CPP and OA modules.   |
| 1.11.8.1                                | PARS II CPP Ready to Go Live Milestone                  | PARS II - CPP module – ready for test of IOC capability.  |
| 1.11.8.2                                | PARS II OA Ready to Go Live Milestone                   | PARS II – OA module – ready for test of IOC capability.   |

| <b>PARS II Work Breakdown Structure</b> |   |  |
|---|---|--|
| <b>WBS #</b>                            | <b>WBS Element</b>                        | <b>Description</b>   |
| 1.12                                    | PARS II Project Support                   | Activities related to supporting the project team as it develops and deploys the system, documentation, training, and services. Includes training of the project team on the Dekker software, setting up the development and test AHE environments, configuration management, and quality assurance. |
| 1.12.1                                  | Project Team Technical Training           | Training in technical aspects of the Dekker software for members of the EES PARS II team to prepare them for assuming responsibility for maintenance   |
| 1.12.2                                  | Configuration Management & Change Control | Ongoing configuration management of PARS II software and documentation and changes requested to software and documents   |
| 1.12.3                                  | Quality Assurance                         | Peer reviews of project deliverables - software, documents, and services   |
| 1.12.4                                  | AHE Test Environment                      | Set up of the test environment for PARS II.  |
| 1.12.5                                  | AHE DEV Environment                       | Set up of development environment for PARS II.   |
| 1.12.6                                  | Risk Management                           | Activities related to managing PARS II risks.  |
| 1.12.7                                  | Maintain Servers                          | Activities related to maintaining the PARS II servers by the PARS II team, including installing configured versions of Dekker software. Once PARS is operational, this activity is tracked under 1.13.8, PARS II Maintenance.  |
| 1.13                                    | PARS II Deployment                        | Deployment of PARS II, including help desk, training, data migration, and software maintenance.  |
| 1.13.1                                  | PARS II Data Migration for Pilot          | Migration of data from PARS and ART to PARS II for the projects involved in the pilot. Assumes manual data migration.  |
| 1.13.7                                  | Pilot Begins                              | Start of PARS II implementation with a small subset of DOE projects (15-20). Pilot runs from February to April 2010.   |
| 1.13.2                                  | PARS II Training                          | Conducting Web and classroom training for PARS II users. Includes cost to train users on PARS II; does not include costs to train users on Dekker thick-client tools.  |
|   |   | Replaced by 1.13.10.   |
|   |   | Combined with 1.13.2   |
| 1.13.5                                  | PARS II Deployment Support                | Setting up user accounts, managing training logistics, responding to customer/user requests as software is being deployed, etc.  |
| 1.13.6                                  | Help Desk                                 | Operation of the PARS II help desk.  |
| 1.13.8                                  | PARS II Maintenance                       | Performing system administration tasks, making software changes, and applying patches/upgrades as needed.  |
| 1.13.9                                  | Pilot Ends                                | Completion of the PARS II pilot.   |
| 1.13.10                                 | Data Migration for Full Implementation    | Migration of data from PARS and ART to PARS II for the CD-0, CD-1, and Closed and Cancelled projects. Assumes manual data migration.   |
| 1.13.11                                 | Full Implementation Begins                | Start of full implementation and the transition of all active projects to PARS II.   |
| 1.13.12                                 | Groups 1, 2 and 3 Start                   | Projects in Groups 1, 2, and 3 begin official reporting of contractor project performance data.  |

| <b>PARS II Work Breakdown Structure</b> |                                |  |
|---|--------------------------------|--|
| <b>WBS #</b>                            | <b>WBS Element</b>             | <b>Description</b>   |
| 1.13.13                                 | Group 4 Starts                 | Projects in Group 4 begin official reporting of contractor project performance data.   |
| 1.13.14                                 | Group 5 Starts                 | Projects in Group 5 begin official reporting of contractor project performance data.   |
| 1.13.15                                 | Group 6 Starts                 | Projects in Group 6 begin official reporting of contractor project performance data.   |
| 1.13.16                                 | Group 7 Starts                 | Projects in Group 7 begin official reporting of contractor project performance data.   |
| 1.13.17                                 | Group 8 Starts                 | Projects in Group 8 begin official reporting of contractor project performance data.   |
| 1.13.18                                 | Group 9 Starts                 | Projects in Group 9 begin official reporting of contractor project performance data.   |
| 1.13.19                                 | Group 10 Starts                | Projects in Group 10 begin official reporting of contractor project performance data.  |
| 1.13.20                                 | PARS II Deployment Completed   | PARS II deployment is completed  |
|   |                                |  |
|   |                                | Combined with 1.13.  |
|   |                                |  |
|   |                                |  |
| 1.15                                    | CPP Transition/Rollout Support | Ad hoc support focused on working with the programs, FPDs, and sites to assist them in reporting project performance data electronically to PARS II. Includes briefings, software demonstrations, Integrated Project Team (IPT) support, portal content, uploading files, sending out error reports, and preparing/delivering communications. Does not include working with sites to analyze their project control systems and help them generate the PARS II files. |
| 1.16                                    | Other Direct Cost              | Costs other than labor and travel.   |
| 1.16.1                                  | Dekker PMIS Purchase           | Purchase of Dekker PMIS software unlimited license.  |
| 1.16.1.1                                | First Installment              | First of three installment payments for the Dekker PMIS software.  |
| 1.16.1.2                                | Second Installment             | Second of three installment payments for the Dekker PMIS software.   |
| 1.16.1.3                                | Third Installment              | Third of three installment payments for the Dekker PMIS software.  |
| 1.16.2                                  | AHE Hosting Fee (Annual)       | Fee charged by DOE's Application Hosting Environment (AHE) for hosting a program's application in the DOE computing center.  |
| 1.16.2.1                                | FY 2009 Annual Fee             | AHE fee charged for FY 2009.   |
| 1.16.2.2                                | FY 2010 Annual Fee             | AHE fee charged for FY 2010.   |
| 1.16.3                                  | Dekker PMIS Maintenance        | Dekker PMIS annual software maintenance fee (will be incurred in FY2010).  |
| 1.6.4                                   | Software for Web Training      | Cost for Flash software needed to develop Web training materials.  |

## APPENDIX B – PARS II SCHEDULE

| Id | WBS       | Task Name   | Duration   | Start    | Finish   |
|----|-----------|---|------------|----------|----------|
| 1  | 1         | PARS II System                                      | 999 days   | 11/1/06  | 9/30/10  |
| 2  | 1.0       | PARS II Software/Vendor Selection                   | 248 days   | 11/1/06  | 10/12/07 |
| 16 | 1.1       | Project Management                                  | 411 days   | 8/1/08   | 3/26/10  |
| 17 | 1.1.1     | Project Startup                                     | 66 days    | 8/1/08   | 10/31/08 |
| 18 | 1.1.2     | Project Planning                                    | 340 days   | 11/10/08 | 3/26/10  |
| 19 | 1.1.2.1   | Project Plan V1.0                                   | 43 days    | 11/10/08 | 1/16/09  |
| 20 | 1.1.2.2   | Project Plan V1.1                                   | 49 days    | 2/2/09   | 4/10/09  |
| 21 | 1.1.2.3   | Project Plan V1.2                                   | 20 days    | 3/1/10   | 3/26/10  |
| 22 | 1.1.3     | Execution & Control                                 | 292 days   | 9/16/08  | 12/31/09 |
| 23 | 1.1.4     | Program Management Support                          | 222.6 days | 11/24/08 | 10/20/09 |
| 24 | 1.2       | PARS II Concept of Operations                       | 170 days   | 9/22/08  | 6/1/09   |
| 25 | 1.2.1     | PARS II Concept of Operations V1.0                  | 67 days    | 9/22/08  | 12/31/08 |
| 26 | 1.2.2     | PARS II Concept of Operations V1.1                  | 0 days     | 5/15/09  | 6/1/09   |
| 27 | 1.2.4     | PARS II Data Dictionary V1.1                        | 96 days    | 12/29/08 | 5/15/09  |
| 28 | 1.3       | PARS II Requirements                                | 248 days   | 1/5/09   | 12/30/09 |
| 29 | 1.3.1     | Requirements Management                             | 248 days   | 1/5/09   | 12/30/09 |
| 30 | 1.4       | CPP Test Phase                                      | 129 days   | 10/20/08 | 4/30/09  |
| 31 | 1.4.1     | Dekker PMIS Purchase (moved to 1.16.1)              | 78 days    | 10/31/08 | 3/3/09   |
| 32 | 1.4.1.1   | 1st Installment (moved to 1.16.1.1)                 | 0 days     | 10/31/08 | 11/3/08  |
| 33 | 1.4.1.2   | 2nd Installment (moved to 1.16.1.2)                 | 0 days     | 12/1/08  | 12/2/08  |
| 34 | 1.4.1.3   | 3rd Installment (moved to 1.16.1.3)                 | 0 days     | 3/2/09   | 3/3/09   |
| 35 | 1.4.2     | Publish Project Plan for CPP 'Test Phase' Module    | 18 days    | 10/20/08 | 11/26/08 |
| 36 | 1.4.3     | Provide Informal Help Desk Support for CPP Sites    | 41 days    | 2/2/09   | 3/31/09  |
| 37 | 1.4.4     | Implement CPP Test Phase at Three EM Sites          | 101 days   | 12/1/08  | 4/30/09  |
| 38 | 1.4.4.1   | Prepare for Site Visits (Mobilization)              | 3.75 days  | 12/1/08  | 12/4/08  |
| 39 | 1.4.4.2   | Conduct Discovery & Configuration at Site 1 (WTP)   | 3 days     | 12/8/08  | 12/10/08 |
| 40 | 1.4.4.2.1 | Conduct Discovery at Site 1- (WTP)                  | 2 days     | 12/8/08  | 12/9/08  |
| 41 | 1.4.4.2.2 | Perform Configuration at Site 1- (WTP)              | 2 days     | 12/9/08  | 12/10/08 |
| 42 | 1.4.4.3   | Conduct Discovery & Configuration at Site 2 (Idaho) | 3 days     | 12/10/08 | 12/12/08 |
| 43 | 1.4.4.3.1 | Conduct Discovery at Site 2 (Idaho)                 | 2 days     | 12/10/08 | 12/11/08 |
| 44 | 1.4.4.3.2 | Perform Configuration at Site 2 (Idaho)             | 1.5 days   | 12/11/08 | 12/12/08 |

| <b>Id</b> | <b>WBS</b> | <b>Task Name</b>   | <b>Duration</b> | <b>Start</b> | <b>Finish</b> |
|-----------|------------|--|-----------------|--------------|---------------|
| 45        | 1.4.4.4    | Conduct CPP Briefing for Paul Bosco and Jack Surash      | 14 hrs          | 12/18/08     | 12/19/08      |
| 46        | 1.4.4.5    | Conduct Discovery & Configuration - Site 3 (SR)          | 63 days         | 2/2/09       | 4/30/09       |
| 47        | 1.4.4.5.1  | Conduct Discovery at Site 3 (SR)                         | 19 days         | 2/2/09       | 2/27/09       |
| 48        | 1.4.4.5.2  | Collect data from Site 3 (SR)                            | 44 days         | 3/2/09       | 4/30/09       |
| 49        | 1.4.4.6    | Continue to collect data from Sites 1&2 (moved to 1.4.7) | 73 days         | 1/14/09      | 4/30/09       |
| 50        | 1.4.4.7    | Conduct Discovery & Collect Data from Site 4 (OR)        | 33 days         | 3/17/09      | 4/30/09       |
| 51        | 1.4.4.7.1  | Conduct Discovery at Site 4 (OR)                         | 33 days         | 3/17/09      | 4/30/09       |
| 52        | 1.4.4.7.2  | Collect data from Site 4 (OR)                            | 22 days         | 4/1/09       | 4/30/09       |
| 53        | 1.4.5      | Configure CPP Module for Test Phase                      | 39 days         | 1/15/09      | 3/13/09       |
| 54        | 1.4.6      | Demonstrate CPP Test to EM & OEMC Management             | 2 days          | 3/11/09      | 3/12/09       |
| 55        | 1.4.7      | Continue to collect data from Sites 1&2                  | 74 days         | 1/14/09      | 4/30/09       |
| 56        | 1.4.11     | CPP Test Phase Completed                                 | 0 days          | 4/30/09      | 4/30/09       |
| 57        | 1.5        | PARS II Dekker Software Configuration                    | 343 days        | 12/12/08     | 4/30/10       |
| 58        | 1.5.10     | OA Functional Design & Requirements Validation           | 45 days         | 3/16/09      | 5/15/09       |
| 59        | 1.5.1      | Configure CPP Module Version 1.0                         | 121 days        | 1/2/09       | 6/25/09       |
| 60        | 1.5.1.1    | Project Management Data Upload                           | 19 days         | 1/2/09       | 1/30/09       |
| 61        | 1.5.1.2    | Project Management Schedule & EVM Input (PARS II Upload) | 56 days         | 2/2/09       | 4/21/09       |
| 62        | 1.5.1.3    | Risk Log (PARS II Upload)                                | 14 days         | 6/8/09       | 6/25/09       |
| 63        | 1.5.1.4    | Management Reserve (PARS II Upload)                      | 14 days         | 4/20/09      | 5/7/09        |
| 64        | 1.5.1.5    | EV (Variance Analysis) (PARS II Upload)                  | 20 days         | 5/8/09       | 6/5/09        |
| 65        | 1.5.1.6    | CPP Menu & Security Integration                          | 121 days        | 1/2/09       | 6/25/09       |
| 66        | 1.5.2      | Develop & Configure the OA Module                        | 177 days        | 1/2/09       | 9/15/09       |
| 67        | 1.5.2.1    | Project Attribute A                                      | 60.7 days       | 1/2/09       | 4/1/09        |
| 68        | 1.5.2.9    | Project Attribute B                                      | 31 days         | 4/20/09      | 6/2/09        |
| 69        | 1.5.2.2    | Critical Decision  | 15 days         | 6/3/09       | 6/23/09       |
| 70        | 1.5.2.3    | Schedule & EVM Analysis                                  | 40 days         | 7/21/09      | 9/15/09       |
| 71        | 1.5.2.4    | Funding Profiles   | 58 days         | 6/24/09      | 9/15/09       |
| 72        | 1.5.2.5    | Key Performance Parameters                               | 14 days         | 8/4/09       | 8/21/09       |
| 73        | 1.5.2.6    | Assessments & Narratives                                 | 14 days         | 6/24/09      | 7/14/09       |
| 74        | 1.5.2.7    | Contingencies  | 14 days         | 7/15/09      | 8/3/09        |
| 75        | 1.5.2.8    | Contacts & Certifications                                | 30 days         | 4/20/09      | 6/1/09        |
| 76        | 1.5.2.10   | O&A Menu & Security Integration                          | 104 days        | 4/20/09      | 9/15/09       |
| 77        | 1.5.3      | Dekker PMIS Core Architecture                            | 117 days        | 1/30/09      | 7/16/09       |



| <b>Id</b> | <b>WBS</b> | <b>Task Name</b>  | <b>Duration</b> | <b>Start</b> | <b>Finish</b> |
|-----------|------------|---|-----------------|--------------|---------------|
| 78        | 1.5.3.1    | Object Upload for MS Office Files                                   | 41 days         | 1/30/09      | 3/31/09       |
| 79        | 1.5.3.2    | Publish Reports Directly from iPortfolio                            | 62 days         | 4/20/09      | 7/16/09       |
| 80        | 1.5.3.3    | Security Framework and Screens                                      | 30 days         | 3/9/09       | 4/17/09       |
| 81        | 1.5.4      | DOE EES/Dekker Review and Briefings                                 | 71 days         | 2/5/09       | 5/15/09       |
| 82        | 1.5.4.1    | Meeting 1   | 2 days          | 2/5/09       | 2/6/09        |
| 83        | 1.5.4.2    | Meeting 2 - Project Attributes A                                    | 2 days          | 2/19/09      | 2/20/09       |
| 84        | 1.5.4.3    | Meeting 3 - Mar 12 - CPP Design & Project Attributes                | 1 day           | 3/12/09      | 3/12/09       |
| 85        | 1.5.4.4    | Meeting 4 - Mar 19 - CPP Design & Project Attributes B              | 1 day           | 3/19/09      | 3/19/09       |
| 86        | 1.5.4.5    | Meeting 5 - Apr 2 - Project Attributes & CD-0 & CD-1                | 1 day           | 4/2/09       | 4/2/09        |
| 87        | 1.5.4.6    | Meeting 6 - CD-2 & CD-3   | 1 day           | 4/9/09       | 4/9/09        |
| 88        | 1.5.4.7    | Meeting 7 - Budget and Cost   | 1 day           | 4/16/09      | 4/17/09       |
| 89        | 1.5.4.8    | Meeting 8 - Reference Data & Reports                                | 1 day           | 4/30/09      | 5/1/09        |
| 90        | 1.5.4.9    | Meeting 9 - EV Baseline, BCP Baseline Change, Scope, Cost, Schedule | 1 day           | 5/7/09       | 5/8/09        |
| 91        | 1.5.4.10   | Meeting 10 - Unfinished Business                                    | 1 day           | 5/13/09      | 5/14/09       |
| 92        | 1.5.4.11   | Meeting 11 - Unfinished Business, Overflow                          | 1 day           | 5/15/09      | 5/15/09       |
| 93        | 1.5.5      | Integrated Quality and Testing                                      | 96 days         | 6/26/09      | 11/12/09      |
| 94        | 1.5.9      | PARS II CPP Software Ready for EES Test                             | 0 days          | 9/11/09      | 9/11/09       |
| 95        | 1.5.8      | PARS II OA Software Ready for EES Test                              | 0 days          | 11/12/09     | 11/12/09      |
| 96        | 1.5.6      | Software Corrective Action  | 148 days        | 9/28/09      | 4/30/10       |
| 97        | 1.5.7      | Dekker Software Integration & Oversight                             | 269 days        | 12/12/08     | 1/14/10       |
| 98        | 1.6        | PARS II Collaboration Center  | 42 days         | 4/1/09       | 5/29/09       |
| 99        | 1.6.1      | PARS II Collaboration Center Prototype                              | 22 days         | 4/1/09       | 4/30/09       |
| 100       | 1.6.2      | PARS II Collaboration Center V1.0                                   | 20 days         | 5/1/09       | 5/29/09       |
| 101       | 1.7        | EES Software Quality Assurance                                      | 231 days        | 2/2/09       | 12/31/09      |
| 102       | 1.7.1      | PARS II System Test Plan  | 25 days         | 8/3/09       | 9/4/09        |
| 103       | 1.7.2      | PARS II System Testing  | 65 days         | 9/28/09      | 12/31/09      |
| 104       | 1.7.2.1    | PARS II CPP System Testing  | 22 days         | 9/28/09      | 10/28/09      |
| 105       | 1.7.2.2    | PARS II OA System Testing   | 28 days         | 11/20/09     | 12/31/09      |
| 106       | 1.7.3      | EES Software Integration  | 19 days         | 2/2/09       | 2/27/09       |
| 107       | 1.8        | PARS II Technical and User Documentation                            | 155 days        | 3/20/09      | 10/28/09      |
| 108       | 1.8.1      | PARS II User Guide  | 123 days        | 3/20/09      | 9/11/09       |
| 109       | 1.8.1.1    | Dekker Role Based User Guide  | 79 days         | 3/20/09      | 7/10/09       |
| 110       | 1.8.1.2    | PARS II User Guide  | 34 days         | 7/27/09      | 9/11/09       |
| 111       | 1.8.2      | PARS II Configuration Parameters Document                           | 20 days         | 9/8/09       | 10/5/09       |
| 112       | 1.8.3      | PARS II Technical Design Document                                   | 44 days         | 8/3/09       | 10/2/09       |



| <b>Id</b> | <b>WBS</b> | <b>Task Name</b>                                  | <b>Duration</b> | <b>Start</b> | <b>Finish</b> |
|-----------|------------|---|-----------------|--------------|---------------|
| 113       | 1.8.4      | PARS II Access Control Policies and Procedures    | 40 days         | 9/1/09       | 10/28/09      |
| 114       | 1.9        | C&A Certification                                 | 180.15 days     | 1/12/09      | 9/29/09       |
| 115       | 1.9.1      | PARS II Security Plan & ISA/MOU/MOA               | 89.88 days      | 1/12/09      | 5/20/09       |
| 116       | 1.9.2      | PARS II COOP/DR                                   | 64 days         | 2/9/09       | 5/8/09        |
| 117       | 1.9.3      | PARS II Configuration Management Plan             | 23 days         | 2/17/09      | 3/26/09       |
| 118       | 1.9.4      | PARS II ST&E Scripts                              | 32.27 days      | 3/6/09       | 6/11/09       |
| 119       | 1.9.5      | PARS II Security Reviews and Testing              | 53.15 days      | 3/26/09      | 6/11/09       |
| 120       | 1.9.5.1    | PIA Review  | 0 days          | 5/20/09      | 5/20/09       |
| 121       | 1.9.5.2    | Security Plan Review                              | 0 days          | 5/20/09      | 5/20/09       |
| 122       | 1.9.5.3    | COOP Review                                       | 0 days          | 5/8/09       | 5/8/09        |
| 123       | 1.9.5.4    | CM Plan Review                                    | 0 days          | 3/26/09      | 3/26/09       |
| 124       | 1.9.5.5    | ST&E Script Review                                | 0 days          | 6/11/09      | 6/11/09       |
| 125       | 1.9.6      | C&A Documentation Modifications                   | 6 days          | 6/4/09       | 6/12/09       |
| 126       | 1.9.9      | Independent Testing                               | 5 days          | 6/26/09      | 7/6/09        |
| 127       | 1.9.12     | Participate in Security Risk Assessment           | 5 days          | 6/12/09      | 6/19/09       |
| 128       | 1.9.13     | Perform e-Authentication (CF-40)                  | 5 days          | 6/19/09      | 6/26/09       |
| 129       | 1.9.14     | Create C&A Package (CF-40)                        | 10 days         | 7/6/09       | 7/20/09       |
| 130       | 1.9.8      | PARS II DAAR Approval                             | 0 days          | 8/3/09       | 8/3/09        |
| 131       | 1.9.7      | PARS II V1.0 C&A Accreditation                    | 0 days          | 9/29/09      | 9/29/09       |
| 132       | 1.10       | PARS II Transition Planning                       | 125 days        | 1/21/09      | 7/17/09       |
| 133       | 1.10.1     | PARS II Deployment Plan                           | 55 days         | 3/9/09       | 5/22/09       |
| 134       | 1.10.2     | PARS II Communications Plan                       | 56.5 days       | 1/21/09      | 4/30/09       |
| 135       | 1.10.3     | PARS II Training Plan                             | 31 days         | 5/18/09      | 6/30/09       |
| 136       | 1.10.4     | PARS II Data Migration Analysis & Plan            | 38 days         | 5/26/09      | 7/17/09       |
| 137       | 1.11       | Transition Preparation                            | 273 days        | 4/1/09       | 4/30/10       |
| 138       | 1.11.1     | AHE TRAIN Environment                             | 42 days         | 4/1/09       | 5/29/09       |
| 139       | 1.11.2     | AHE PROD Environment                              | 30 days         | 9/29/09      | 11/12/09      |
| 140       | 1.11.3     | Technical Site Surveys                            | 86 days         | 4/1/09       | 7/31/09       |
| 141       | 1.11.4     | ART & PARS I Data Conversion Process & Procedures | 10 days         | 9/8/09       | 9/21/09       |
| 142       | 1.11.5     | Training Materials & Data                         | 138 days        | 7/13/09      | 1/29/10       |
| 143       | 1.11.5.1   | PARS II Training Materials & Data V1.0            | 30 days         | 7/13/09      | 8/21/09       |
| 144       | 1.11.5.2   | PARS II Training Materials & Data V1.1            | 30 days         | 9/16/09      | 10/28/09      |
| 145       | 1.11.5.3   | PARS II Web Training                              | 62 days         | 10/29/09     | 1/29/10       |
| 146       | 1.11.6     | PARS II Help Desk                                 | 166 days        | 9/1/09       | 4/30/10       |
| 147       | 1.11.6.1   | PARS II Help Desk Setup                           | 21 days         | 9/1/09       | 9/30/09       |
| 148       | 1.11.6.2   | PARS II Help Desk (combined with 1.13.6)          | 71 days         | 1/21/10      | 4/30/10       |

| <b>Id</b> | <b>WBS</b> | <b>Task Name</b>                                     | <b>Duration</b> | <b>Start</b> | <b>Finish</b> |
|-----------|------------|--|-----------------|--------------|---------------|
| 149       | 1.11.7     | PARS II Acceptance Testing                           | 21 days         | 1/4/10       | 2/2/10        |
| 150       | 1.11.7.1   | PARS II CPP Acceptance Testing                       | 20 days         | 1/4/10       | 2/1/10        |
| 151       | 1.11.7.2   | PARS II OA Acceptance Testing                        | 21 days         | 1/4/10       | 2/2/10        |
| 152       | 1.11.8     | PARS II Transition Readiness Milestones              | 0 days          | 2/3/10       | 2/3/10        |
| 153       | 1.11.8.1   | PARS II CPP Go Live Milestone                        | 0 days          | 2/3/10       | 2/3/10        |
| 154       | 1.11.8.2   | PARS II OA Go Live Milestone                         | 0 days          | 2/3/10       | 2/3/10        |
| 155       | 1.12       | PARS II Project Support                              | 326.4 days      | 9/15/08      | 1/8/10        |
| 156       | 1.12.1     | Project Team Technical Training                      | 127 days        | 2/2/09       | 7/31/09       |
| 157       | 1.12.2     | Configuration Management & Change Control            | 250 days        | 1/2/09       | 12/31/09      |
| 158       | 1.12.3     | Quality Assurance                                    | 269 days        | 10/1/08      | 12/31/09      |
| 159       | 1.12.4     | AHE Test Environment                                 | 36 days         | 9/15/08      | 11/3/08       |
| 160       | 1.12.5     | AHE Dev Environment                                  | 37 days         | 12/9/08      | 2/6/09        |
| 161       | 1.12.6     | Risk Management                                      | 190 days        | 3/23/09      | 12/31/09      |
| 162       | 1.12.7     | Maintain Servers                                     | 216.4 days      | 3/2/09       | 1/8/10        |
| 163       | 1.13       | PARS II Deployment                                   | 337 days        | 6/1/09       | 9/30/10       |
| 164       | 1.13.6     | Help Desk  | 176.94 days     | 1/21/10      | 9/30/10       |
| 165       | 1.13.1     | PARS II Data Migration for Pilot                     | 3 days          | 2/1/10       | 2/3/10        |
| 166       | 1.13.7     | Pilot Begins   | 0 days          | 2/3/10       | 2/3/10        |
| 167       | 1.13.2     | PARS II Training                                     | 156 days        | 2/4/10       | 9/15/10       |
| 168       | 1.13.3     | PARS II V1.1 Data Migration                          | 3 days          | 2/4/10       | 2/8/10        |
| 169       | 1.13.4     | PARS II Training (combined with 1.13.2)              | 58 days         | 2/9/10       | 4/30/10       |
| 170       | 1.13.5     | PARS II Deployment Support                           | 337 days        | 6/1/09       | 9/30/10       |
| 171       | 1.13.8     | PARS II Maintenance                                  | 167 days        | 2/4/10       | 9/30/10       |
| 172       | 1.13.9     | Pilot Ends   | 0 days          | 4/30/10      | 4/30/10       |
| 173       | 1.13.10    | Data Migration for Full Implementation               | 5 days          | 4/26/10      | 4/30/10       |
| 174       | 1.13.11    | Full Implementation Begins                           | 0 days          | 5/3/10       | 5/3/10        |
| 175       | 1.13.12    | Groups 1, 2 and 3 Start                              | 0 days          | 2/3/10       | 2/3/10        |
| 176       | 1.13.13    | Group 4 Starts                                       | 0 days          | 3/4/10       | 3/4/10        |
| 177       | 1.13.14    | Group 5 Starts                                       | 0 days          | 4/1/10       | 4/1/10        |
| 178       | 1.13.15    | Group 6 Starts                                       | 0 days          | 5/4/10       | 5/4/10        |
| 179       | 1.13.16    | Group 7 Starts                                       | 0 days          | 6/2/10       | 6/2/10        |
| 180       | 1.13.17    | Group 8 Starts                                       | 0 days          | 7/2/10       | 7/2/10        |
| 181       | 1.13.18    | Group 9 Starts                                       | 0 days          | 8/2/10       | 8/2/10        |
| 182       | 1.13.19    | Group 10 Starts                                      | 0 days          | 9/2/10       | 9/2/10        |
| 183       | 1.13.20    | PARS II Deployment Completed                         | 0 days          | 9/30/10      | 9/30/10       |
| 184       | 1.14       | PARS II 2010 O&M and Deployment - combined with 1.13 | 0 days          | 10/1/09      | 10/1/09       |

| <b>Id</b> | <b>WBS</b> | <b>Task Name</b>               | <b>Duration</b> | <b>Start</b> | <b>Finish</b> |
|-----------|------------|--------------------------------|-----------------|--------------|---------------|
| 185       | 1.15       | CPP Transition/Rollout Support | 439 days        | 1/2/09       | 9/30/10       |
| 186       | 1.16       | Other Direct Cost (ODC)        | 327 days        | 10/31/08     | 3/1/10        |
| 187       | 1.16.1     | Dekker PMIS Purchase           | 77 days         | 10/31/08     | 3/2/09        |
| 188       | 1.16.1.1   | 1st Installment                | 1 day           | 10/31/08     | 10/31/08      |
| 189       | 1.16.1.2   | 2nd Installment                | 1 day           | 12/1/08      | 12/1/08       |
| 190       | 1.16.1.3   | 3rd Installment                | 1 day           | 3/2/09       | 3/2/09        |
| 191       | 1.16.2     | AHE Hosting Fee (Annual)       | 248 days        | 11/26/08     | 11/30/09      |
| 192       | 1.16.2.1   | FY2009 Annual Fee              | 1 day           | 11/26/08     | 11/28/08      |
| 193       | 1.16.2.2   | FY2010 Annual Fee              | 1 day           | 11/30/09     | 11/30/09      |
| 194       | 1.16.3     | Dekker PMIS Maintenance        | 1 day           | 3/1/10       | 3/1/10        |
| 195       | 1.16.4     | Software for Web Training      | 1 day           | 10/13/09     | 10/13/09      |