

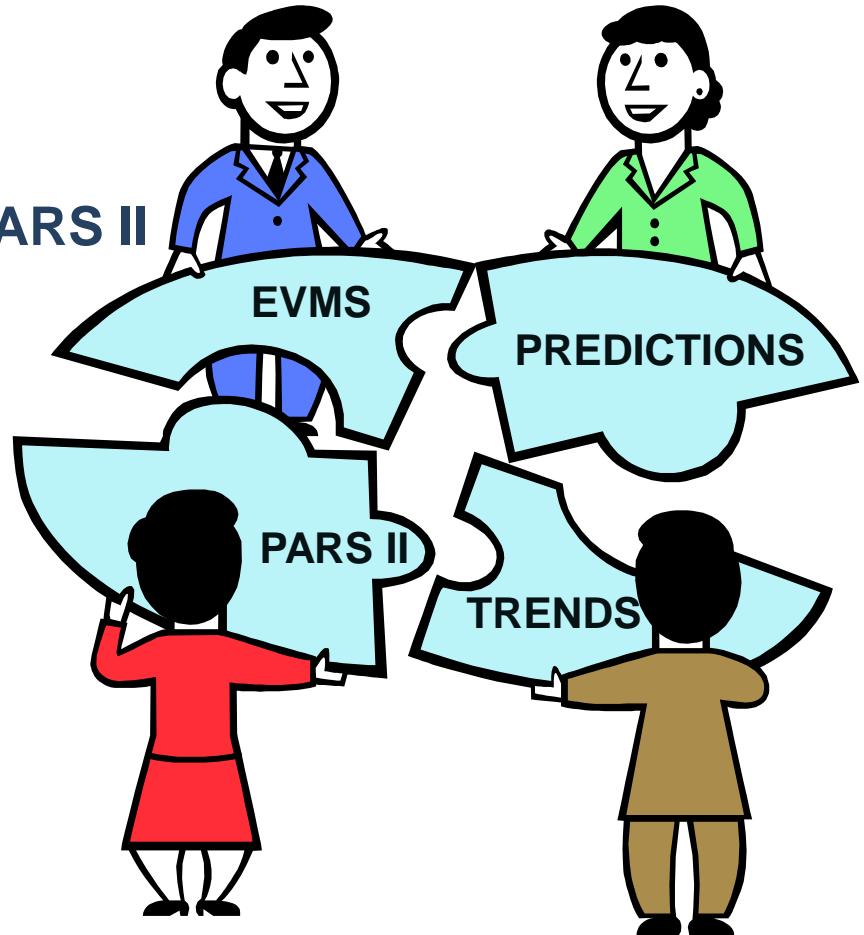
Enhancing Earned Value (EV) Analysis Using Project Assessment & Reporting System (PARS II)



**Presented by:
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Office of Acquisition and Project Management (APM) MA-60
U. S. Department of Energy
January 2013**

Agenda – Day 1

- 8:00 – 8:15 Welcome / Intro
- 8:15 – 9:15 PARS II Overview
- 9:15 – 9:30 Break
- 9:30 – 10:30 Project Lifecycle in PARS II
- 10:30 – 11:00 Dashboards
- 11:00 – 12:30 Lunch
- 12:30 – 1:00 EVM Overview
- 1:00 – 2:30 EVMS Surveillance
Process Part 1
- 2:30 – 2:45 Break
- 2:45 – 3:45 Process Part 2
- 3:45 – 4:30 EV Common Issues



Agenda – Day 2

8:00 – 9:00 Budget vs. Funds

9:00 – 9:15 Break

9:15 – 11:00 EV Data Analysis

11:00 – 12:30 Lunch

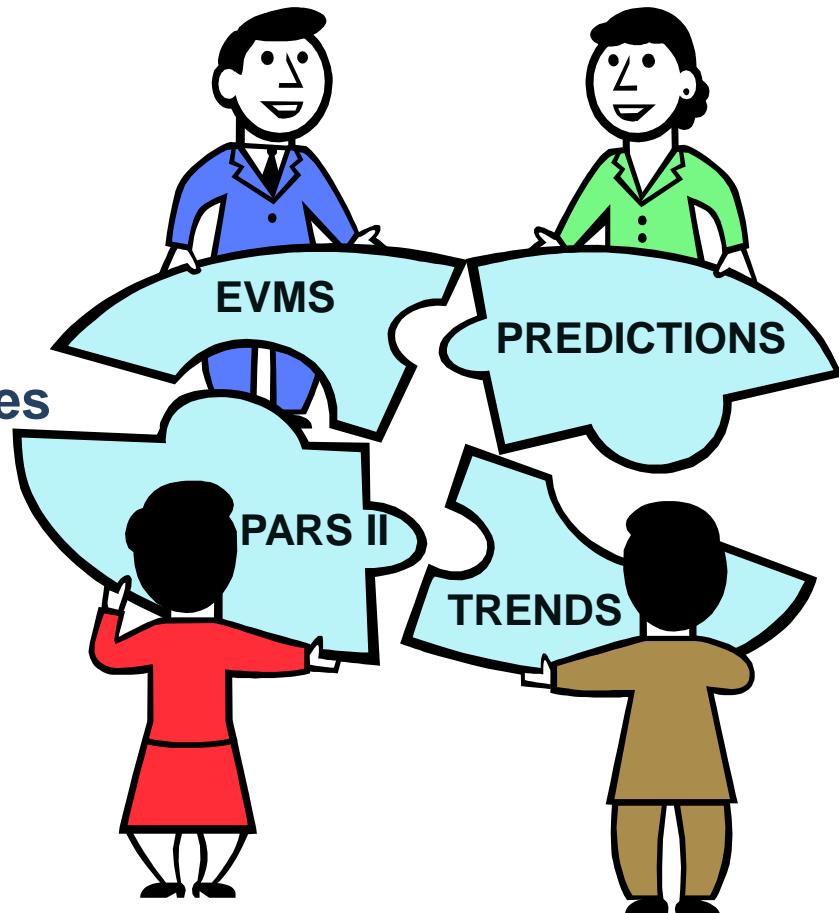
12:30 – 1:15 PARS II Assessment Roles

1:15 – 2:00 PARS II DepSec Monthly Report

2:00 – 2:15 Break

2:15 – 2:45 PARS II Reporting

2:45 – 4:00 PARS II Wrap-Up

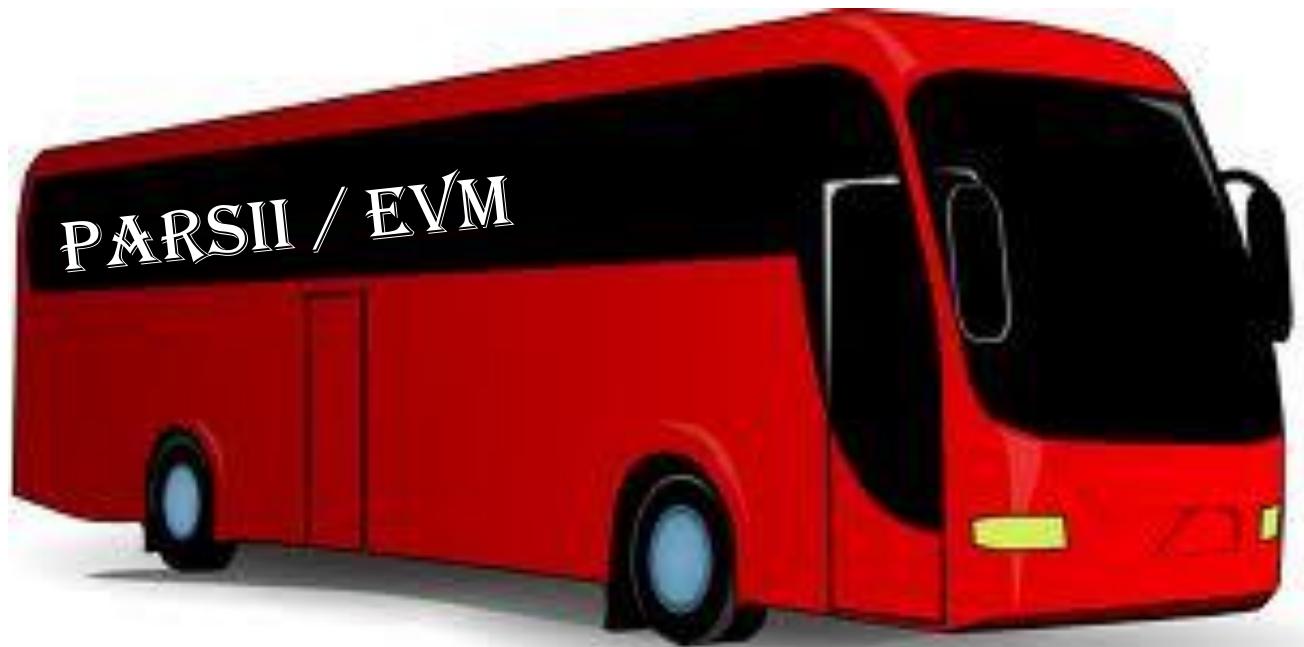




Before We Get Started

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- **Materials**
 - Feedback Forms (Questions, Comments, Suggestions)
 - Appendix see Slides 329-344
- **Let's take a moment to get to know one another**





Why are We Here?

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- Share information relative to new and improved PARS II reports and EVMS surveillance and analysis processes
- Provide information to improve communication and proficiencies working with PARS II and Earned Value Management
- Provide a forum to exchange best practices concerning PARS II and EVMS procedures and implementation across the complex
- Who will benefit from this training?
 - Federal Project Directors (FPDs) and Contractor Project Managers with their respective project control staffs
 - DOE HQ Project Mgmt / APM
 - DOE HQ Project Mgmt Support Office (PMSO) staff





A Word from the Deputy Secretary

- Must not continue “Worst Practice” of breaching baselines with little to no forewarning - Noted in April 11, 2012 meeting with Paul Bosco, Director, APM
- **PARS II Data Quality Policy Memo dated June 19, 2012**
 - Project cost and schedule performance needs to reflect reality
 - Early warning indicators essential
 - Need monthly EACs including a separate FPD Forecast TPC
 - » FPD’s best estimate of final total project cost (i.e. AC + to-go costs + expected REA costs + fee + ODCs + trends + change orders; FPD’s view as Govt. rep independent of contractor EAC; not same as approved TPC)
 - EVMS gamesmanship not tolerated
 - Contractor accountable for timely, accurate, reliable and actionable project and contractor cost, schedule, performance, risk, and forecast data, reports and information
 - Federal project team accountable for oversight and validation
 - COs should incentivize the appropriate behavior relative to project data
 - Restructuring cost and fee arrangements, when appropriate, upon receipt of significant baseline change proposals

PARS II Overview





PARS II Course Outline

- **Account Access**
- **System Requirements**
- **Modules**
 - Oversight and Assessment
 - Project Performance Module
 - Administration Module
 - All Reports
- **Find/Search for a Project**
- **Project Lifecycle in PARS II**
- **Monthly Process**
- **Dashboards**
- **Assessment Roles**
 - FPD
 - PMSO
 - APM (MA-60)
- **Monthly Report and Metrics**
- **SSS Reports**
 - Standard
 - Custom
- **Future Release Changes**
- **PARS II Help Desk**



Welcome to PARS II



Project Assessment and Reporting System (PARS II)

V8.0.20120308

- PARS II is the Department's official "System of Record" for capital asset project performance information. PARS II uses the same data as maintained in our contractors' project management systems, so everyone from the Federal Project Director's staff to the Secretary of Energy will have easy access to the same data.
- The PARS II software application is managed by the MA Office of Acquisition and Project Management (APM) MA-60 and is used by federal and contractor personnel across the nation to record and track the progress of capital asset projects.
- Deployed in October 2010, the goal of this system is to provide accurate, timely, complete, and verifiable project performance data. The system provides greater transparency on the performance of specific projects, and facilitates the efforts of project analysts to analyze, track, and validate the data.



PARS II Documentation

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ENERGY.GOV
Office of Management
SERVICES **OPERATIONAL MANAGEMENT**

SEARCH

About Us OFFICES

PARS II Functions

PROJECT ASSESSMENT

Welcome to PARS II

PARS II is the Department's official "System of Systems" for tracking major construction management systems. Everyone from the Office of Management to the field offices can use PARS II to track the progress of major construction projects.

The PARS II software application is managed by the Office of Management. It allows users to track the progress of major construction projects across the Department.

Questions or comments about PARS II can be directed to the PARS II Help Desk.

PARS II Functions

- [Login to PARS II](#) - to access the PARS II application.
- [Change Password](#) - to change your PARS II application password.
- [Request User Account](#) - to request a PARS II user account via the PARS II Help Desk.
- [PARS II Training](#) - to see the training schedule and course descriptions.
- [PARS II FAQ](#) - to see answers to commonly-asked questions about PARS II.
- [Email PARS II Support](#) - to send an email message to the PARS II Help Desk.

User Documents

- [Release Notes V8.0.20110608](#)
- [PARS II User Guide](#)
- [Configuring Workstations for use with the PARS II System](#)
- [PARS II Reports Catalog](#)
- [PARS II Standard Operating Procedures \(SOP\)](#)
- [PARS II Known Issues and Workarounds](#)
- [PARS II User Account Access Guide](#)
- [PARS II Site End-of-Month Checklist and Processing Schedule](#)
- [PARS II New Reports and Reports With New Reporting Features](#)
- [Report Digital Signature Acceptance](#)
- [EV Data Migration Template](#)
- [PARS II Change Request Form](#)

Contractor Documents

- [PARS II OM* Upload Requirements](#)

<http://energy.gov/management/project-assessment-and-reporting-system-pars-ii>



Request for PARS II Account / Project Access



SERVICES OPERATIONAL MANAGEMENT MISSION

U.S Department of Energy Headquarters
Management Information Systems
Application Gateway



LOGIN

REQUEST ACCESS

ABOUT MIS GATEWAY

HELP

PARS II ACCOUNT ACCESS REQUEST

The account access process for PARS II relies on the Department of Energy's MIS Application Gateway system to verify the requestor's identity and to approve his/her request for access to a specific DOE Headquarters application, such as PARS II. Once approved by the MIS Application Gateway, the PARS II Help Desk Administrator will assign a new PARS II account to the requestor.

REQUEST ACCESS TO PARS II PROJECTS

Users are granted access to projects based on the information supplied during the account creation process. However, should a User require additional access to projects after this process has been completed, a written request (email) from either the FPD of Record for a project or Program FPM is required to the PARS II System Administrator to grant additional project access.

PARS II PASSWORD REQUEST / RESETTING PASSWORD

If a User forgets his or her password, the PARS II Helpdesk can assist:

- Via email to I-Manage.Eas@hq.doe.gov;
- By phone at 301-903-2500 (option 4, then option 5); and
- By phone at 866-834-6246 (option 4, then option 5).

<https://mis.doe.gov/portal/>



PARS II User Account Request



<https://mis.doe.gov/>

U.S Department of Energy Headquarters Management Information Systems Application Gateway

Help Line

--Email
I-MANAGE HelpDesk@hq.doe.gov

--Phone
HQ: 301-903-2500
Toll Free: 1-866-834-6246
Option #4, Option #5

Contractor Project Analyst - Perform EV uploads. View Assigned Projects and Dashboards.

FPD / DFPD - View Assigned Projects. Access to Dashboards and Reports Module. Perform FPD Monthly Assessments.

PM / Analyst - View All Projects for Assigned Organization. Access to Dashboards and Reports Module. Perform Program Monthly Assessments.

Program Office Support - View All Projects for Assigned Organization. Access to Dashboards and Reports Module.

DOE Senior Exec - View All Projects for Assigned Organization. Access to Dashboards and Reports Module.

APM Analyst - View and Edit Rights For All Projects Within the Portfolio. Should Only Be Selected If A Member Of APM.

Interested Party - View All Projects for Assigned Organization. Access to Dashboards and Reports Module.

Application Access Request - PARS II (PROD instance)

Cree,Marc David

(* - Required)

Note : You can only select one Role

* Select User Role:

[User Roles Help \(PDF\)](#)

- Contractor Project Analyst
- Federal Project Director / Deputy FPD
- Program Manager / Analyst
- Program Office Support
- DOE Senior Executive / Management
- OECM Analyst / Alternate Analyst
- Interested Party

* Select your Approving Official:

... Select your approving official ...

NOTE: The DOE Project Number, also called the DOE Project ID, is the project's identification code as reported in the OMB A-11, Exhibit 300 or the program budget submission (e.g., 97-D-102).

DOE Project Name(s) or Project Number(s):

(* required for FPD / Deputy FPD and Contractor Project Analyst roles)

Requestor Comments:

* Please provide a Business reason supporting your need to access PARS II: For example, as an FPD I will use PARS II to analyze schedule and earned value project data.

SUBMIT



PARS II Passwords & Account Suspension

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- **PARS II User temporary Password must be activated within 7 Days**
- **PARS II Passwords must be reset by the User every 90 days**
- **In accordance with the DOE Security Plan, any PARS II account that has inactivity greater than 180 days will be suspended.**
 - Users whose account may be suspended due to inactivity will be sent an email (URGENT – ACTION REQUIRED to Maintain PARS II Account) (5) five business days before suspension.
 - To remain active, Users must login to PARS II within the next seven (7) days.
 - If an account is suspended, Users will be required to follow the normal process of requesting a PARS II account via MIS.
 - This process is documented at:

http://www.management.energy.gov/documents/PARS_II_User_Account_Access_Guide.pdf



PARS II Access - Project Security

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Project Security

Security Level By: Project | Check All | Unlock All | Save | Cancel | Reports

PARS II Access Process

- Federal Sponsor designates User's project access in MIS
- System Administrator assigns a PARS II account to the requestor
- Project access is a multi-step process
 1. Program Approval
 2. System Administrator set-up
 3. Emails sent to User / Requestor

Helpful Hint: The selected MIS User Role is for level of access within a project, not the User's current official DOE title.

FYI: Adding or changing contacts in the Oversight & assessment module **DOES NOT** change a Users security rights. The Administration Module – Project Security is not linked to the Oversight & Assessment Module Project Attributes / Project Contacts tab.

Project Access

- All Users
- Restricted

User Rights

- Reference:
- Read/Write:
- Grant:
- Execute:



Configuring Workstations for PARS II

PARS II requires that a User's workstation be configured to ensure report accuracy. General instructions can be found at:

<http://energy.gov/management/downloads/configuring-workstations-use-pars-ii-system>

**** Administrative Rights are required to perform the installation of the ActiveX Control or Trusted Publisher. ****

PARS II HARDWARE, SOFTWARE AND NETWORK REQUIREMENTS

- Internet Explorer 7 (native mode)
- Internet Explorer 8 (native mode)
- Internet Explorer 9 (native mode or compatibility mode)
- Microsoft Excel 32-bit for 2003, 2007 and 2010 are supported spreadsheet applications

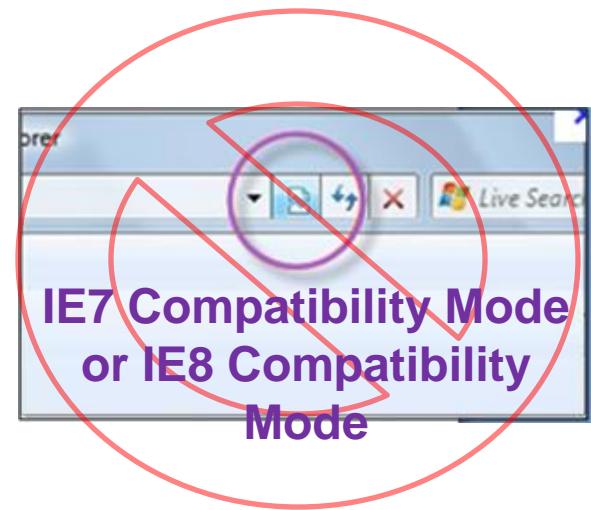
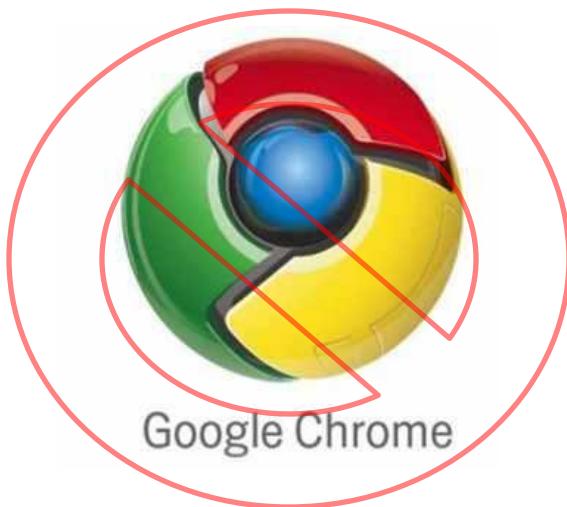
1. Instructions are different for installing the ActiveX Control depending on the operating system - Windows XP or Windows 7.
 - Configuring Workstations for use with the PARS II System, 6/27/2012, **Section 1.2**)
<http://energy.gov/management/downloads/configuring-workstations-use-pars-ii-system>
2. Set MS Office Macro Security to Allow Digitally Signed Content from Dekker LTD for Microsoft Excel 2007 or Microsoft Excel 2003.
 - Configuring Workstations for use with the PARS II System, 6/27/2012, **Section 1.3**)
<http://energy.gov/management/downloads/configuring-workstations-use-pars-ii-system>

Helpful Hint: Make Sure you know the correct system platform and version of Microsoft Office installed on your workstation.

Helpful Hint: Perform the ActiveX Control installation before setting macros for Excel.



PARS II Browser Requirements



SSS Reports - ActiveX and Trusted Publisher Error



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The screenshot shows the PARS II software interface. On the left, there's a navigation bar with sections like OVERSIGHT & ASSESSMENT, PROJECT PERFORMANCE, ALL REPORTS, and SSS Reports. The main area is titled "SSS Reports" and shows a list of shared reports under "Analysis Results". One report is selected, showing a table of data for the months of May through September. A red arrow points from this table to a callout box containing the note about Trusted Publishers.

The screenshot shows an Excel spreadsheet with a "Security Warning" message at the top: "Some active content has been disabled." An "Options..." button is highlighted. A red arrow points from this button to the "Microsoft Office Security Options" dialog box. The dialog box is titled "Security Alert - Macros & ActiveX" and contains sections for "Macros & ActiveX" and "Signature". It also includes a note about a valid digital signature from a trusted publisher. At the bottom, there are three radio buttons: "Help protect me from unknown content (recommended)", "Enable this content", and "Trust all documents from this publisher". The third option is circled in red. A red arrow points from this circle to a callout box containing a helpful hint about workstation configuration.

Microsoft Office Security Options

Security Alert - Macros & ActiveX

Macros & ActiveX

Macros and one or more ActiveX controls have been disabled. This active content might contain viruses or other security hazards. Do not enable this content unless you trust the source of this file.

Note: The digital signature is valid, but the signature is from a publisher whom you have not yet chosen to trust.

[More information](#)

File Path: C:\...\Temp\SSS\Baseline Volatility - Past and Near-Term (PMB Level).xls

Signature

Signed by: Dekker, Ltd.

Certificate expiration: 8/12/2013

Certificate issued by: VeriSign Class 3 Code Signing 2009-2 CA

[Show Signature Details](#)

Help protect me from unknown content (recommended)

Enable this content

Trust all documents from this publisher

[Open the Trust Center](#)

OK

Cancel

Helpful Hint: If a workstation is improperly configured to accept the required ActiveX control, a red "X" will present in the generation box and the report will fail to open within Excel.



SSS Reports - Excel Macro Setting Error



OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

Selected Project: 000390 - 01-D-416 - Waste Treatment and Immobilization Plant (WTP)

Status Date: 01/26/2013 CPP Data As-Of Date: 10/14/2012

Current Critical Decision: CD3 (BCP)

Current User: CREEMAR Logout

SSS Reports All monetary values are in whole dollars.

+ Add - Remove | Copy Paste | View

Shared Reports

- Analysis Reports
- APM DepSec Monthly Reports
- Verification Reports (Portfolio)
- Verification Reports (Project)
- APM Month End
- APM Monthly Status Report
- APM Quarterly Status Report
- APM Red/Yellow Project Report
- APM Red/Yellow Project Report (Portfolio)

Report Date: 8/23/2012
OA Status Date: 1/26/2013
CPP Data As-Of Date: n/a

Home Insert Page Layout Formulas Data Review View

Font Alignment

A B C D E

1 A1 Report Date: 8/23/2012
OA Status Date: 1/26/2013
CPP Data As-Of Date: n/a

2

3

4 APM Analyst:

Ready

Helpful Hint: Currently, a report without proper Macro Security settings will present with an incorrect Report Date and/or incorrect CPP Data As-Of Date.

WS Number	VBS Description	Level	TBCV	TBCV	TACV	BCVS	BCVP	ACVP	Cum C	Cum S
P	Idaho Cleanup Project	1	4,086,973			533,393,000	533,393,000	533,393,000		

DATA ACCURACY WARNING!!!

This workstation is not properly configured for running reports from PARS II and the data in this report may be inaccurate. Please verify your MS Excel Macros setting and rerun the report.

Note: As reports are updated/created, a warning message will be inserted within Excel upon report presentation to alert Users that a Macro Security error exists.



PARS II Log-In: <https://pars2.doe.gov>

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Project Assessment and Reporting System (PARS II)

V8.0.20120308

This Screen Updated 5/21/2012

IMPORTANT NOTE

PARS II Version 8.0.20120308, released on May 19, 2012, has additional security features which prevents unsupported browsers. Compatibility mode, Mozilla Firefox, Google Chrome and IE9 are no longer supported means for accessing PARS II. Internet Explorer using an unsupported browser or browser mode, please contact your Network Administrator. Hardware, software and network recommendations for use with PARS II can be found [in the document at this link](#).

Did You Know?

You can easily see a list of every PARS II project to which you have access?

As soon as you log in to PARS II (from the Projects tab):

- Click on the Find icon on the left side of the PARS II icon bar.
- A Search window will display which allows users to Search By different parameters.
- Single click the Clear icon to remove any previous search criteria that was typed into any field.
- Single click the Search icon.
- After processing/loading, you will be returned to the Projects tab, with a complete list of all PARS II projects to which you have been granted.
- If you wish to see a list of active PARS II projects to which you have been granted access, you may enter the word "Active" in the Project Active field and click the Search icon. You will be returned to the Projects tab with a complete list of all active projects to which you have been granted access.

Report Accuracy Warning!

Users who require access to PARS II reports must ensure that their workstations are properly configured according to the PARS II requirements. Workstations that are not properly configured to PARS II requirements will produce accurate reports. Without this configuration, PARS II report information presented [may be inaccurate](#).

Security Notice

This web site is part of a Federal computer system used to accomplish Federal functions. The Department of Energy uses software programs to monitor this web site to protect information in the system. By accessing this web site, you are expressly consenting to these monitoring activities.

Unauthorized attempts to defeat or circumvent security features, to use the system for other than intended purposes, to deny service to authorized users, to access, obtain, alter, damage, or destroy information, or otherwise to interfere with the system or its operation is prohibited. Evidence of such acts may be disclosed to law enforcement authorities and result in criminal prosecution under the Computer Fraud and Abuse Act of 1986 and the National Information Infrastructure Protection Act of 1996, codified at section 1030 of Title 18 of the United States Code, or other applicable criminal laws.

[Continue](#) [Cancel](#)

Helpful Hint: If you click Cancel, you will be directed to the PARS II documentation homepage.

The server pars2.doe.gov at pars2.doe.gov requires a username and password.

User name:

Password:

OK Cancel



O&A - Projects

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects**
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- Project Overview
- All Attachments

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date:
Current Critical Decision: CD2 (BCP)
Current User: CREEMAR Logout

Helpful Hint: Contractor Project Performance (CPP) is the most recent upload of EV data

Helpful Hint: Current Critical Decision of the project and if a BCP has been entered.

To see a list of projects to which you have access, use the "Find" button in the line above.
The "Select a Level" dropdowns below are to be used for the Administrative purpose of adding a project.

PARS Project ID	DOE Project Number	Project Acronym	Project Name	CDD Date
000726	101961		Plutonium Facility-41 Building Demolition	09/25
000737	17-XX-DD-XXX	SM-43	Demolition of Building South Mesa (SM)-43	01/15
000739	PTX-ASC	ASC	Pantex Administrative Support Complex (ASC)	09/16
000741	PTX-PREP	PREP	Pantex Renewable Energy Project (PREP)	09/16
000750	08-Y12MIE	Microwave	Microwave Deployment	09/23
000751	08-Y12MIE-1	Oven	Oven Consolidation	09/23
000753	11-D-801B	Phase B	TA-55 Infrastructure Reinvestment, Phase II PHASE B	09/29

Helpful Hint: To see all projects you have access , select Find and Search.



Project Attributes

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects**
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date:

Current Critical Decision:
Current User: CREEMAR Logout

Projects

Updating Project : RS-CAP-2012

Save Cancel | Add Contact Edit Contact Remove Contact

Project Attributes **Project Contacts**

Parent Program: DOE>NA>NA>Capital Asset Project

PARS Project ID:	000925
CPP Date:	2/24/2012
CPP Project Number:	RS-CAP-2012
Project Name:	Capital Asset Project
Project Acronym:	CAP
Project Description:	This project has been created to demonstrate the requirements for data entry into the PARS II system.

Project Types

Project Type: 1 - Facility Construc
Nuclear/Non-Nuclear: 2 - Non-Nuclear
Program: NA
CPP Upload Requirements:

Project Categories

Project Activity Status: Active
Project on Hold: No
Project of Special Interest: No
Site Code: LANL

Role **Contact Name** **Certified**

FPD Name	Wayne Bristol	Level 3
FPM		
OECM Analyst		
Prime Contractor		

Helpful Hint: Adding or changing an FPD does not change security access.



Project Attributes - Contacts



Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date:

Current Critical Decision:
Current User: CREAMAR Logout

- OVERSIGHT & ASSESSMENT**
- Capital Projects
 - Projects**
 - Critical Decisions
 - BCPs
 - Monthly Status
 - Budget/Funding
 - KPPs
 - All Attachments

Important Note: The Key Role checkbox, designated by the System Administrator, allows a Key Role to be designated and appear on the Project Attributes tab.

Helpful Hint: Only use the Add Contact Icon for new/additional roles that are not one of the 4 standard ones.

Updating Project : RS-CAP-2012

Save | Cancel | **Add Contact** | Edit Contact | Remove Contact

Project Attributes | **Project Contacts**

Role	Title	Contact Name	ORG	Certification	Date Assigned	Date Unassigned
FPD Name	Federal Project Director	Wayne Bristol		Level 3	02/24/2012	
FPM						
OECM Analyst						
Prime Contractor						

Code

- AE
- Contractor Analyst/Project Controls
- Contractor PM
- Deputy FPD
- Deputy FPM
- FPD Name
- FPM
- OECM Analyst
- OECM Analyst (Alt)
- PARS Help Desk
- PARS System Admin
- Prime Contractor
- FPD-Pending AE Approval**
- FPD-Pre CD1**
- PSO
- SAE
- US

Cancel | Find Contact

AE

Daniel Hitchcock

2/9/2012

0

Key Contact Role

Helpful Hint: These are the 4 Key Roles standard for each project. Edit these roles, **do not** use the Add Contact Icon to enter a new one. Once the Date Unassigned is entered a new blank role is created automatically, which should then be edited.

Helpful Hint: FPD-Pending AE Approval and FPD-Pre CD1 were recently added to the "Role" dropdown box.



O&A – Critical Decisions

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions**
- KPPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD2
Current User: CREEMAR Logout

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision: CD2-Approve Performance Baseline FPO: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date	3/1/2012
CD2: Date Approved	2/23/2012
CD2: Approved By	John Smith
CD2: Date Received By OEM	2/24/2012
CD2: Approval Notes	(Text area)
CD2: TPC (Approved)	125,000,000
CD2: CD-4 Date (Approved)	9/30/2016
Orig. DOE Schedule Contingency (in days)	40
Orig. DOE Cost Contingency	5,000,000
Bunk Costs	0
Orig. DOE ODOs	4,000,000
Orig. Contractor Fee/Profit	3,000,000
Orig. Contractor MR	6,000,000
PMB	107,000,000
Calculated TPC	125,000,000
Updated By	CREEMAR
Updated Date	2/27/2012 7:59:15 AM

Planned Dates:

CD3A	(Text area)
CD2	(Text area)

Helpful Hint: The CD Date Approved triggers the Current Critical Decision displayed.



O&A Module - BCPs

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U.S. DEPARTMENT OF ENERGY PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs**
- Monthly Status
- Budget/Eunding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

BCPs

Select BCP: BCP-01 FPD: Wayne Bristol Certification: Level 3

BCP Detail:

BCP Title	01
BCP Change Directed	<input type="checkbox"/>
Request Submission Date	3/21/2012
BCP Date Approved	3/21/2012
BCP Approved By	John Smith
BCP Date Received By OEMC	9/16/2014
BCP Approval Notes	
BCP: TPC (Approved)	131,000,000
BCP: Change In Cost	6,000,000
BCP: CD-4 Date (Approved)	2/28/2017
BCP: Change In Schedule (In days)	151
BCP: Change In Scope (Increase=Scope Added, Decrease=Scope Removed, None=No Change In Scope)	None
DOE Schedule Contingency (In days)	40
DOE Cost Contingency	6,000,000
Sunk Costs	0
DOE ODCs	5,000,000
Contractor Fee/Profit	4,000,000
Contractor MIR	7,000,000
PMB	109,000,000
Calculated TPC	131,000,000
Updated By	CREEMAR
Updated Date	3/22/2012 7:52:26 AM

Helpful Hint: Schedule Contingency should be entered in calendar days.



O&A Module - AE Modification

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

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- BCPs**
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

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HELP

BCPs

Add | Remove | Save | Cancel | KPP | Attachments | Reports

Select BCP:

BCP Detail:

Planned Dates:

Select Revision Type:

OK Cancel

BCP-Add BCP
BCP-Add BCP
AE-MOD-Acquisition Executive Mod

Add | Edit | Remove | Save | Cancel | KPP | Attachments | Reports

Select BCP:

AE-MOD- FPD: Richard Craun Certification: Level 2

BCP Detail:

Title

Approval Date

Approved By

Approval Notes

BCP 02 02/01/2011
BCP 01 01/02/2009
BCP 03 - Unapproved 05/25/2012
AE-MOD 2 02/03/2011
AE-MOD 1 01/03/2009
AE-MOD 3 - Unapproved

Important Note: The dropdown screen is structured to reflect Approved BCPs (most recent approval first), Unapproved BCPs, Approved AE Mods (most recent approval first) and Unapproved AE Mods.

Helpful Hint: AE Modifications are listed in the dropdown screen after all Approved and Unapproved BCPs.



O&A Module – Monthly Status – FPD

U.S. DEPARTMENT OF ENERGY
PARS II

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HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/28/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: CD3

Current User: CREEMAR Logout

Monthly Status

Edit | Save | Cancel | **Attachments** | Reports

Select Monthly Status Type: **FPD - Monthly Status - FPD**

FPD: Wayne Bristol Certification: Level 3

Monthly Status Detail:

Forecast For TPC	129,500,000
Forecast Completion	6/18/2017
Has the CPP data been reviewed?	<input checked="" type="checkbox"/>
Is the OA data current?	<input checked="" type="checkbox"/>
FPD CPP Data As-Of Date	12/25/2011
Assessment Narrative	
FPD Assessment RYG	Green
Program Assessment RYG	
OECM Assessment RYG	
Cost Contingency Used	500,000
Cost Contingency Remaining	6,000,000
Schedule Contingency Used (In days)	5
Schedule Contingency Remaining (In days)	40
Profit Fee Used	750,000
Profit Fee Remaining	4,000,000
DOE ODC Used	1,000,000
DOE ODC Remaining	5,000,000
Updated By	CREEMAR
Updated Date	5/29/2012 8:06:46 PM

Add/edit Narrative, Hyperlink or Document

Document | Save | Cancel

CODE	DESCRIPTION
MR Transaction Log	Mandatory
Variance Analysis Narrative	Mandatory

WARNING:
Do not upload pre,
Please contact DIO
Nuclear Informatics

Document: Browse...

Helpful Hint: To view all prior period assessments go to the Project Reports Folder and run:
Assessments by Project – Current & Prior Periods

Helpful Hint: The correct Contractor Project Performance (CPP) Data As-Of Date must be selected for accurate reporting.

Assessment due by the 3rd working day of the Month.



O&A Module – Monthly Status – Program



OVERSIGHT & ASSESSMENT

- [Capital Projects](#)
 - [Projects](#)
 - [Critical Decisions](#)
 - [BCPs](#)
 - [Monthly Status](#)
 - [Budget/Funding](#)
 - [KPPs](#)
 - [All Attachments](#)
 - [Project Overview](#)
- PROJECT PERFORMANCE**
- ALL REPORTS**
- ADMINISTRATION**
- HELP**

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: CD3

Current User: CREEMAR Logout

Monthly Status

[Edit](#) | [Save](#) | [Cancel](#) | [Attachments](#) | [Reports](#)

Select Monthly Status Type:

Program - Monthly Status - Program

FPD: Wayne Bristol Certification: Level 3

Monthly Status Detail:

Program Assessment RYG

Green

FPD Assessment RYG

Green

OECM Assessment RYG

Forecast For TPC

131,000,000

Forecast CD4 Completion

2/17/2017

Is the OA data current?

PO Status Assessment
Narrative

Updated By

CREEMAR

Updated Date

5/29/2012 8:10:31 PM

Helpful Hint: Informational (view) Only

Assessment due by the 6th
working day of the Month.



O&A Module – Monthly Status – APM

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U.S. DEPARTMENT OF ENERGY PARS II KCA

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

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HELP

Monthly Status

Edit | Save | Cancel | Attachments | Reports

Select Monthly Status Type: OECM - Monthly Status - OECM FPD: Wayne Bristol Certification: Level 3

Monthly Status Detail:

OECM Assessment RYG	Green
FPD Assessment RYG	Green
Program Assessment RYG	Green
Forecast For TPC	129,600,000
Forecast CD4 Completion	6/30/2017
Assessment Narrative	(Large Text Area)
Cost Assessment RYG	Green
Schedule Assessment RYG	Green
Updated By	CREEMAR
Updated Date	5/29/2012

Helpful Hint: Informational (view) Only

Initial Assessment due by the 9th working day of the Month.



O&A Module – Budget / Funding

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U.S. DEPARTMENT OF ENERGY PARS II

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PROJECT PERFORMANCE

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HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:
Current Critical Decision: Closeout (BCP)
Current User: CREAMAR Logout

Budget/Funding

Create New Profile Edit Profile Span Remove Profile Save Edit Profile Values Cancel Attachments Reports

Budget / Funding Selection

Funding Profile: IPL-DOE Integrated Priority List Budget Year: FY 13 Start Date: 10/1/2010 End Date: 9/30/2017

Comparison Profile: Funding Profile Notes:

Budget /Funding

	Description	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	Total
-	TEC Total	234,403,000	128,476,000	80,512,000	37,091,000	83,772,000	84,949,000	85,765,000	734,968,000
	TEC Design	234,403,000	128,476,000	80,512,000	37,091,000	83,772,000	84,949,000	85,765,000	734,968,000
	TEC Construction	0	0	0	0	0	0	0	0
-	OPC Total								
	OPC (Excluding D&D)	0	0	0	0	0	0	0	0
	OPC (D&D)	0	0	0	0	0	0	0	0
	TOTAL Request (TPC)	234,403,000	128,476,000	80,512,000	37,091,000	83,772,000	84,949,000	85,765,000	734,968,000



O&A Module – Budget / Funding

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U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

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HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)
Current User: TRNCONT05 Logout

Budget/Funding All monetary values are in whole dollars.

Create New Profile Edit Profile Span Remove Profile Save Edit Profile Values Cancel Attachments Reports

Budget/Funding Selection

Funding Profile: IPL-DOE Integrated Priority List

Comparison Profile:

Edit Profile Span

Save Cancel

Funding Profile: IPL-DOE Integrated Priority List
Budget Year: FY 13
Start Date: 10/1/2010
End Date: 9/30/2017

Type	Description
IPL	DOE Integrated Priority List
OMB	Office of Management and Budget
CBR	Congressional Budget Request
APPROP	Appropriations
CD2	Performance Baseline (CD2)
AE-MOD	1
BCP	01



O&A Module – KPPs (Key Performance Parameters)

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U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 12/30/2011
Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

KPPs

Add Edit View Remove | Clear Filter | Attachments | Reports

KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope	KPP Validated Yes/No
02	01	design & treatment capacities - HLW pretreatment		
03	01	design & treatment capacities - LAW vitrification		
04	01	design & treatment capacities - HLW vitrification		
05	01	LAB -		
06	01	BOF -		
	01	design & treatment capacities - LAW pretreatment		

The 'KPPs' link in the left navigation bar is highlighted with a yellow circle and connected by a blue arrow to the 'KPPs' section of the main content area.

NOTE: This screen should be used to View all KPPs, not to Add or Edit a KPP.

To add or edit a KPP go directly to the CD or BCP screen.



O&A Module – All Attachments

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

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- BCPs
- Monthly Status
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- KPPs
- All Attachments

Project Overview

PROJECT PERFORMANCE

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HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

All Attachments

View Reports

Drag a column header here to group by that column

Code	Type	Title	Doc #	Version
Project Definition	Document	FPD - Appointment	Bristol	2008-
Project Definition	Narrative	Description		
Project Status FPD	Narrative	ASSESSMENTNARRATIVE		
Project Status FPD	Narrative	CORRECTIVEACTIONNARRATIVE		
Project Status OEM	Narrative	OVERALLASSESSMENTNARRATIVE		
Project Status Program	Narrative	POST		

Helpful Hint: To see the most recent Narrative pick and then click on View

Helpful Hint: To view attachment click on title and then Open.

Helpful Hint: Attachments can only be Viewed on this screen, not Added.

Helpful Hint: To see all prior assessments go to SSS Reports; Project Reports; Assessments by Project – Current & Prior Periods

STOP

NO OUO or UCNI

Expanded View

Code	Type	Title	Doc #	Version	Description	Uploaded By	Uploaded Date	Updated By	Updated Date
Project Definition	Document	FPD - Appointment	Bristol	2008-07-04	Signed Approval Memo - FPD Designation	Marc Cree	3/13/2012 11:56:11 AM	Marc Cree	3/13/2012 11:56:48 AM



O&A Module – Project Overview

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

- Capital Projects
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- All Attachments
- Project Overview** (highlighted)
- Close Period

PROJECT PERFORMANCE

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HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Project Overview

Helpful Hint: This report is an Excel file, not a Dashboard. The report is also available via SSS Reports; Project Reports; Project Overview

Report was successfully generated.

Reopen Report

Project Overview	
Project Identification	
Points of Contact	
ES II Project ID: 000925	Federal Project I Philip [Tess] Park, Lead I (202) 541-8372, tess.park@energy.gov
DOE Project Num: ES-D-485	Program POC Craig Welsh (202) 506-3555, craig.welsh@hq.doe.gov
Project Name: Salt-Water Processing Facility (SWPF)	DOE Analyst Rick Ellifill (202) 287-1528, Rick.Ellifill@hq.doe.gov
Project Type: 1-Facility Construction	Contractor PIETG ESS Division, Certified Parsons Infrastructure & Technology Group, Inc.
Baseline: No	
Project Status: Under On Hold: No	
Special Interests: No	
Program: EM Site: Savannah River Site (SRS)	
Critical Decisions	
Planned Dates / Actual Dates	
Current CD1: CD9	Planned Dates: n/a Actual Dates: Jan 2004
Current BCP1: PCP-01	Planned Dates: n/a Actual Dates: Aug 2007
ES Approved By: Jeffrey Kupfer	Planned Dates: n/a Actual Dates: Sep 2007
ES Approved By: Jeffrey Kupfer	Planned Dates: n/a Actual Dates: Jan 2005
TPC [Approved]: \$1,355,000,000	Planned Dates: Sep 2007 Actual Dates: Sep 2007
Plan [Approved]: Oct 2015	Planned Dates: n/a Actual Dates: n/a
Current Assessments - POST CD-2	
Current DOE Assessment Periods: May 2012	
PPB Assessment: Rev 4	PPB Assessment: Rev 4
Range From Priorit: No	Range From Priorit: 3
Forecasted TPC: \$1,483,500,000	Forecasted TPC: \$1,658,000,000
Forecasted CD4: 0/12/15	Forecasted CD4: 0/12/15
Performance Baseline - POST CD-2	
Performance Snapshot - POST CD-2	
CD1 TPC Range: \$375,000,000 - \$401,000,000	Performance Periods: April 2012
Original CD2 TPC: \$381,000,000	CD1 CD2-15: 100% Complete
1 Approved TPC: \$1,355,000,000	CD1 CD2-15: Rev 4
Forecasted TPC: \$1,658,000,000	CD1 CD2-15: Rev 4
Forecasted TPC: \$1,483,500,000	CD1 CD2-15: Rev 4
Initial CD4 TPC:	CD1 CD2-15: Rev 4
Original CD4: May 2015	CD1 CD2-15: Rev 4
1 Approved CD4: Oct 2015	CD1 CD2-15: Rev 4
Forecasted CD4: Oct 2015	CD1 CD2-15: Rev 4
Forecasted CD4: Oct 2015	CD1 CD2-15: Rev 4
1 Approved Date:	CD1 CD2-15: Rev 4
Source [KPPs]: 1 KPPs Unlocked. See PROJECT KPPs for details.	CD1 CD2-15: Rev 4
TREND	
TCB1: 100%	TCB2: 100%
TCB3: 100%	TCB4: 100%
\$1,320,000,000	\$1,320,000,000
\$1,320,000,000	\$1,320,000,000
\$1,320,000,000	\$1,320,000,000



Project Overview - Top Half

Report Date: 5/30/2012
Project: 000389 - Salt Waste Processing Facility (SWPF)
OA Status Date: 5/26/2012 - CPP Data As Of Date: 4/27/2012



Project Overview

Project Identification

PARS II Project ID: 000389
DOE Project No: 05-D-405
Project Name: Salt Waste Processing Facility (SWPF)
Project Type: 1 - Facility Construction
Nuclear: No
Project Status: Active
On Hold: No
Special Interest: No

Program: EM
Site: Savannah River Site (SRS)

Points of Contact

Federal Project Director
Phillip (Tony) Polk, Level 4
(803) 641-8972, tony.polk@srs.gov
Program POC
Craig West
(202) 586-9559, craig.west@hq.doe.gov
APM Analyst
Rick Elliott
(202) 287-1520, Rick.Elliott@hq.doe.gov
Contractor
PI&TG ESS Division, Certified
Parsons Infrastructure & Technology Group, Inc.

Critical Decisions

Current CD: CD3
Current BCP: BCP-01

CD3 Approved By: Jeffrey Kupfer
BCP-01 Approved By: Jeffrey Kupfer

TPC (Approved): \$1,339,000,000
CD4 Date (Approved): Oct 2015

	Planned Dates	Approved Dates
CD0:	n/a	Jun 2001
CD1:	n/a	Aug 2004
CD2:	n/a	Sep 2007
CD3:	n/a	Jan 2009
CD3A:	Sep 2007	Sep 2007
CD4:	Oct 2015	
Closeout:	n/a	



Project Overview - Bottom Half

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Current Assessments - POST CD-2

Current DOE Assessment Period: May 2012

FPD Assessment: **Red**

Change from Prior: No

FPD Forecasted TPC: \$1,489,548,000

FPD Forecasted CD4: Oct 2015

APM Assessment: **Red**

of Months at Red: 3

APM Forecasted TPC: \$1,650,000,000

APM Forecasted CD4: Oct 2015

Performance Baseline - POST CD-2

	Low	High
CD1 TPC Range:	\$375,000,000	\$400,000,000
Original CD2 TPC:	\$900,000,000	
Latest Approved TPC:	\$1,339,000,000	
APM Forecasted TPC:	\$1,650,000,000	
FPD Forecasted TPC:	\$1,489,548,000	
Actual CD4 TPC:		
Original CD4:	Nov 2013	
Latest Approved CD4:	Oct 2015	
APM Forecasted CD4:	Oct 2015	
FPD Forecasted CD4:	Oct 2015	
CD4 Approved Date:		

Scope (KPPs): 3 KPP(s) entered.

See PROJECT KPPs for details.

Performance Snapshot - POST CD-2

EV Performance Period: April 2012

*Cum CPI/SPI Based on Performance Since 07/27/2007

Cum CPI: 0.96 Cum SPI: 0.94 % Complete: 76%

	At BCP-01	Remaining
Contingency (\$):	\$116,800,000	\$114,360,097
Contingency (Days):	420 days	226 days
DOE ODCs:	\$45,500,000	\$0
Profit/Fee:	\$61,800,000	\$13,032,096
Contractor MR:	\$158,000,000	\$7,930,515
	At BCP-01	Current
Contractor PMB:	\$957,000,000	\$1,204,221,496
Contractor EAC:		\$1,605,524,522

IEAC1	IEAC2	IEAC3
AC + (BCWR / CPI)	AC + BCWR / CPI *	AC + (BCWR / Avg CPI)
\$1,250,643,950	\$1,268,935,721	\$1,361,942,357



Project Performance Module - Dashboards

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2011 CPP Data As-Of Date: 12/30/2011
Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

1. **Project Data Upload**
1 CPR Dashboard
2 Schedule Dashboard
3 Timephased Dashboard
MR Dashboard
CPR Entry

2. **Drilldown Reports**

3. **Drilldown Reports**

4. **Drilldown Reports**

Project: 12/30/2011 WBS Slip Drilldown Reports

WBS Number	Description	Incremental					Cumulative					At Complete		
		BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
1	Undefined	21,468,073	18,924,998	20,517,103	-2,543,076 (Y)	-1,592,105 (G)	883,197,788	853,128,800	863,982,971	-30,068,988 (G)	-10,854,170 (G)	1,203,931,397	1,260,800,606	-56,869,209 (G)
UB	Undistributed Budget											0	0	
PMB	Performance Measurement Baseline	21,468,073	18,924,998	20,517,103	-2,543,076 (Y)	-1,592,105 (G)	883,197,788	853,128,800	863,982,971	-30,068,988 (G)	-10,854,170 (G)	1,203,931,397	1,260,800,606	-56,869,209 (G)
MR	Management Reserve											8,220,611		
	Totals:	21,468,073	18,924,998	20,517,103	-2,543,076 (Y)	-1,592,105 (G)	883,197,788	853,128,800	863,982,971	-30,068,988 (G)	-10,854,170 (G)	1,212,152,008	1,260,800,606	-48,648,598 (G)

Project: 12/30/2011 WBS Slip Drilldown Reports

Project	Description	Start Date Slips (Days)				End Date Slips (Days)				ETI
		< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	
1	Undefined	5,818	450	421	2,491	5,144	470	461	3,105	1.90 (R)

Project: 12/30/2011 WBS Drilldown Reports

WBS Number	Description	Element	2011				2012				2013				ROP	Total					
			Prior	9	10	11	12	1	2	3	4	5	6	7			8	9	10	11	12
1	Undefined	S	804,059,049	22,241,215	18,809,937	18,819,515	21,468,073	20,163,699	20,852,350	23,976,371	18,350,942	23,356,668	23,135,919	15,382,551	19,141,145	14,027,093	11,897,174	15,689,997	12,028,888	102,750,810	1,203,931,397
		P	779,898,228	21,188,329	18,673,840	18,643,406	18,924,998														853,128,800
		A	778,151,089	27,973,185	18,624,458	18,717,155	20,517,103														853,982,971
		EAC	778,151,089	27,973,185	18,624,458	18,717,155	20,517,103	18,529,916	22,322,749	27,234,946	19,385,259	18,933,182	23,423,368	17,136,380	21,282,412	15,169,111	18,499,263	23,385,742	14,171,324	159,384,003	1,260,800,606



MR Dashboard

(Slide 100 provides further detail)

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD3 (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

- Project Data Upload
- CPR Dashboard
- Schedule Dashboard
- Timephased Dashboard
- MR Dashboard** (highlighted with a yellow circle)
- CPR Entry

ALL REPORTS

ADMINISTRATION

HELP

Helpful Hint: Click on the Green checkmark to view detail.

MR Dashboard

Project: 000389 12/30/2011

Attachment	Transaction	Balance	Credit	Debit	REMARKS
	11/25/2011	8,949,946.08	.00	822,386.19	WBS:2.3.5.1.1 OBS:07 Activity: Resource:
	11/25/2011	9,772,332.27	822,386.17	.00	WBS:2.3.4.01.01 OBS:05 Activity: Resource:
	9/30/2011	8,949,946.10	.00	46,496.77	WBS:5.0 OBS: Activity: Resource:
	9/30/2011	8,996,442.87	262,025.00	.00	WBS:4.2 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	.00	.00	WBS:4.2 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	.00	39.46	WBS:2.4.5.04.95 OBS:04 Activity: Resource:
	5/27/2011	8,734,457.33	.00	36.22	WBS:2.4.5.04.08 OBS:04 Activity: Resource:
	5/27/2011	8,734,493.55	214.81		
	5/27/2011	8,734,278.74	.00		
	5/27/2011	8,734,278.74	.00	150.00	
	5/27/2011	8,884,278.74	2,056,880.20		
	5/27/2011	6,827,398.54	.00	1,143.87	
	5/27/2011	7,971,272.96	.00	318.00	
	5/27/2011	8,289,272.96	.00	327.23	

Helpful Hint: If the MR Dashboard is not populated, the Contractor is not uploading this data via the CPP process.

Attachment Detail

MR Dashboard Transaction Narrative on 11/25/2011

Cancel

Changes: Create a System Turnover Coordination Team
Change Description and Justification:

This PCR will create a System Turnover Coordination Team work package over the Construction Staff account. Based on the current status of the project, a shift in the need for a constructability review team was no longer required. These personnel will be transferred to the Construction group to prepare for system testing and coordination. This group will prepare turnover sequences in detail to support an efficient transition between the construction installation team to the Commissioning team. The budget for this new work package will come from Management Reserve.
There are no schedule impacts as a result of this change.

Risk Assessment Management Plan Identified Risk:
Risk Number: N/A
Risk Description: N/A



Project Performance Module



OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

5 Project Data Upload

CPR Dashboard

Schedule Dashboard

Timephased Dashboard

MR Dashboard

6 CPR Entry

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/28/2011 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD4 (BCP)

Current User: CREEMAR Logout

5

Process	Data Type	Format	File	Status
Overwrite	EV CPR	ANSIX12		Browse...
None	Complete Project	Access	1_Copy of Copy of SRS_Parsons_SWPF_2011_12	Warnings

6

Edit				Save	Cancel	Attachments	Add	Remove	Delete Performance Period Data	Clear Data
Status Date:	1/31/2012	Baseline Name:		Submitted By:	PHILPPA	Submitted Date:	3/21/2012 5:41:21 PM	Status:	Completed	
Reviewer Use Only										
Reviewed By:		Reviewed Date:	1/1/0001 12:00:00 AM	Disposition:	Submitted					
WBS	OBS	Incremental		Cumulative						
Number	Description	Parent	BCWS	BCWP	ACWP	BCWS	BCWP			
1	Ground-Based Dark Energy Experiment		140,000.00	130,000.00	130,000.00	33,480,000.00	33,390,000.00			

Project Performance Module

CPP (Contractor Project Performance) Upload



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Screenshot of the PARS II Project Performance Module (CPP) upload interface.

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2011 CPP Data As-Of Date: 12/15/2011

Current Critical Decision: CD3 (BCP)
Current User: TRNCONT05 Logout

Project Data Upload

Status Date: 4/24/2012 (circled in red)

Important Note: During an upload, a Status Date entered on the Project Upload screen that does not match the Status Date in the upload file will return an error report instead of warnings. The report gives a clear error message that the Status Date entered does not match the Status Date in the upload file along with the respective dates for each item so the issue can be corrected.

Import Log - Microsoft Internet Explorer provided by DOE COE

File Edit View Favorites Tools Help

Import Log

Project Name: 000396
Status Date: 4/24/2012
File: 2_1_NewLUSIMar2011.mdb

Run Time: 5/29/2012 3:09:02 PM
Submitted by: TRNCONT05

Upload Error/Warning Report

Message	Line Number
The import table(EV_CPR_Header) has a 3/31/2011 Status Date, and the selected Status Date is 4/24/2012, which does not match. This condition must be corrected in order to import the file.	



All Reports Module - SSS Reports

**U.S. DEPARTMENT OF ENERGY
PARS II**

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports (highlighted with a yellow circle)

Acronym: Sort, Select and Summarize (SSS)

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/28/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: Closeout (BCP)

Current User: CREEMAR Logout

SSS Reports

Shared Reports

- + Analysis Reports
- APM DepSec Monthly Reports
 - Verification Reports (Portfolio)
 - + Assessments - Current Period Detail (Portfolio)
 - + Assessments Completion Status (Portfolio)
 - + CPP Upload Status Report
 - + Project Dashboard
 - + Project Dashboard - Prior Period
 - + Project Summary by Program
 - + Project Summary for Memos
 - Verification Reports (Project)
 - + APM Red/Yellow Detail 1 - 6 Month Trend
 - + APM Red/Yellow Detail 2 - 12 Month Plan v
 - + APM Red/Yellow Detail 3 - Contractor Comp
 - + APM Red/Yellow Detail 4 - TPC To-Go
 - + APM Red/Yellow Project Report
 - + Assessments by Project - Current & Prior P
 - + Project Quick View Mgmt Report
 - + Project Quick View Report
 - APM Month End
 - + APM Monthly Status Report
 - + APM Quarterly Status Report
 - + APM Red/Yellow Project Report (Portfolio)
 - + CPP Upload Status Report

Folder Name: APM DepSec Monthly Reports

Folder Description:

Import Report File:

Helpful Hint: Steps to print a report:
1. Expand Plus sign
2. Click on report
3. Click View



SSS Reports - Analysis

U.S. DEPARTMENT OF ENERGY
PARS II

OVERSIGHT & ASSESSMENT

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ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)

Current User: CREEMAR Logout

SSS Reports

+ Add | Paste

Shared Reports

- Analysis Reports **(circled)**
 - + Baseline Volatility - Past and Near-Term (PMB)
 - + CPI vs. TCPI (PMB Level)
 - + EV Data Validity (WBS Level)
 - + EV Project Summary (6-Mo; PMB Level)
 - + Funding Status (Monthly at Project Level)
 - + IEAC Analysis (WBS Level)
 - + MR Balance v. CV, VAC, & EAC Trends
 - + Management Reserve (MR) Log
 - + Performance Analysis (WBS Level)
 - + Performance Index Trends (WBS Level)
 - + Retroactive Change Indicator (6-Mo, PMB Level)
 - + Schedule Missing Logic (Activity Level)
 - + Schedule Relationship Types (Activity Level)
 - + Variance Analysis Cumulative (WBS Level)
- + APM DepSec Monthly Reports
- + APM Planning
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
- + Reports For Testing

Note: This is the newest folder created for EV Analysis.

Report Title: Baseline Volatility - Past and Near-Term (PMB Level)

Report Subtitle: V-2012-12-04

Report Description: Demonstration of changes made to the time-phased baseline (baseline volatility) over a most recent 6 month period as well as near-term 6 month period using contractor time-phased

Update Report File:

Created by: PEDANIG

Modified by: N/A

Last viewed by: PRATT on 1/4/2013 1:42:03 PM



All Reports - Reports Button

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:

Projects

To add a Project: Select Level 1, Select Level 2, Select Level 3, Then click the ADD button.

Select a Level 1 Program Office: [dropdown]
Select a Level 2 Program Organization: [dropdown]
Select a Level 3 Capital Asset Project: [dropdown]

ALL REPORTS

Helpful Hint: The Reports button on multiple screens gives you the ability to run selected reports without having to navigate to the SSS Reports module.

Helpful Hint: The Verification Reports folder is actually a subfolder of the APM DepSec Monthly Reports folder.

SSS Reports

- Projects Reports
 - Shared Reports
 - APM DepSec Monthly Reports
 - APM Red/Yellow Project Report
 - Enterprise Reports (Portfolio)
 - Project Attributes
 - Project Reports
 - Project Attributes
 - Project Detail
 - Project Overview
 - Project Quick View Mgmt Report
 - Project Quick View Report
 - Verification Reports (Project)
 - APM Red/Yellow Project Report
 - Project Quick View Mgmt Report
 - Project Quick View Report

CDO Date

Subproject	CDO Date
ISIL	12/15/
Advanced Photon Source (APS)	01/04/
	02/26/
	02/26/
	02/26/
	02/24/

Close

The screenshot displays the PARS II software interface. On the left, a sidebar lists various reporting modules like Capital Projects, Projects, Critical Decisions, BCPs, etc., with 'ALL REPORTS' highlighted. A large orange circle highlights the 'ALL REPORTS' button. A yellow arrow points from this button to a callout box containing the text: 'Helpful Hint: The Reports button on multiple screens gives you the ability to run selected reports without having to navigate to the SSS Reports module.' On the right, the main workspace shows a 'Projects' screen with a table of project IDs and names. A blue arrow points from the 'Reports' button at the top of this screen to another callout box containing the text: 'Helpful Hint: The Verification Reports folder is actually a subfolder of the APM DepSec Monthly Reports folder.' A detailed 'SSS Reports' menu is overlaid on the workspace, showing categories like 'Projects Reports', 'Shared Reports', 'Project Reports', and 'Verification Reports (Project)' with their respective report options.



Project Find/Search

Page 44

- **Program Capital Asset Dropdowns**
- **Locate a Project or Entire Project List**
 - Ctrl F
 - Find Icon
 - Search Icon
- **Search Criteria**
 - Project Activity Status, Contact Last Name, Program, Site Code
- **Project List Formatting / Sorting**



Capital Asset Dropdowns

U.S. DEPARTMENT OF ENERGY
PARS II

OVERSIGHT & ASSESSMENT

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Projects

Find | Add | Edit | Remove | View | Attachments | Reports | Change Program | Save Configuration

To see a list of projects to which you have access, use the "Find" button in the line above.
The "Select a Level" dropdowns below are to be used for the Administrative purpose of adding a project.

Select a Level 1 Program Office: Select a Level 2 Program Organization: Select a Level 3 Capital Asset Project:

- BPA - Bonneville Power Administration
- EERE - Office of Energy Efficiency & Renewable E
- EIA - Energy Information Administration
- EM - Office of Environmental Management
- FE - Office of Fossil Energy
- LM - Office of Legacy Management
- NA - National Nuclear Security Administration
- NE - Office of Nuclear Energy
- OE - Office of Electricity Delivery and Energy Relia
- RW - Office of Civilian Radioactive Waste Manager
- SC - Office of Science
- SEPA - Southeastern Power Administration
- SWPA - Southwestern Power Administration
- WAPA - Western Area Power Administration

Helpful Hint: Dropdowns on the Project List screen are for the Administrative purpose of adding a project to the PARS II System - **NOT to Find your list of projects**



Project Search – Ctrl F

Find: TEAM

Previous Next Options ▾ 8 matches

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 03/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: CD3 (BCP)

Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Eunding
- KPPs
- Project Overview
- All Attachments

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Projects

To see a list of projects to which you have access, use the "Find" button in the line above.
The "Select a Level" dropdowns below are to be used for the Administrative purpose of adding a project.

Select a Level 1 Program Office: Select a Level 2 Program Organization: Select a Level 3 Capital Asset Project:

PARS Project ID	DOE Project Number	Project Acronym	Project Name	CD0 Date
000600	MIE-03-SC-CNMM	CNM	Center for Nanoscale Materials (CNM)	01/01,
000601	05-D-601		Compressed Air Upgrades Project	01/01,
000602	MIE-06-SC-TEAM	TEAM	Transmission Electron Aberration-Corrected Microscope (TEAM)	01/01,
000603	SC-1		Run IIb CDF Detector Project	01/01,
000607	SC-2		Run IIb D-Zero Detector Project	01/01,
000608	XX-SC-XXX-1		U.S. A Toroidal Large Hadron Collider Apparatus, U.S. ATLAS	01/01,
000610	XX-SC-XXX-2		U.S. Compact Muon Solenoid, U.S. CMS	01/01,



Project - Find / Search

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:
Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Projects

Find Add Edit Remove View Attachments Reports Change Program Save Configuration

To see a list of projects to which you have access, use the "Find" button in the line above.
The "Select a Level" dropdowns below are to be used for the Administrative purpose of adding a project.

Select a Level 1 Program Office: Select a Level 2 Program Organization: Select a Level 3 Capital Asset Project:

Search Cancel Clear

Helpful Hint: Single click the Clear icon to remove any previous search criteria that was typed into any field.

Project Types

Program

Project Categories

Project Activity Status

Site Code

Helpful Hint: To see a list of projects that you are listed within the OA Project Contacts, type your Last Name.

Helpful Hint: To see a list of only currently Active projects, type "Active" in the Project Activity Status

Boolean Search

Site Code: Ames, ANL, Ashtabula, Bayou Choctaw, BNL, Carlsbad, ETEC, ETTP, Fernald, FNAL, INL, KAFB, KAPL, KCP, LANL, LBNL, LLNL, Miamisburg, Moab, MSU, NETL (PA), NETL (WV), Nevada Office, NREL, NNSS, NTS, Oak Ridge, ORNL, ORP, Paducah, Pantex, PNNL, Portsmouth, PPPL, PPPO, Richland, Rochester, Russia, SEFOR – Arkansas, SLAC, SNL, SPR, SRS, TJNAF, West Valley, Y-12 or Yucca Mountain.



PARS II Overview Wrap-Up

Page 49

- Account Access
- System Requirements
- Modules
 - Overview
 - Project Assessment
 - Resource Module
 - Administer Module
 - All Reports
- Find/Search for a Project

Navigating PARS II





Project Lifecycle in PARS II

Page 51

- **Receive Initial CD memo**
- **Create Project / Capital Asset Project**
- **Project Attributes / Contacts**
 - CD0
 - CD1
 - CD2
 - CD3A (as required)
 - CD3
 - BCPs
 - CD4
 - Closeout
- **Coordination required – BCP / Next CD**
- **KPPs**
- **Attachments**



Creating a Capital Asset Project

Page 52

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date:
Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Capital Projects

Add **Remove** **View** **Attachments** **Reports**

To add a Capital Asset Program: Select Level 1, Select Level 2, Then click the ADD button.

Select a Level 1 Program Office:

- NA - National Nuclear Security Administration **1**
- BPA - Bonneville Power Administration
- NEERE - Office of Energy Efficiency & Renewable E
- EIA - Energy Information Administration
- EM - Office of Environmental Management
- FE - Office of Fossil Energy
- LM - Office of Legacy Management
- NA - National Nuclear Security Administration **1**
- NE - Office of Nuclear Energy
- OE - Office of Electricity Delivery and Energy Relia
- RW - Office of Civilian Radioactive Waste Manager
- SC - Office of Science
- SEPA - Southeastern Power Administration
- SWPA - Southwestern Power Administration
- WAPA - Western Area Power Administration

Select a Level 2 Program Organization:

- 121.1 - Defense Science Division **2**
- 122.3 - Stockpile Technology and Special Materials D
- 172.2 - Construction Management Division
- NA - National Nuclear Security Administration
- NA-121 - Office of Research & Development for Na
- NA-123 - Office of Inertial Confinement Fusion and
- NA-23 - ADA for Nuclear Risk Reduction
- NA-28 - Assistant Deputy Administrator for Fissile M
- NA-285 - MOX Integrated Project Division (SRA-708-
- NA-286 - WSB Integrated Project Division (SRS-730
- NA-52 - Office of Infrastructure and Facilities Mana
- NA-56 - Office of Environmental Projects & Operati
- NA-70 - Associate Administrator for Defense Nucle

Continuous Air Monitoring (FICAM) Continuous Air Monitoring (FICAM)

Adding a New Capital Project

Save **Cancel**

Parent Programs: NA NA

Capital Program Name: **4** Capital Asset Project

Description: Second Version of Capital Asset Project

Level 3 Capital Project

PARS Project ID	Project Name	TPC	CD4 Date	FPM	Certification
Totals					

PY: NTB: OPER: LCC:

Important Note: If a duplicate Program Office or Program Organization is accidentally created, the entire system crashes



Creating a Capital Asset Project

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U.S. DEPARTMENT OF ENERGY PARS II KCA

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview
- Close Period

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/28/2012 CPP Data As-Of Date:

Note: The project info listed is the last project the User accessed

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Projects

Find **Add** Edit Remove View Attachments Reports Change Program Save Configuration

To add a Project: Select Level 1, Select Level 2, Select Level 3, Then click the ADD button.

1 2 3 4

Level 1	Level 2	Level 3	CDD Date	
BPA - Bonneville Power Administration	- Select One -	- Select One -		
EEERE - Office of Energy Efficiency & Renewable E	- Select One -	- Select One -		
EIA - Energy Information Administration	121.1 - Defense Science Division	122.3 - Stockpile Technology and Special Materials D		
EM - Office of Environmental Management	172.2 - Construction Management Division	NA - National Nuclear Security Administration		
FE - Office of Fossil Energy	NA-121 - Office of Research & Development for Na	NA-121 - Office of Research & Development for Na	12/13/	
LM - Office of Legacy Management	NA-123 - Office of Inertial Confinement Fusion and	NA-123 - Office of Inertial Confinement Fusion and		
NA - National Nuclear Security Administration	NA-23 - ADA for Nuclear Risk Reduction	NA-23 - ADA for Nuclear Risk Reduction		
NE - Office of Nuclear Energy	NA-265 - Assistant Deputy Administrator for Fissile M	NA-265 - Assistant Deputy Administrator for Fissile M		
OE - Office of Electricity Delivery and Energy Relia	NA-266 - MOX Integrated Project Division (SRA-706)	NA-266 - WSB Integrated Project Division (SRS-730)		
RW - Office of Civilian Radioactive Waste Manager	NA-52 - Office of Infrastructure and Facilities Mana	NA-56 - Office of Environmental Projects & Operatio		
SC - Office of Science	NA-70 - Associate Administrator for Defense Nucle	NA-70 - Associate Administrator for Defense Nucle		
SEPA - Southeastern Power Administration				
SWPA - Southwestern Power Administration				
WAPA - Western Area Power Administration				
000389	05-D-405	SWPF	Salt W	
000390	01-D-416	WTP	Waste	
000392	06-D-701	NMSSUP II	Nucle	
000393	07-D-253	HSM	Heatin	
000394	08-D-802	HEPF	High E	
			MSSUP) Phase	08/22/
				01/01/
				01/01/
				12/05/
				08/08/



Project Attributes / Project Contacts

Projects

Viewing Project : RS-CAP-2012

Save Cancel | Add Contact Edit Contact Remove Contact

Project Attributes **Project Contacts**

Parent Program: DOE>NA>NA>Capital Asset Project

PARS Project ID: 000925
DOE Date: 224/2012

DOE Project Number: RS-CAP-2012
Project Name: Capital Asset Project

Project Acronym: CAP
Project Description: This project has been created to demonstrate the requirements for data entry into the PARS II system.

Project Types

Project Types: 1 - Facility Construction
Nuclear/Non-Nuclear: 2 - Non-Nuclear
Program: NA
OFR Upload Requirements:

Project Categories

Project Activity Status: Active
Project Hold: No
Project of Special Interest: No
Site Code: LANL

Role **Contact Name** **Certification**

Role	Contact Name	Certification
FPD Name	Wayne Bristol	Level 3
FPM		
OECM Analyst	John White	
Prime Contractor	MBS Inc.	Certified

Important Fields

- DOE Project Number
- Project Name
- Project Acronym
- Project Description
- Program
- Site Code
- Contacts & Date Assigned

Projects

Viewing Project : RS-CAP-2012

Save Cancel | Add Contact Edit Contact Remove Contact

Project Attributes **Project Contacts**

Role **Title** **Contact Name** **ORG** **Certification** **Date Assigned** **Date Unassigned**

Role	Title	Contact Name	ORG	Certification	Date Assigned	Date Unassigned
FPD Name	Federal Project Director	Wayne Bristol		Level 3	02/24/2012	
FPM						
OECM Analyst	OECM Analyst	John White	Department of Energy		02/24/2012	
Prime Contractor		MBS Inc.	MBS Inc.	Certified	02/24/2012	

OVERSIGHT & ASSESSMENT

Capital Projects

Projects

Critical Decisions

BCPs

Monthly Status

Budget/Funding

KPPs

All Attachments

Project Overview

Helpful Hint: CD0 is automatically created when a new project is added, with a Updated By & Updated Date

Critical Decisions

*** TEST ENVIRONMENT ONLY- NOT FOR LIVE DATA ***

[Edit](#) | [Save](#) | [Cancel](#) | [KPP](#) | [Attachments](#) | [Reports](#)

Select Critical Decision:

CD0-Approve Mission Need

FPD:

Certification:

No FPD Designation is required at CD0; however, if the CD0 Approval Memo contains an FPD Designation it will be included

Critical Decision Detail:

Planned Date



CD0 Date Approved



CD0 Approved By



CD0 Date Received By OEMC



CD0 Approval Notes

Approval Notes should contain every deviation from the standard (TPC, CD4 Date, Planned Dates) or any other notes deemed important for communication.

CD0: TPC Low

85,000,000

CD0: TPC High

135,000,000

CD0: CD-4 Date Low



CD0: CD-4 Date High



Updated By

CREEMAR

Updated Date

2/27/2012 7:55:42 AM

Business Rule: If only one TPC amount is provided at CD0 or CD1, the value is to be entered as both the Low and High TPC .

Planned Dates:

CD1



CD2



CD3A



CD3



CD4



Closeout



Note: The next corresponding CD planned date is required for planning purposes.

Business Rule: If only one CD4 date is provided at CD0 or CD1, the date is to be entered as both the Low and High Date.



CD-1



OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:
Current Critical Decision: CD1
Current User: CREEMAR Logout

Critical Decisions

KPP: Not required at CD0 or CD1.

Select Critical Decision: CD1-Approve Alternative Selection and Cost Range FPD: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date	4/30/2011
CD1 Date Approved	5/16/2011
CD1 Approved By	John Smith
CD1 Date Received By OEMC	5/19/2011

CD1 Approval Notes: Approval Notes should contain every deviation from the standard (TPC, CD4 Date, Planned Dates) or any other notes deemed important for communication.

CD1: TPC Low	95,000,000
CD1: TPC High	129,000,000
CD1: CD-4 Date Low	6/30/2016
CD1: CD-4 Date High	10/31/2016

Updated By: CREEMAR Updated Date: 2/27/2012 7:58:04 AM

Planned Dates:

CD2	3/1/2012
CD3A	
CD3	5/31/2012
CD4	9/30/2016
Closeout	

Helpful Hint: A Certified FPD Designation is required at CD1 and can be included in the CD1 memo or provided on a separate memo .

Business Rule: The FPD will be listed as TBD until a memo is received by APM.

LOOKING FORWARD TO CD2:

- Contractors will be required to perform CPP Uploads of EV and Schedule data at CD2.
- 6 months prior to CD2 coordination with the Contractor begins:
 - To set up a user account
 - Verify extractor for system
 - Arrange for a test/trial-run of the CPP Upload process.

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE**ALL REPORTS****ADMINISTRATION****HELP**

Business Rule: If the TPC breakdown is not included in the CD2 memo, attach the document that includes this info. Make notation in the CD2 Approval Notes.

Critical Decisions

KPP (Key Performance Parameters) are required at CD2, BCP and CD4.

Select Critical Decision: CD2-Approve Performance Baseline

Critical Decision Detail:

Planned Date	3/1/2012
CD2: Date Approved	2/23/2012
CD2: Approved By	John Smith
CD2: Date Received By OEMC	2/24/2012

CD2: Approval Notes: Approval Notes should contain every deviation from the standard (CD4 Date, Planned Dates, TPC breakdown) or any other notes deemed important for communication.

CD2: TPC (Approved)	125,000,000
CD2: CD-4 Date (Approved)	9/30/2016
Orig. DOE Schedule Contingency (In days)	40
Orig. DOE Cost Contingency	5,000,000
Sunk Costs	0
Orig. DOE ODCs	4,000,000
Orig. Contractor Fee/Profit	3,000,000
Orig. Contractor MR	6,000,000
PMB	107,000,000
Calculated TPC	125,000,000

Updated By: CREEMAR
Updated Date: 2/27/2012 7:59:15 AM

Planned Dates:

CD3A	5/31/2012
CD3	5/31/2012
CD4	2/28/2017
Closeout	

ESSENTIAL COMPONENTS OF CD2:

- For a CD2 to be created that will be reflected accurately within PARS II and the reporting of metrics, all fields must be completed.
- Contractors are required to perform CPP Uploads of EV and Schedule data.
- Key Performance Parameters, KPPs, are required to be entered at CD2.

Helpful Hint: Calculated TPC allows a comparison of values between what is entered at CD2: TPC (Approved) and the summation of the following fields:

- DOE Cost Contingency
- Non-Contract Costs (ODCs/Sunk Costs)
- Contractor Fee/Profit
- Contractor MR
- PMB.



CD2 Template

TEMPLATE FOR APPROVAL OF PERFORMANCE BASELINE CD-2

During preparation of CD-2 and prior to approval, coordinate document with OEMC.

The following information should be clearly identifiable in the approval document:

- Name and Title of Acquisition Executive (Approving Official)
- Purpose (e.g., Approval of CD-2, Performance Baseline for Project Y)

The following Performance Baseline information must be clearly listed. [DOE O 413.3B, Appendix A, 4.c.(4)] It is preferable for it to be in the first paragraph of a memo or on the front page of a multipage document. This is necessary to clearly define the original Performance Baseline for the record.

- The approved Performance Baseline Total Project Cost
- The approved CD-4 Project Completion date Month and Year
- The major scope elements, minimum Key Performance Parameters (KPPs), and capital asset requirements defining successful completion of the project (bullet list or table)

A table documenting the Funding Profile from project inception to completion that the Acquisition Executive and Program Office are committing to request (example following). [DOE O 413.3B, Appendix C, 15.c. Data entered on PARS II Budget/Funding screen.]

This is the funding profile that will be contained in the Project Data Sheet (PDS) submitted in the Congressional Budget Request. If no PDS is submitted and only operating expense funds are used, then list the funding profile in the TPC line, and when loaded in PARS II, the profile will be entered into the TEC Construction line which will auto calculate to the TPC line.

Description	FY...	FY09	FY10	FY11	FY12	FY13	FY...	Total
TEC Construction								
TEC Design (PED)								
Total TEC								
OPC (except D&D)								
OPC (D&D)								
Total OPC								
TPC								

If a new FPD is being assigned at CD-2, the Acquisition Executive can document the appointment in this memo rather than a separate appointment memo.

The following is additional information that needs to be provided to update the PARS project parameter to enable the correct TPC baseline parameter balances to be loaded into PARS for accurate project assessment and reporting. [DOE O 413.3B, Appendix C, 16. Data entered on PARS II CD-2 screen.] It can be included in the AE approval memo or a separate transmittal from a program/project official (e.g., PMSO/FPD).

A table documenting the Performance Baseline components that equate to the TPC (example table following). The project team, program office, assigned OEMC project analyst, and OEMC PARS admin team should begin coordinating input on these values during preparation of CD-2 and prior to approval

to ensure all have same understanding of purpose and meaning, and to agree upon reporting period that these values will begin applying for assessment and reporting, such that in at least this one reporting period, the PMB and MR values entered will equal the values in the contractor upload.

Description	Whole \$ Value
Sunk Costs	(Fee, ODCs, etc., previously paid/costed that won't show in any of the following lines but part of TPC)
PMB (inclusive of Undistributed Budget)	Contractor's BAC
Management Reserve	Starting balance from CD-2
Fee/Profit	Starting balance from CD-2 that fee/profit paid will be decremented from to calculate Fee/Profit remaining
DOE Other Direct Costs (ODCs)	Starting balance from CD-2 that ODCs used will be decremented from to calculate DOE ODCs remaining
Cost Contingency	Starting balance from CD-2 that Cost Contingency used will be decremented fro to calculate Cost Contingency remaining
Performance baseline (TPC)	Above values must sum to Approved TPC
Schedule Contingency (Calendar Days)	Starting balance from CD-2P that Schedule Contingency used will be decremented fro to calculate Schedule Contingency remaining

- Planned CD-3 date (if applicable)
- Name of contractor(s) which will be executing project and uploading EVMS data into PARS to ensure correct EVMS metric reporting to DOE leadership/management and OMB/GAO.



CD2 Attachment

Critical Decisions

Edit | Save | Cancel | KPP | **Attachments** | Reports

Select Critical Decision:

CD2-Approve Performance Baseline

Add

Type Title Doc # Version Uploaded By Uploaded Date Descr

Narrative APPROVALNOTES Marc Cree 2/24/2012 9:22:5

Add/Edit Narrative, Hyperlink or Document

Document Save Cancel

Title:

Description: **CODE**

Version:

Document No.:

WARNING: Do not upload project information. Please contact the OI Information department.

AE - Acquisition Executive Delegation memos
Acquisition Strategy (if updated)
CD-2 Approval memo
CD-2 Approval memo and ESAAB (or equivalent) briefing slides
Cancellation Memo
Complete or Approved final NEPA documentation
Design Review documents

Document: Browse...

Helpful Hint: Use the pull down menu to pick a Title. The project name or number should not be included in the title.



CD2 Attachment

Add/Edit Narrative, Hyperlink or Document

Document | **Save** | Cancel

Title: CD-2 Approval memo

Description: Signed CD2 Approval MEmo for Capital Asset Project

Version: 2012-2-23

Document Note:

WARNING:
Do not upload project attachments or enter narratives that contain classified or sensitive information.
Please contact the OEM Analyst if you have questions about sending sensitive data, such as CIOU (Official Use Only) or UCND (Unclassified Controlled Nuclear Information) data.

Document: n:\My Documents\RS-C | Browse...

Important : Free form text in the Title field cannot exceed 100 characters.

Important : Attachment Description cannot exceed 250 characters.

Important : Document name can not include any special characters ('-apostrophe, %-percent sign, &-ampersand).

Title	Doc #	Version	Uploaded By	Uploaded Date	Description
APPROVALNOTES			Marc Cree	2/24/2012 9:22:5	
CD-2 Approval memo	2012-2-23	Marc Cree	2/24/2012 9:52:3	Signed CD2 Approval M	



CD-2 KPP (Key Performance Parameter)

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011
Current Critical Decision: CD2
Current User: CREEMAR Logout

Critical Decisions

KPP

OVERSIGHT & ASSESSMENT

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- BCPs
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- Budget/Funding
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- All Attachments
- Project Overview

PROJECT PERFORMANCE

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ADMINISTRATION

HELP

1

2

3

Helpful Hint: Delivered Scope and Validation to occur at CD4.

KPPs

Add

Adding a New KPP

Save Cancel

CD or BCP:

KPP No

KPP Planned Scope

CD2-Approve Performance

Enter a brief narrative that describes the minimum or threshold value of the planned or intended characteristics, functions, requirements, or design basis that, if changed, would have a major impact on the facility or system performance, schedule, cost and/or risk, or the ability of the interfacing project to meet its mission requirements.

KPP Delivered Scope

KPP Validated Yes/No

Date Updated

Updated By



KPP Module - CD2 and BCP KPPs

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U.S. DEPARTMENT OF ENERGY PARS II KPP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD2
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

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KPPs

Add Edit View Remove | Clear Filter | Attachments

KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope	KPP Validated Yes/No
03	01	Narrative Describing KPP 03 at BCP-01	Narrative Describing KPP 03 at BCP-01.	
01	CD2	Narrative Describing KPP 01 at CD2		
02	CD2	Narrative Describing KPP 02 At CD2		
04	01	Narrative Describing KPP 04 At BCP-01		

Helpful Hint: Hover the mouse to view the full text.

When viewing the KPP List, if you hover the mouse on the description (Planned or Delivered Scope) of the KPP, the full text entered will be displayed.

CD or BCP

(All)
(Empty)
(NonEmpty)

01
CD2

KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope	KPP Validated Yes/No
02	CD2	Narrative Describing KPP 02 At CD2		
01	CD2	Narrative Describing KPP 01 at CD2		



CD-3A

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:

Current Critical Decision: CD3A.
Current User: CREEMAR [Logout](#)

OVERSIGHT & ASSESSMENT

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HELP

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision: CD3A-Approve Procurement of Long Lead Items FPD: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date	<input type="text"/>
CD3A Date Approved	<input type="text"/>
CD3A Approved By	<input type="text"/>
CD3A Date Received By OECM	<input type="text"/>
CD3A Approval Notes	<input type="text"/>
Latest Approved CD-4 Date	2/28/2017 <input type="text"/>
Approved Scope	<input type="text"/>
Approved Cost	<input type="text"/>
Updated By	CREEMAR
Updated Date	2/24/2012 9:17:30 AM

Planned Dates:

CD3	5/31/2012 <input type="text"/>
CD4	2/28/2017 <input type="text"/>
Closeout	<input type="text"/>

Helpful Hint: All Reports are filtered to default to the latest CD, except CD3A



U.S. DEPARTMENT OF ENERGY
PARS II KCA

OVERSIGHT & ASSESSMENT

- Capital Projects
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PROJECT PERFORMANCE

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: CD3

Current User: CREEMAR Logout

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:
CD3-Approve Start of Construction FPD: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date	5/31/2012
CD3 Date Approved	7/1/2012
CD3 Approved By	John Smith
CD3 Date Received By OECM	7/6/2012

CD3 Approval Notes
Approval Notes should contain every deviation from the standard (CD4 Date, Planned Dates) or any other notes deemed important for communication.

Latest Approved TPC (CD2 or Latest BCP)
131,000,000

Latest Approved CD4 Date (CD2 or Latest BCP)
2/28/2017

CD3: Lessons Learned Report Received

Updated By: CREEMAR
Updated Date: 2/27/2012 8:00:17 AM

Planned Dates:

CD4	2/28/2017
Closeout	

Business Rule: If CD2/3 is approved on one memo it will be attached at both the CD2 and CD3 screens.

Business Rule: Any changes to the TPC or CD4 Date presented in the CD3 Approval Memo can only be achieved via a BCP.

- CD3 Lessons Learned is required for all projects that achieved CD3 after 05/29/2011.
- Within 90 days, submit Lessons Learned regarding up-front project planning and design to PSO and APM.

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Helpful Hint: Any changes to the Planned Dates from the BCP Approval Document should be entered on the BCP screen. If the BCP: CD4 Date Approved field is changed, the Planned Date should also be changed.

BCPs

Select BCP: BCP-01

BCP Detail:

BCP Title	01
BCP Change Directed	<input type="checkbox"/>
Request Submission Date	<input type="button" value="Calendar"/>
BCP Date Approved	3/21/2012
BCP Approved By	John Smith
BCP Date Received By OEMC	9/16/2014

BCP Approval Notes

Approval Notes should contain every deviation from the standard (CD4 Date, Planned Dates, TPC breakdown) or any other notes deemed important for communication.

BCP: TPC (Approved) 131,000,000

BCP: Change In Cost 6,000,000

BCP: CD-4 Date (Approved) 2/28/2017

BCP: Change In Schedule (In days) 151

BCP: Change In Scope (Increase=Scope Added, Decrease=Scope Removed, None=No Change in Scope) None

DOE Schedule Contingency (In days) 40

DOE Cost Contingency 6,000,000

Sunk Costs 0

DOE ODCs 5,000,000

Contractor Fee/Profit 4,000,000

Contractor MR 7,000,000

PMB 109,000,000

Calculated TPC 131,000,000

Updated By CREEMAR

Updated Date 3/22/2012 7:52:26 AM

Planned Dates:

CD3A	<input type="button" value="Calendar"/>
CD3	5/31/2012 <input type="button" value="Calendar"/>
CD4	2/28/2017 <input type="button" value="Calendar"/>
Closeout	<input type="button" value="Calendar"/>

Business Rule: KPPs are required to be entered for every BCP, even if they did not change from CD2

Business Rule: Only BCPs that change the Cost (TPC); Scope (KPPs); Schedule (CD4 date) are entered

Business Rule: Any project cost not reported through Contractor upload in the form of cumACWP and is not recoverable by DOE (ex: Fee , ODC).

Calculated TPC (PB) allows a comparison of values between what is entered into the TPC Approved field and the summation of the following fields: DOE Cost Contingency + Non-Contract Costs + Contractor Fee/Profit + Contractor MR + PMB.



BCP Template (Baseline Change Proposal)

TEMPLATE FOR APPROVAL OF PERFORMANCE BASELINE BCP

During preparation of BCP and prior to approval, coordinate document with OEMC.

The following information should be clearly identifiable in the approval document:

- Name and Title of Acquisition Executive (Approving Official); if authority delegated, reference and provide delegation memo
- Purpose (e.g., Approval of Performance Baseline BCP for Project Y)

The following Performance Baseline information must be clearly listed. [DOE O 413.3B, Appendix A, 6.b.] It is preferable for it to be in a table (example provided) on the front page of a memo or multipage document. This is necessary to clearly define Performance Baseline changes for the record.

- The approved Performance Baseline Total Project Cost
- The approved CD-4 Project Completion date Month and Year
- The major scope elements, minimum Key Performance Parameters (KPPs), and capital asset requirements defining successful completion of the project

Total Project Cost at		CD-4 Completion Date at		
CD-2	Last BCP*	This BCP	CD-2	Last BCP*
Scope/KPP/Requirement established at			Characterize Change (e.g., New, Deleted, Increased, Decreased)	
CD-2	Last BCP*	This BCP		

* If this is the 1st BCP, then this field should be marked N/A.

A table documenting the Funding Profile from project inception to completion that the Acquisition Executive and Program Office are committing to request (example following). [DOE O 413.3B, Appendix C, 15.c. Data entered on PARS II Budget/Funding screen.]

This is the funding profile that will be contained in the Project Data Sheet (PDS) submitted in the Congressional Budget Request. If no PDS is submitted and only operating expense funds are used, then list the funding profile in the TPC line, and when loaded in PARS II, the profile will be entered into the TEC Construction line which will auto calculate to the TPC line.

Description	FY...	FY09	FY10	FY11	FY12	FY13	FY...	Total
TEC Construction								
TEC Design (PED)								
Total TEC								
OPC (except D&D)								
OPC (D&D)								
Total OPC								
TPC								

If a new FPD is being assigned at this BCP, the Acquisition Executive can document the appointment in this memo rather than a separate appointment memo.

The following is additional information that needs to be provided to update the PARS project record to enable the correct TPC baseline parameter balances to be loaded into PARS for accurate project assessment and reporting. [DOE O 413.3B, Appendix C, 16. Data entered on PARS II BCP screen.] It can be included in the AE approval memo or a separate transmittal from a program/project official (e.g., PMSD/FPD).

A table documenting the Performance Baseline components that equate to the TPC (example table following). The project team, program office, assigned OEMC project analyst, and OEMC PARS admin team should begin coordinating input on these values during preparation of BCP and prior to approval to ensure all have same understanding of purpose and meaning, and to agree upon reporting period that these values will begin applying for assessment and reporting, such that in at least one reporting period, the PMB and MR values entered will equal the values in the contractor upload.

Description	Whole \$ Value
Sunk Costs	(Fee, ODCs, etc., previously paid/costed that won't show in any of the following lines but part of TPC)
PMB (inclusive of Undistributed Budget)	Contractor's BAC
Management Reserve	New starting balance from BCP
Fee/Profit	New starting balance from BCP that fee/profit paid will be decremented from to calculate Fee/Profit remaining
DOE Other Direct Costs (ODCs)	New starting balance from BCP that ODCs used will be decremented from to calculate DOE ODCs remaining
Cost Contingency	New starting balance from BCP that Cost Contingency used will be decremented from to calculate Cost Contingency remaining
Performance baseline (TPC)	Above values must sum to Approved TPC
Schedule Contingency (Calendar Days)	New starting balance from BCP that Schedule Contingency used will be decremented from to calculate Schedule Contingency remaining

- Planned CD-3 date (if applicable)
- Name of contractor(s) which will be executing project and uploading EVMS data into PARS to ensure correct EVMS metric reporting to DOE leadership/management and DMB/GAO.



**U.S. DEPARTMENT OF ENERGY
PARS II**

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Within 90 days, submit Lessons Learned regarding project execution and facility start-up to PSO and APM.

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:
CD4-Approve Start of Operations or Project Completion FPD: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date	2/28/2017
CD4 Date Approved	3/2/2017
CD4 Approved By	John Smith
CD4 Date Received By OECM	3/3/2017

CD4 Approval Notes
Approval Notes should contain every deviation from the standard (Lessons Learned, Close Out) or any other notes deemed important for communication.

TPC
TPC: 131,000,000
TPC At CD-4: 131,000,000

KPP Scope At Complete
(Yes=All KPPs Achieved, No=Some KPPs Not Achieved)
Yes

KPP Scope Narrative At Complete

CD4: Lessons Learned Report Received

Updated By: CREEMAR
Updated Date: 2/27/2012 8:26:00 AM

Planned Dates:
Closeout

Business Rule: A project that reaches CD4 remains active in the month the CD4 memo is received by APM. After the Period is moved forward the project will be moved from Active to Completed.

Note: KPPs are required to be entered at CD4 and validated as completed Yes or No

Business Rule: KPP Verbiage included on CD4 memo is entered here.



CD4 Template

TEMPLATE FOR APPROVAL OF CD-4, START OF OPERATIONS/PROJECT COMPLETION

During preparation of CD-4 and prior to approval, coordinate document with OECM.

The following information should be clearly identifiable in the approval document:

- Name and Title of Acquisition Executive (Approving Official)
- Purpose (e.g., Approval of CD-4, Start of Operations/Project Completion, for Project Y)

The following Performance Baseline information must be clearly listed. [DOE O 413.3B, Appendix A, 4.e.]

It is preferable for it to be in a table (example provided) on the front page of a memo or multipage document. This is necessary to clearly define the final Performance Baseline accomplished for the record.

- The estimated final TPC based on current records
- The approved CD-4 date is the date the document is signed
- The major scope elements, minimum Key Performance Parameters (KPPs), and capital asset requirements defining successful completion of the project approved at CD-2 and the latest BCP (if applicable), and the scope/KPP/facility requirements that were achieved at CD-4 as documented in (identify report title and date).

Total Project Cost at			CD-4 Completion Date at		
CD-2	Latest BCP*	CD-4	CD-2	Latest BCP*	CD-4
					When signed

Scope/KPP/Requirement established at		Scope/KPP/Requirement achieved at	Met Scope/KPP/Requirement for	
CD-2	Latest BCP*	CD-4	CD-2?	Latest BCP?*

*If this is the 1st BCP, then this field should be marked N/A.

Note that any changes to the project's final TPC or completed major scope elements must be documented in the subsequent project/contract closeout report, for which the initial report is due within 90 days after CD-4 approval.



CD4 KPP Validation

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/30/2011
Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

Critical Decisions

OVERSIGHT & ASSESSMENT

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KPPs

1 KPP

2 Add

3 Adding a New KPP

Business Rule: Needs to be same number as entered at CD2 or BCP.

LEAVE BLANK

Helpful Hint: Delivered Scope and Validation only occurs at CD4.

KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope	KPP Validated Yes/No

CD or BCP: KPP No
KPP Planned Scope
KPP Delivered Scope
KPP Validated Yes/No
Data Source
Updated By



KPP Module - CD4 KPP Validation

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U.S. DEPARTMENT OF ENERGY PARS II

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

KPPs

Add	Edit	View	Remove	Clear Filter	Attachments	Reports
KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope		KPP Validated Yes/No	
03	CD4		Narrative Describing Delivered Scope of KPP 03		Yes	
01	CD4		Narrative Describing Delivered Scope of KPP 01		Yes	
02	CD4		Narrative Describing Delivered Scope of KPP 02		Yes	
04	CD4		Narrative Describing Delivered Scope of KPP 04		Yes	
03	01	Narrative Describing KPP 03 at BCP-01				
01	CD2	Narrative Describing KPP 01 at CD2				

KPP No

- (All)
- (Empty)
- (Nonempty)
- 01
- 02
- 03
- 04

KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope		KPP Validated Yes/No
01	CD4		Narrative Describing Delivered Scope of KPP 01		Yes
01	CD2	Narrative Describing KPP 01 at CD2			



Closeout



OVERSIGHT & ASSESSMENT

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Critical Decisions

[Edit](#) | [Save](#) | [Cancel](#) | [KPP](#) | [Attachments](#) | [Reports](#)

Select Critical Decision:

Closeout

FPD: Wayne Bristol Certification: Level 3

Critical Decision Detail:

Planned Date

Closeout Date Approved

Closeout Approved By

Closeout Date Received By OECM

Closeout Approval Notes

Approval Notes should contain every deviation from the standard (Lessons Learned, Close Out) or any other notes deemed important for project communication.

Actual Cost At Financial Closeout

131,000,000

Updated By

CREEMAR

Updated Date

2/27/2012 9:00:36 AM

Helpful Hint: Once the date is entered and saved, the banner changes.

Business Rule: Also used to track REAs and Closeout TPC Estimate on metric reports when no Closeout Date Approved is entered.

Business Rule: Edit rights are removed once a project reaches Closeout. However, the project is not archived and full View rights and reporting capabilities remain.



All Attachments

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date:
Current Critical Decision: CD4 (BCP)
Current User: CREEMAR Logout

U.S. DEPARTMENT OF ENERGY PARS II

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All Attachments

View | Reports

Drag a column header here to group by that column

Code	Type	Title	Doc #	Version
BCPs BCP - 01	Narrative	APPROVALNOTES		
Critical Decisions CDO	Document	CD-0 Approval memo		2010-
Critical Decisions CDO	Document	Mission Need Statement		2012-
Critical Decisions CDO	Narrative	APPROVALNOTES		
Critical Decisions CD1	Document	CD-1 Approval memo		
Critical Decisions CD1	Narrative	APPROVALNOTES		

Helpful Hint: This column shows where a document or narrative was physically attached in PARS II.

Helpful Hint: A User can only View attachments - Add or Edit is not possible from this screen.



Attachments – OUO and UCNI

U.S. DEPARTMENT OF ENERGY PARS II

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2012 CPP Data As-Of Date:

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:
CD2-Approve Performance Baseline FPD: Wayne Bristol Certification: Level 3

Add Edit Remove View Close Reports

Type	Title	Doc #	Version	Uploaded By	Uploaded Date	Descr
Narrative	APPROVALNOTES			Marc Cree	2/24/2012 9:22:5	

Drag a column header here to group by that column.

Code ▾	Type ▾	Title ▾	Doc # ▾	Version
BCPs BCP - 01	Narrative	APPROVALNOTES		
Critical Decisions CDO	Document	CD-0 Approval memo		2010-
Critical Decisions CDO	Document	Mission Need Statement		2012-
Critical Decisions CDO	Narrative	APPROVALNOTES		
Critical Decisions CD1	Document	CD-1 Approval memo		

NOTE: When completing a CD, BCP or Monthly Assessment that refers to an OUO or UCNI document, the document CAN NOT be attached within PARSII.

Business Rule: Create a one page document that states where the OUO or UCNI document resides.



NO OUO or UCNI

Project Lifecycle in PARS II Wrap-Up

- Receive initial CD memo
- Create project/Capital Asset Project
- Project Attributes / Contacts
- CD0
- CD1
- CD2
- CD3
- CD3
- BCPs
- CD4
- Closeout
- KPPs
- Attachments





PARS II Dashboards

- What are the Dashboards?

• PARS II Dashboards

- CPR Dashboard
- Timephased Dashboard
- Schedule Dashboard
- Management Reserve (MR) Dashboard

The image displays four separate windows of the PARS II system:

- WBS Number:** A grid showing Work Breakdown Structure (WBS) details across various phases (Design, Construction, etc.) and activities.
- Activity:** A detailed view of specific project activities, including descriptions, start and end dates, and resource utilization.
- KIS\$:** A financial dashboard showing budgeted costs (BCWS), actual costs (BCWP), and variances (SV, CV) for different work packages.
- Variance Analysis - WBS 2.1.5:** A modal window providing a detailed breakdown of cost variances and their causes, including notes about schedule changes and construction progress.

• Contractor Project Performance Data Uploads

- Is My Project Required To Upload Data?
- Upload Data Requirements
- Dashboards only display data if Contractor Project Performance - CPP Data exists

CPP vs. OA Periods

- OA Status Date – DOE Performance Period
 - CPP Data As Of Date – Contractor Performance Period
 - Linked by FPD Assessment
-
- Note OA and CPP Period in the PARS II Header

Selected Project: 000389 - US-D-405 - Salt Waste Processing Facility (SWPF)

Status Date: 03/26/2012 CPP Data As Of Date: 01/27/2012

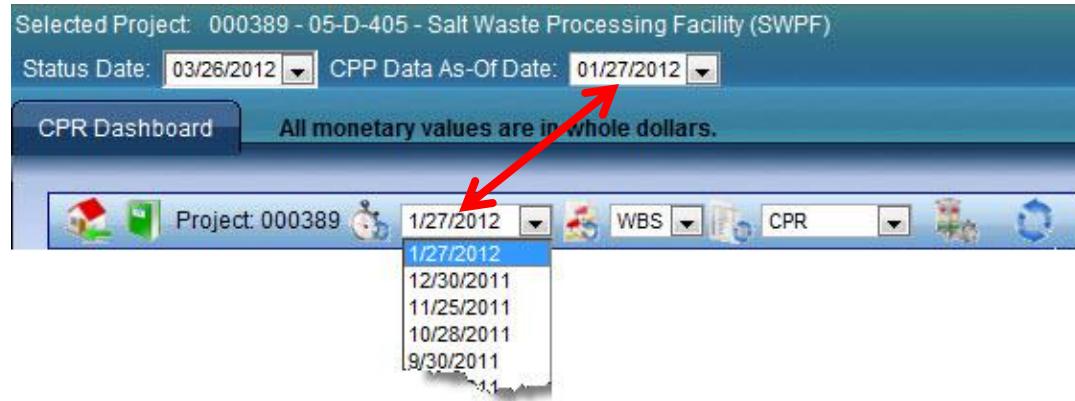
CPR Dashboard All monetary values are in whole dollars.

Project: 000389 1/27/2012 WBS CPR

1/27/2012
12/30/2011
11/25/2011
10/28/2011
9/30/2011

Dashboards – Changing CPP Date

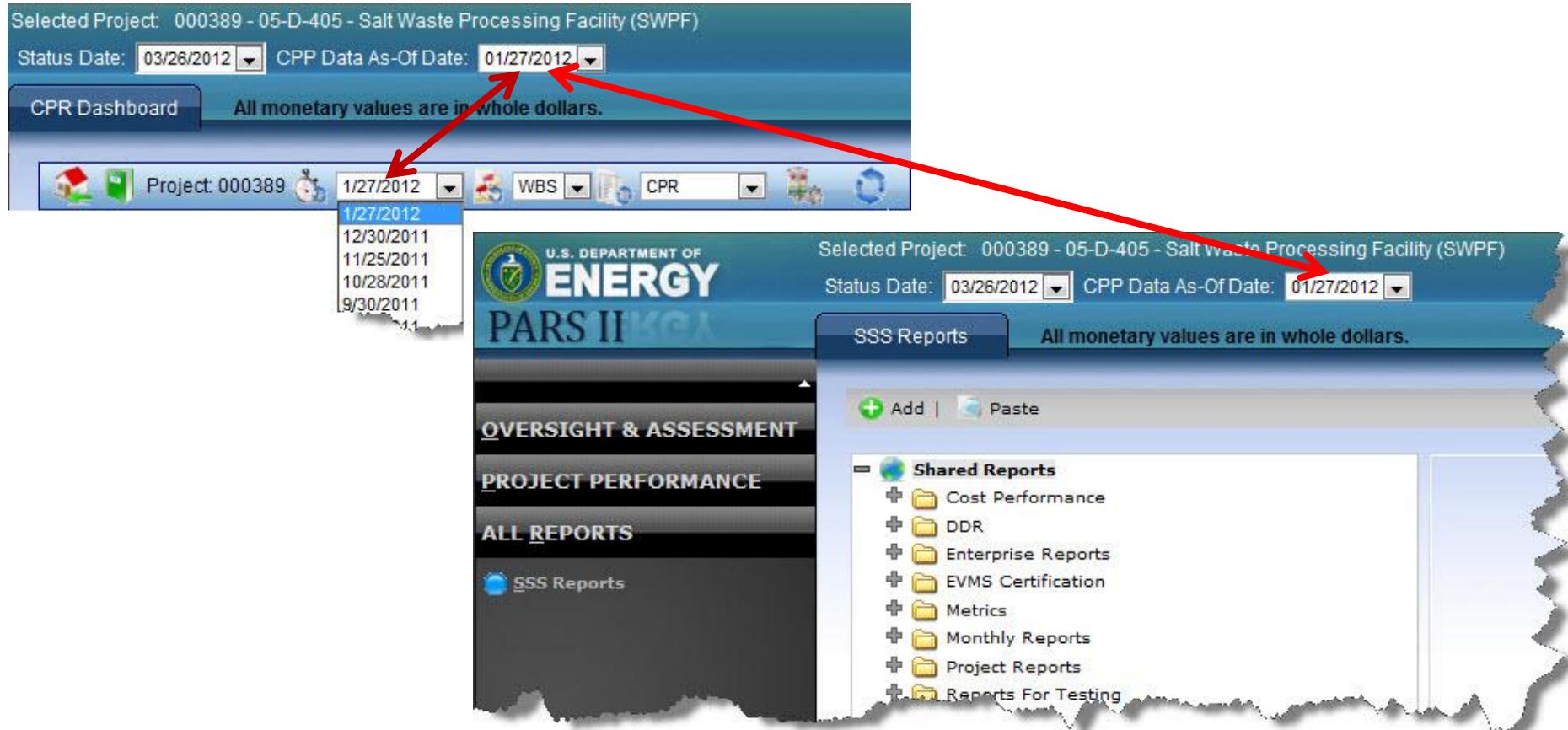
- Viewing Data in Prior CPP Periods



- Changing Date in Dashboards Will Change CPP Date in PARS II Header

Dashboards – Changing CPP Date

- Viewing Data in Prior CPP Periods
- Running Reports for Prior CPP Period
 - Once date is changed on Dashboard, it will remain active for purpose of running reports until changed again, project selection changed, or logout.



The screenshot illustrates the process of changing the CPP Data As-Of Date on the PARS II CPR Dashboard. It shows three views of the dashboard:

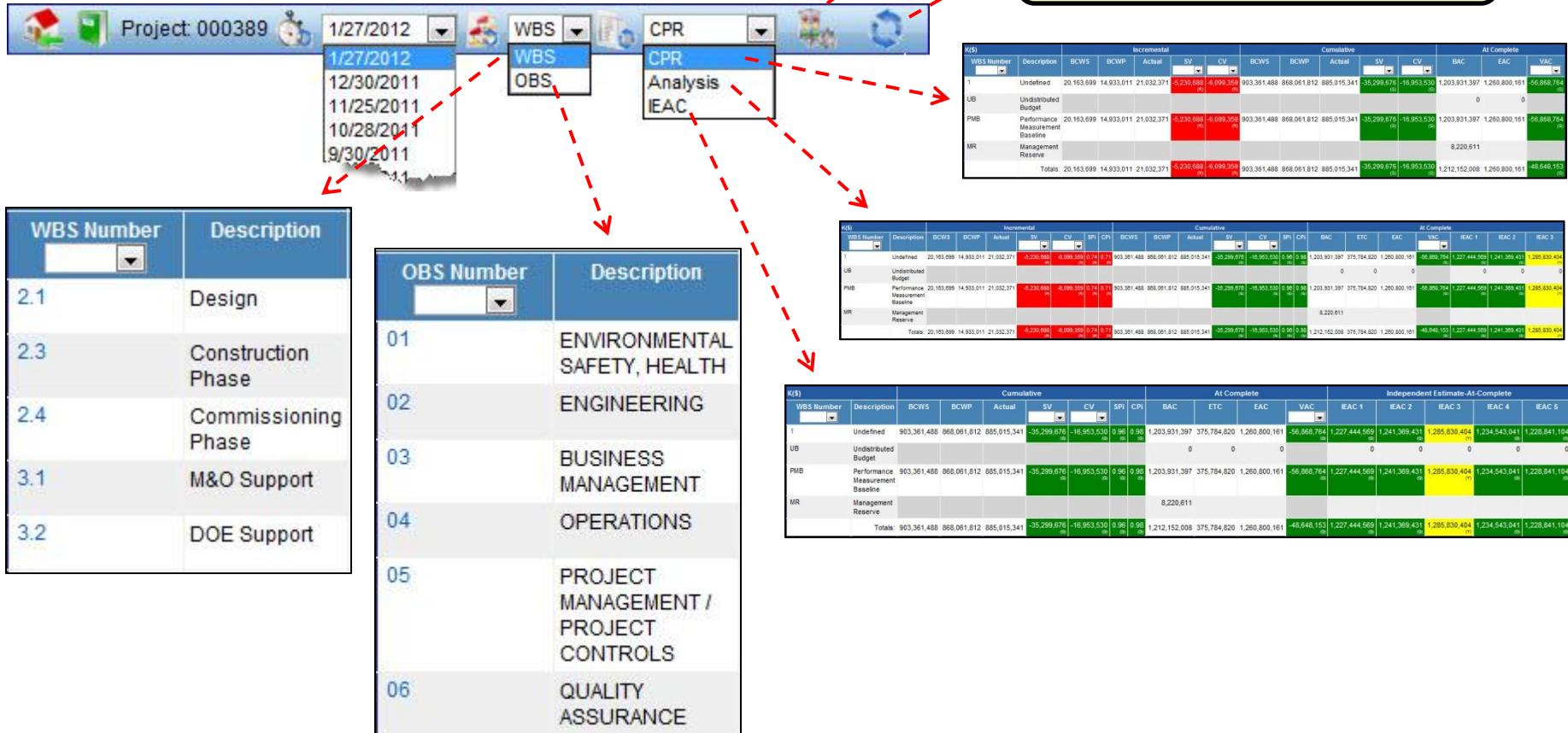
- Top View:** Shows the 'Selected Project' as 000389 - 05-D-405 - Salt Waste Processing Facility (SWPF). The 'Status Date' is set to 03/26/2012, and the 'CPP Data As-Of Date' is set to 01/27/2012. A red arrow points from this field to the second view.
- Middle View:** A close-up of the top navigation bar showing the 'Project: 000389' and the 'CPP Data As-Of Date' dropdown set to 01/27/2012. A red arrow points from this field to the third view.
- Bottom View:** The main dashboard interface with the 'Selected Project' and 'Status Date' fields. The 'CPP Data As-Of Date' dropdown is also set to 01/27/2012. A red arrow points from this field to the bottom right corner of the dashboard area.

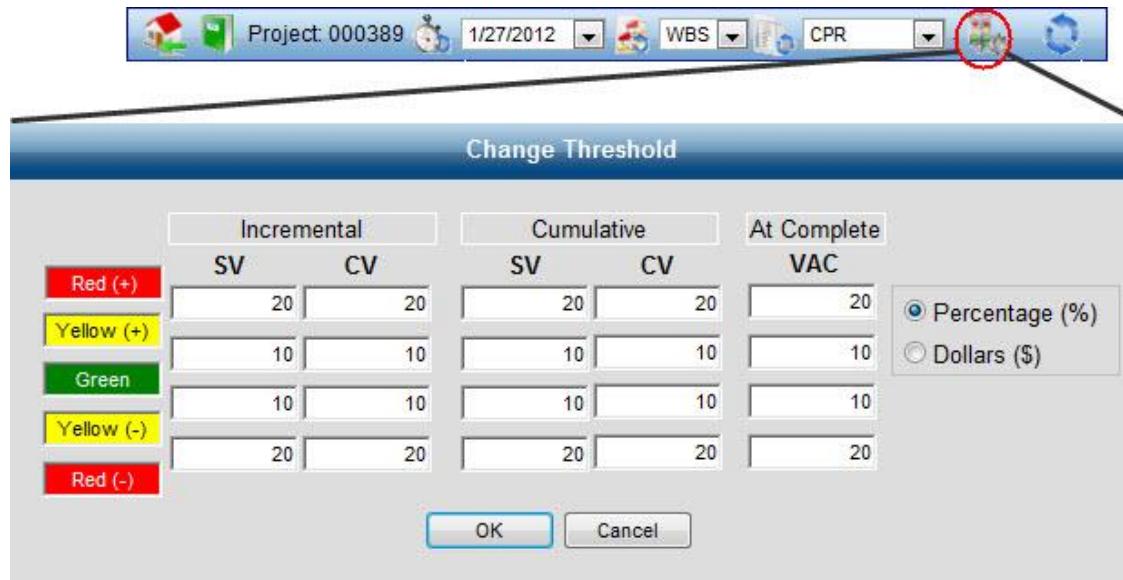
In all views, a message at the top states: "All monetary values are in whole dollars."

CPR Dashboard – Overview



- **Variety of Ways to Review the Data**
 - WBS and OBS
 - CPI and SPI
 - EAC v. IEAC





Important: Once threshold settings have been changed by a User, there is NOT a default option available to return to the application base settings. This screen shot shows the initial default thresholds in PARSII.

- **Understanding Thresholds**

- Not dictated by contract, but are controlled by each individual User
- Used for data review and filtering on CPR Dashboard
- PARS II default thresholds
 - **GREEN:** $\leq 10\%$
 - **YELLOW:** $> 10\% \text{ AND } \leq 20\%$
 - **RED:** $> 20\%$
 - No Rounding! $10.1\% = \text{YELLOW}$

- **Changing Thresholds**

- Change applies to ALL projects for ONE user
- Changes save between sessions
- % v. \$ Thresholds - Only one can be viewed at a time



CPR Dashboard – Data Overview

- **Contractor-reported Data Elements**
 - WBS and OBS
 - Incremental BCWS, BCWP and ACWP
 - Cumulative BCWS, BCWP, and ACWP
 - Budget At Complete (BAC)
 - Estimate At Complete (EAC)
 - Estimate To Complete (ETC)
 - Undistributed Budget (UB)
 - Management Reserve (MR)

 - **Calculated Performance Indicators**
 - Cost Performance Index (CPI)
 $CPI = BCWP / ACWP$
 - Schedule Performance Index (SPI)
 $SPI = BCWP / BCWS$
 - Percent Cost Variance (CV%)
 $CV\% = CV / BCWP$
 - Percent Schedule Variance (SV%)
 $SV\% = SV / BCWS$

 - **Data Elements Derived from Contractor Data**
 - Performance Measurement Baseline (PMB)
 $PMB = BAC + UB$
 - Budgeted Cost of Work Remaining (BCWR)
 $BCWR = BAC - BCWP_{cum}$
 - Cost Variance (CV) = $BCWP - ACWP$
 - Schedule Variance (SV) = $BCWP - BCWS$
 - Variance At Complete (VAC) = $BAC - EAC$

 - **Calculated Independent Estimate At Complete**
 - IEAC1 = $ACWP_{cum} + (BCWR / CPI_{cum})$
 - IEAC2 = $ACWP_{cum} + (BCWR / (CPI_{cum} \times SPI_{cum}))$
 - IEAC3 = $ACWP_{cum} + (BCWR / CPI_{3-mo\ avg})$
 - IEAC4 = $ACWP_{cum} + (BCWR / SPI_{cum})$
 - IEAC 5 =
 $ACWP_{cum} + (BCWR / (0.8 CPI_{cum} \times 0.2 SPI_{cum}))$
- NOTE: Weights assigned to CPI and SPI for IEAC5 calculation cannot be changed by user.**



CPR Dashboard – CPR View

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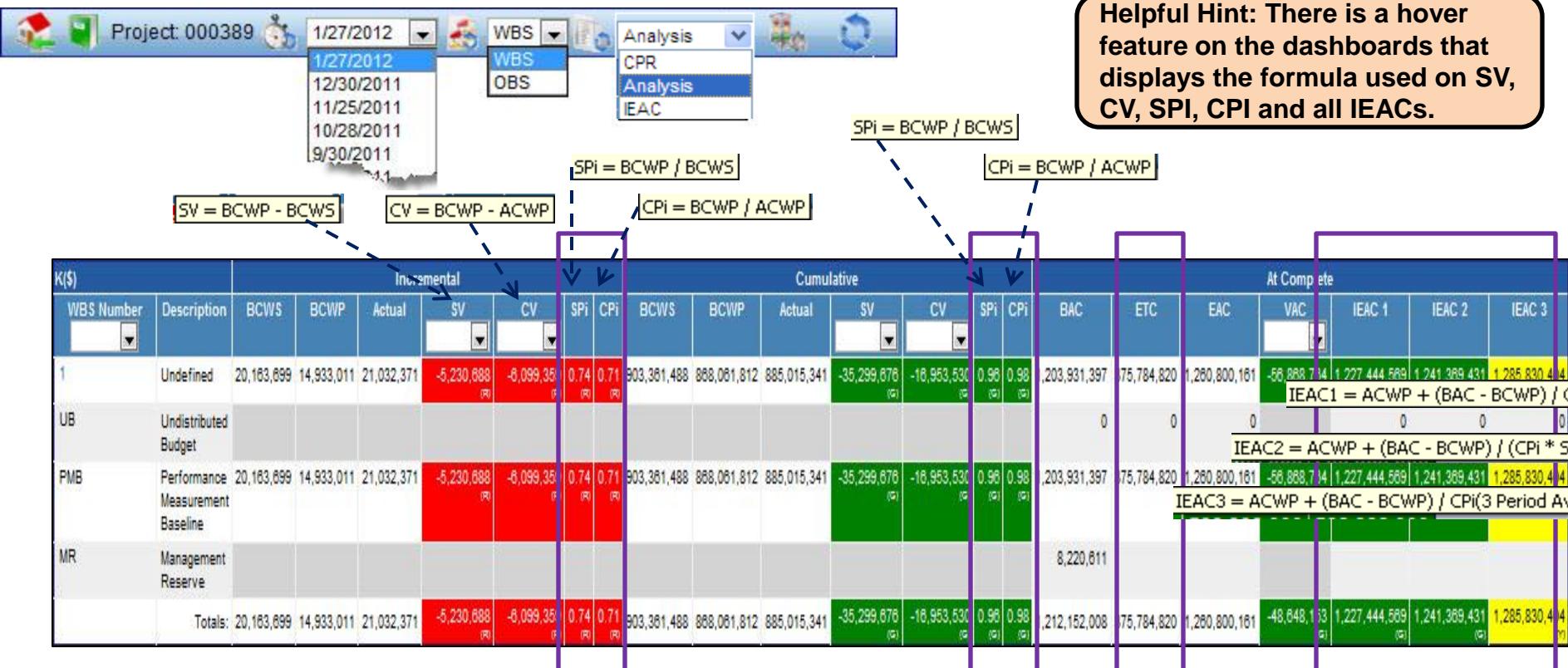
The screenshot shows a software interface for a construction project. At the top left is a logo for 'Project: 000389'. To its right are dropdown menus for '1/27/2012' (date), 'WBS' (Work Breakdown Structure), 'CPR' (Construction Project Report), and other options like 'OBS' (Observation) and 'IEAC' (Independent Evaluation and Audit Committee). Below these are several date fields: '1/27/2012' (highlighted in blue), '12/30/2011', '11/25/2011', '10/28/2011', and '9/30/2011'. A small icon at the bottom right indicates '1.1'.

Helpful Hint: There is a hover feature on the dashboards that displays the formula used on SV & CV

K(\$)		Incremental					Cumulative					At Complete			
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC	
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)	
UB	Undistributed Budget											0	0		
PMB	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)	
MR	Management Reserve											8,220,611			
		Totals:	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,212,152,008	1,260,800,161	-48,648,153 (G)



CPR Dashboard – Analysis View



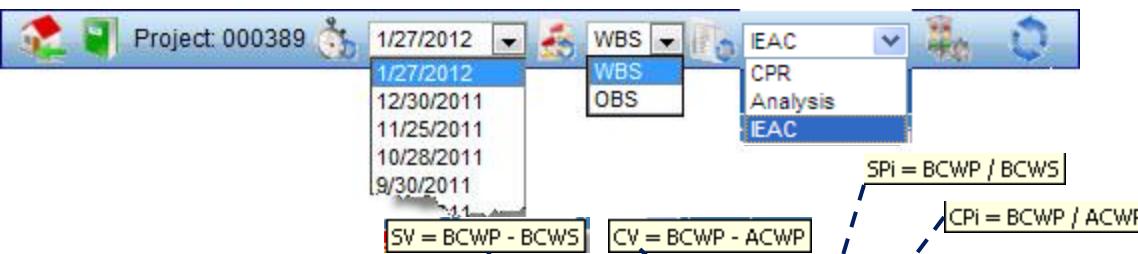
Helpful Hint: There is a hover feature on the dashboards that displays the formula used on SV, CV, SPI, CPI and all IEACs.

Differences between CPR and Analysis View

- Incremental SPI and Incremental CPI
- Cumulative SPI and Cumulative CPI
- At Complete ETC
- At Complete IEAC1, IEAC2 and IEAC3



CPR Dashboard – IEAC View



Helpful Hint: There is a hover feature on the dashboards that displays the formula used on SV, CV, SPI, CPI and all IEACs.

K(\$)		Cumulative						At Complete				Independent Estimate-At-Complete						
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BAC	ETC	EAC	VAC	IEAC 1	IEAC 2	IEAC 3	IEAC 4	IEAC 5	
1	Undefined	903,361,488	868,061,812	885,015,341	-35,299,676 (6)	-16,953,530 (6)	0.96 (6)	0.98 (6)	1,203,931,397	375,784,820	1,260,800,161	-56,868,764 (6)	1,227,444,569 (6)	IEAC1 = ACWP + (BAC - BCWP) / CPI (6)	128,841,104 (6)			
UB	Undistributed Budget								0	0	0		IEAC2 = ACWP + (BAC - BCWP) / (CPI * SPI) 0					
PMB	Performance Measurement Baseline	903,361,488	868,061,812	885,015,341	-35,299,676 (6)	-16,953,530 (6)	0.96 (6)	0.98 (6)	1,203,931,397	375,784,820	1,260,800,161	-56,868,764 (6)	1,227,444,569 (6)	IEAC3 = ACWP + (BAC - BCWP) / CPI(3 Period Avg) 124,260,424 128,822,404 124,512,044	128,841,104 (6)			
MR	Management Reserve								8,220,611				IEAC4 = ACWP + (BAC - BCWP) / SPI 1227,444,569					
		Totals:	903,361,488	868,061,812	885,015,341	-35,299,676 (6)	-16,953,530 (6)	0.96 (6)	0.98 (6)	1,212,152,008	375,784,820	1,260,800,161	-48,648,153 (6)	1,227,444,569 (6)	1,241,369,431 (6)	1,285,830,404 (6)	1,234,543,041 (6)	1,228,841,104 (6)

Differences between CPR and IEAC View

- No Incremental Data
- Cumulative SPI and Cumulative CPI
- At Complete ETC
- Independent Estimate-At-Complete IEAC1, IEAC2, IEAC3, IEAC4, IEAC5



CPR Dashboard – Drill Down

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Project: 000389 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)
UB	Attributed											0	0	
PMB	Period Measurement Baseline	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)	
MR	Management Results													

Project: 000389 Current WBS: 1 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
2.1	Design	50,736	40,455	110,620	-10,281 (R)	-70,164 (R)	248,963,333	248,796,769	249,654,190	-166,564 (G)	-857,420 (G)	249,086,697	250,039,932	-953,235 (G)
2.3	Construction Phase	18,829,660	13,603,353	19,635,283	-5,226,306 (R)	-6,031,930 (R)	592,455,093	558,170,968	581,659,308	-34,284,125 (Y)	-23,488,340 (G)	782,950,432	842,410,786	-59,460,354 (Y)
2.4	Commissioning	1,018,848	1,024,747	850,275	5,899 (G)	174,473 (Y)	21,636,281	20,787,293	19,495,714	-848,988 (G)	1,291,579 (G)	126,208,064	122,663,238	3,544,825 (G)
3.1	M&O Support	25	173,135	280,624	0 (G)	-107,489 (R)	24,757,558	24,757,558	24,269,459	0 (G)	488,099 (G)	28,354,417	28,354,417	0 (G)
3.2	DOE Support	155,569			0 (G)	-64,249 (R)	15,549,224	15,549,224	9,936,671	0 (G)	5,612,553 (R)	17,331,787	17,331,787	0 (G)

Project: 000389 Current WBS: 2.3 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete			
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC	
2.3.1	Construction Support	0	0	1,514	0 (G)	-1,514 (R)	136,638,825	136,638,825	139,686,153	0 (G)	-3,047,328 (G)	136,638,825	139,686,153	-3,047,328 (G)	
2.3.2	Construction	0	0	-8,414	0 (G)	8,414 (R)	145,662,416	145,662,416	147,676,993	0 (G)	-2,014,577 (G)	145,662,416	147,676,993	-2,014,577 (G)	
2.3.3	Engineered Equipment	0	0	-252,946	0 (G)	252,946 (R)	66,627,190	66,627,190	65,102,239	0 (G)	1,524,951 (G)	66,627,190	65,102,239	1,524,951 (G)	
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)	
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)	
2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,137	-10,644,470 (Y)	
		Totals:	18,829,660	13,603,353	19,635,283	-5,226,306 (R)	-6,031,930 (R)	592,455,093	558,170,968	581,659,308	-34,284,125 (Y)	-23,488,340 (G)	782,950,432	842,410,786	-59,460,354 (Y)



CPR Dashboard – Drill Down

Variance Analysis - WBS: 2.3.5

Cancel

Cause:

Overview
Construction has continued safe per the Project Plan. The Alpha Finishing Facility (AFF) is 56% complete. The program is currently 56% complete. The program includes self-performed construction effort.

Seven (7) structural concrete placements were originally scheduled but were developed in response to late deliveries of the large ASME tanks.

One (1) buttress wall concrete placement at El. 176' was also completed in the CPA and was planned for this period.

Three (3) low roof curb concrete placements were also completed and these placements were also planned in the baseline in prior periods but were also impacted by late deliveries of the large ASME tanks.

Other work completed includes:
HVAC ductwork and supports in rooms R2-202 and R-213,
Installation of miscellaneous metals - stairs, handrails, platforms in the CCA,
Installation of metal decking, South of L line in AFF,
Installation of balance of grounding in the AFF,
Concrete placement B-035 & B-036 in the EFSA,
Installation of Siding, roof membrane and gutters/downspouts in the NFSA and
Installation of electrical fixtures and devices in rooms R201 and R201A.
Contractor has also posted progress on

NOTE: VAR Narrative is only available if contractor includes VAR Narratives in their CPP Upload

VAR Narrative

Back to Dashboard

Project: 000389 WBS Number: 2.3

Dynamic Drilldown Reports

- Shared Reports
 - WBS DDR
 - WBS IEAC Analysis
 - WBS Performance Index Trends
 - WBS SPA Cost (Monthly)
 - WBS SPA Cost (Yearly)
 - WBS SPA Cost Schedule (Monthly)
 - WBS SPA Cost Schedule (Yearly)
 - WBS SPA Hours (Monthly)
 - WBS SPA Hours (Yearly)
 - WBS SPI vs. CPI Trend
 - WBS SV vs. CV Trend
 - WBS Summary Report

DDR Reports

K(\$)														Incremental			Cumulative			At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC								
2.3.1	Construction Support	0	0	1,514	0 (G)	-1,514 (R)	136,638,825	136,638,825	139,686,153	0 (G)	-3,047,328 (G)	136,638,825	139,686,153	-3,047,328 (G)								
2.3.2	Construction	0	0	-8,414	0 (G)	8,414 (R)	145,662,416	145,662,416	147,676,993	0 (G)	-2,014,577 (G)	145,662,416	147,676,993	-2,014,577 (G)								
2.3.3	Engineered Equipment	0	0	-252,946	0 (G)	252,946 (R)	66,627,190	66,627,190	65,102,239	0 (G)	1,524,951 (G)	66,627,190	65,102,239	1,524,951 (G)								
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)								
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)								
2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,137	-10,644,470 (Y)								
		Totals:	18,829,660	13,603,353	19,635,283	-5,226,306 (R)	-6,031,930 (R)	592,455,093	558,170,968	581,659,308	-34,284,125 (Y)	-23,488,340 (G)	782,950,432	842,410,786	-59,460,354 (Y)							



CPR Dashboard – Drill Down

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Project: 000389 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)
UB	Undistributed Budget											0	0	
PMB	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	1,203,931,397	1,260,800,161	-56,868,764 (G)
MR	Market Res.													

Project: 000389 Parent WBS: 1 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
2.1	Design	0,736	40,455	110,620	-10,281 (R)	-70,164 (R)	248,963,333	248,796,769	249,654,190	-166,564 (G)	-857,420 (G)	249,086,697	250,039,932	-953,235 (G)
2.3	Construction Phase	9,660	13,603	12,283	-5,226,306 (R)	-6,031,930 (R)	592,455,093	558,170,968	581,659,308	-34,284,125 (Y)	-23,488,340 (G)	782,950,432	842,410,786	-59,460,354 (Y)
2.4	Commissioning Phase	8,848	1,024,74	50,275	5,899 (G)	174,473 (Y)	21,636,281	20,787,293	19,495,714	-848,988 (G)	1,291,579 (G)	126,208,064	122,663,238	3,544,825 (G)
3.1	M&O Support	3,135	173,13	80,624	0 (G)	-107,489 (R)	24,757,558	24,757,558	24,269,459	0 (G)	488,099 (G)	28,354,417	28,354,417	0 (G)
3.2	DOE Support	1,320	91,32	55,569	0 (G)	-64,249 (R)	15,549,224	15,549,224	9,936,671	0 (G)	5,612,553 (R)	17,331,787	17,331,787	0 (G)

Project: 000389 Parent WBS: 2.3 1/27/2012 WBS CPR Drilldown Reports

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
2.3.1	Construction Support	0	0	1,514	0 (G)	-1,514 (R)	136,638,825	136,638,825	139,686,153	0 (G)	-3,047,328 (G)	136,638,825	139,686,153	-3,047,328 (G)
2.3.2	Construction	0	0	-8,414	0 (G)	8,414 (R)	145,662,416	145,662,416	147,676,993	0 (G)	-2,014,577 (G)	145,662,416	147,676,993	-2,014,577 (G)
2.3.3	Engineered Equipment	0	0	-252,946	0 (G)	252,946 (R)	66,627,190	66,627,190	65,102,239	0 (G)	1,524,951 (G)	66,627,190	65,102,239	1,524,951 (G)
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)
2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,137	-10,644,470 (Y)

Totals: 18,829,660 13,603,353 19,635,283 -5,226,306
(R) -6,031,930
(R) 592,455,093 558,170,968 581,659,308 -34,284,125
(Y) -23,488,340
(G) 782,950,432 842,410,786 -59,460,354
(Y)



CPR Dashboard – Filtering

- Filters Available in Dashboard Header
 - WBS/OBS
 - Incremental SV and CV
 - Cumulative SV and CV
 - VAC
- All Levels of WBS/OBS as Uploaded by Contractor
- Yellow Selection Will Display All Red AND Yellow Elements
- Red Selection Will Display Only Red Elements
- Click “Recycle” Button to Apply Filters

The screenshot shows a CPR Dashboard interface with a table of financial data. The table has columns for K(\$), Incremental, Cumulative, and At Complete categories. Each category has sub-columns for BCWS, BCWP, Actual, SV, and CV. The SV and CV columns contain dropdown menus with color-coded options: Red, Yellow, and Green. In the Cumulative section, some cells show red values with '(R)' and yellow cells with '(Y)'. A yellow circle highlights the 'Recycle' button in the top toolbar. A callout bubble points to the 'Recycle' button with the text: 'Recycle Button Will Refresh the Dashboard and Apply Selected Filters'.

K(\$)		Incremental				Cumulative				At Complete					
		BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC	
UB	WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
	1	Level 1	20,163,699	14,933,011	21,032,371	Red Yellow	Red Yellow	903,361,488	895,015,341	885,015,341	Red Yellow	Red Yellow	1,203,931,397	1,260,800,161	Red Yellow
	Level 2	Undistributed Budget											0	0	
	Level 3														
	Level 4														
PM	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	895,015,341	885,015,341	Red Yellow	Red Yellow	1,203,931,397	1,260,800,161	0,800,161	-56,868,764 (Y)
	Management Reserve														
	Totals:	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	895,015,341	885,015,341	Red Yellow	Red Yellow	1,203,931,397	1,260,800,161	0,800,161	-48,648,153 (Y)



CPR Dashboard – Filtering

WBS Number	Description	Incremental					Cumulative					At Complete		
		BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	
VAR 2.1.7	PMME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,094	-166,564 (R)	-378,966 (R)	1,151,055	1,625,816	-474,781 (R)
VAR 2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,019	-10,286,411 (Y)
VAR 2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,216	-34,992,520 (R)
VAR 2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,117	-10,644,470 (Y)

All Level 3 WBS Elements from contractor-provided WBS structure where Variance At Complete (VAR) breached YELLOW threshold.



CPR Dashboard – Filtering

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K(\$)		Incremental						Cumulative						At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC		
Level 3																
2.1.7	R&ME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,094	-166,564 (R)	-378,966 (R)	1,151,055	1,625,830	-474,781 (R)		
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)		
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,200	-34,992,520 (R)		
2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,132	-10,644,470 (Y)		
2.4.5	Commissioning Phase Mgmt Support - Balance	1,018,848	1,024,747	850,269	5,899 (G)	174,479 (Y)	12,392,549	11,543,561	10,171,825	-848,988 (Y)	1,371,735 (Y)	116,964,332	113,339,850	3,624,982 (G)		

All Level 3 WBS Elements from contractor-provided
WBS structure where Variance At Complete (VAR) OR
Cumulative Schedule Variance (Cum SV) breached
YELLOW threshold.



CPR Dashboard – Filtering

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Project 000389 1/27/2012 WBS CPR Drilldown Reports

K(\$)

		Incremental						Cumulative						At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC		
2.1.7	PM&ME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,044	-166,564 (R)	-378,966 (R)	1,151,055	1,625,866	-474,781 (R)		
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,139	802,756 (G)	-675,783 (G)	112,090,648	122,377,049	-10,286,411 (Y)		
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-2,055,527 (Y)	213,286,686	248,279,263	-34,992,520 (R)		
2.3.6	Equipment Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,222	-8,862,325 (Y)	7,220,075 (Y)	108,644,667	119,289,117	-10,644,470 (Y)		
2.4.5	Commissioning Phase Mgmt	1,924,777	850,269	1,924,777	5,899 (G)	174,479 (Y)	12,392,549	11,543,561	10,171,856	-848,988 (Y)	1,371,735 (Y)	116,964,332	113,339,300	3,624,982 (G)		

Project 000389 Pareto 2.3.5 1/27/2012 WBS CPR Drilldown Reports

K(\$)

		Incremental						Cumulative						At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC		
2.3.5.1	Construction Management, Support and ODCs	5,517,071	4,694,807	5,212,891	-822,263 (Y)	-518,084 (Y)	75,565,397	66,207,771	69,085,885	-9,357,626 (Y)	-2,878,113 (G)	145,500,397	174,861,969	-29,361,572 (R)		
2.3.5.2	Yard	991,140	221,669	411,849	-769,471 (R)	-190,180 (R)	3,649,395	1,560,897	2,672,608	-2,088,497 (R)	-1,111,711 (R)	9,572,492	9,482,164	90,328 (G)		
2.3.5.3	Administration Building	0	0	0	0 (G)	0 (G)	13,087	13,038	13,686	-49 (G)	-648 (G)	576,566	577,397	-831 (G)		
2.3.5.4	Process Building	1,376,681	916,580	2,409,989	-460,101 (R)	-1,493,409 (R)	27,913,531	17,500,985	25,725,021	-10,412,546 (R)	-8,224,036 (R)	45,757,030	51,338,078	-5,581,048 (Y)		
2.3.5.5	Alpha Finishing Facility	915,313	84,169	109,154	-831,145 (R)	-24,986 (R)	6,169,140	1,803,302	1,644,320	-4,365,838 (R)	158,982 (G)	11,880,202	12,019,599	-139,397 (G)		
	Totals:	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)		



CPR Dashboard - Thresholds

Understanding Thresholds

- Not dictated by contract, but is up to each individual User.
- Used for data review and filtering on CPR Dashboard.
- PARS II default thresholds

GREEN: ≤ 10%

YELLOW: > 10% AND ≤ 20%

RED: > 20%

No Rounding! 10.1% = **YELLOW**

Incremental		Cumulative		At Complete	
SV	CV	SV	CV	VAC	
Red (+)	20	20	20	20	20
Yellow (+)	10	10	10	10	10
Green	10	10	10	10	10
Yellow (-)	20	20	20	20	20
Red (-)					

OK Cancel

Percentage (%)
Dollars (\$)

Incremental		Cumulative		At Complete	
SV	CV	SV	CV	VAC	
Red (+)	20	20	20	20	10
Yellow (+)	10	10	10	10	5
Green	10	10	10	10	5
Yellow (-)	20	20	15	15	10
Red (-)					

OK Cancel

Percentage (%)
Dollars (\$)

- Changing Thresholds**
 - Change applies to ALL projects for ONE user
 - Changes save between sessions.
 - % v. \$ Thresholds - Only one can be viewed at a time.



CPR Dashboards

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- Change in Thresholds Is Immediately Reflected on the Dashboard

Drilldown Reports															
K(\$)		Incremental					Cumulative					At Complete			
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC	
2.1.7	R&ME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,094	-166,564 (R)	-378,966 (R)	1,151,055	1,625,836	-474,781 (R)	
2.3.4	Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)	
2.3.5	Construction - Balance	8,800,205	5,917,225	8,143,884	-2,882,980 (R)	-2,226,659 (R)	113,310,550	87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)	
2.3.6	Engineered Equipment - Balance	5,879,554	4,103,754	7,113,575	-1,775,800 (R)	-3,009,822 (R)	70,519,502	61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,137	-10,644,470 (Y)	
2.4.5	WBS Number	K(\$)					Incremental					Cumulative			
2.1.7		R&ME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,094	-166,564 (R)	-378,966 (R)	1,151,055	1,625,836	-474,781 (R)
2.3.1		Construction Support	0	0	1,514	0 (G)	-1,514 (R)	136,638,825	136,638,825	139,686,153	0 (G)	-3,047,328 (G)	136,638,825	139,686,153	-3,047,328 (Y)
2.3.4		Construction Phase Management & Support - Balance	4,149,901	3,582,375	4,637,670	-567,526 (Y)	-1,055,296 (R)	59,696,610	60,499,366	61,175,149	802,756 (G)	-675,783 (G)	112,090,648	122,377,059	-10,286,411 (Y)
2.3.5		Construction - Balance						87,085,994	99,141,521	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,206	-34,992,520 (R)	
2.3.6		Engineered Equipment - Balance						61,657,177	68,877,252	-8,862,325 (Y)	-7,220,075 (Y)	108,644,667	119,289,137	-10,644,470 (Y)	
2.4.5	Commissioning Phase Mgmt Support - Balance	1,018,848	1,024,747	850,269	5,899 (G)	174,479 (Y)	12,392,549	11,543,561	10,171,825	-848,988 (Y)	1,371,735 (Y)	116,964,332	113,339,350	3,624,982 (G)	

**WBS 2.3.1 Breached
Updated Threshold on
Variance At Complete (VAC)**



Timephased Dashboard

			Project: 000389 Parent WBS: 1															WBS		Drilldown Reports		
WBS Number	Description	Element	2012												2013						ROP	Total
			Prior	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1			
2.1	Design	S	248,703,063	65,199	65,928	78,409	50,738	45,095	42,598	32,902	2,769										249,088,897	
		P	248,630,952	39,951	41,508	43,905	40,455														248,798,769	
		A	249,280,687	117,882	75,768	69,255	110,620														249,654,190	
		EAC	249,280,687	117,882	75,768	69,255	110,620	40,612	40,556	35,917	47,085	57,188	35,406	44,258	35,406	35,406	13,910				250,039,932	
2.3	Construction Phase	S	521,163,133	17,224,520	15,453,617	19,784,164	18,829,680	19,534,561	22,340,282	16,771,301	21,756,824	20,324,858	13,137,272	16,199,674	11,422,352	9,333,539	12,062,158	8,980,369	7,587,432	11,044,716	782,950,432	
		P	498,092,052	15,624,113	15,554,319	17,297,131	13,603,353														558,170,968	
		A	508,480,509	17,103,173	17,643,258	18,797,084	19,635,283														581,659,308	
		EAC	508,480,509	17,103,173	17,643,258	18,797,084	19,635,283	22,461,599	24,824,384	18,260,058	16,529,080	18,513,786	12,382,133	17,353,897	14,618,815	11,407,255	14,290,937	9,082,647	9,807,834	71,439,493	842,410,788	
2.4	Commissioning Phase	S	17,216,443	1,082,302	1,043,755	1,274,932	1,018,848	994,893	1,244,958	1,257,575	1,307,115	2,480,855	1,946,747	2,613,714	2,347,498	2,449,409	3,473,407	2,924,974	2,910,433	78,640,206	128,208,084	
		P	18,945,929	771,880	791,383	1,253,393	1,024,747														20,787,293	
		A	18,139,624	915,443	641,069	949,303	850,275														19,495,714	
		EAC	18,139,624	915,443	641,069	949,303	850,275	1,231,388	1,447,394	1,101,173	1,118,211	1,793,289	1,514,844	1,859,766	1,341,355	1,567,962	2,072,179	1,583,726	1,605,263	84,930,995	122,663,238	
3.1	M&O Support	S	24,034,100	180,768	173,135	216,419	173,135														28,354,417	
		P	24,034,100	180,768																	558	
		A	23,053,357	312,815																	459	
		EAC	23,053,357	312,815																	417	
3.2	DOE Support	S	15,183,524	77,148																	787	
		P	15,183,524	77,148																	224	
		A	9,170,077	175,385	128,005	309,655	155,569														9,936,671	
		EAC	9,170,077	175,385	128,005	309,655	155,569	-3,963,780	704,759	563,807	563,807	704,759	563,807	704,759	563,807	247,694	326,850	261,320	270,653	5,883,056	17,331,787	

NOTE: Data in the dashboard is only available if the contractor includes time phased SPA data in their CPP Upload

- Current Functionality
- Available for a fixed number of reporting periods
- Easier to drill down than reviewing reports
- Most useful on WBS elements nearing completion



Schedule Dashboard – Overview

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- Contains Contractor Baseline and LRE Schedule
- Provides High-Level Visibility into the Contractor Schedule
- Activities and Milestones Rolled Up to Control Account Level
- Used to Support High-Level Schedule Analysis – Not to Replace P6

The screenshot illustrates a schedule dashboard interface. At the top left, there's a toolbar with icons for file operations and a dropdown menu labeled "Project: 000389". Next to it is a date selector showing "1/27/2012" and a dropdown menu for "WBS". To the right of the date selector is another dropdown menu currently set to "Float", with "Slip" and "Float" also listed. A red dashed arrow points from the "Slip" option in this menu down to a table below. This table has two main sections: one for "Start Date Slips (Days)" and one for "End Date Slips (Days)". Both sections include columns for < 30, > 30, > 60, > 90 days, and ETi (Estimated Total Impact). The data shows values such as 5,678, 484, 295, 2,725, 4,946, 509, 338, 3,389, and 1.93 (R). Below this table is another table with four main sections: "Baseline Critical (Free Float)", "Current Critical (Free Float)", "Baseline Critical (Total Float)", and "Current Critical (Total Float)". It includes columns for WBS Number, Description, and ETi. The data for the first row shows values like 657, 170, 387, 3,061, 1,021, 212, 498, 3,705, 2,457, 542, 861, 415, 1,952, 461, 520, 2,503, and 1.93 (R).

		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				
WBS Number	Description	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	ETi
1	Undefined	657	170	387	3,061	1,021	212	498	3,705	2,457	542	861	415	1,952	461	520	2,503	1.93 (R)



Schedule Dashboard – Data Overview

• Contractor Reported Data Elements – No Calculations on This Data

- **Activity Name** – Unique activity ID as defined in the contractor schedule
- **Activity Description** – Corresponding activity description
- **Org Dur** – Original Duration as reported in the contractor LRE schedule
- **B-Org Dur** – Original Duration as reported in the contractor baseline schedule
- **Act Dur** – Actual Duration as reported in the contractor LRE schedule
- **Rem Dur** – Remaining Duration as reported in the contractor LRE schedule
- **%** – Activity Physical Percent Complete as reported in the contractor LRE schedule
- **ASDATE** – Actual Start Date as reported in the contractor LRE schedule
- **AFDATE** – Actual Finish Date as reported in the contractor LRE schedule
- **ESDATE** – Early Start Date as reported in the contractor LRE schedule
- **EFDATE** – Early Finish Date as reported in the contractor LRE schedule
- **LSDATE** – Late Start Date as reported in the contractor LRE schedule
- **LFDATE** – Late Finish Date as reported in the contractor LRE schedule
- **B-Start** – Baseline Start Date as reported in the contractor baseline schedule
- **B-Finish** – Baseline Finish Date as reported in the contractor baseline schedule
- **Free Float** – Activity Free Float as reported in the contractor LRE schedule
- **Total Float** – Activity Total Float as reported in the contractor LRE schedule
- **Baseline Free Float** – Activity Free Float as reported in the contractor baseline schedule
- **Baseline Total Float** – Activity Total Float as reported in the contractor baseline schedule
- **Critical** – Flag for activities that are identified as Critical in the contractor LRE schedule

Note:

Contractor's project calendar is not uploaded, so all calculations in the schedule dashboard and schedule reports are based upon calendar days.



Schedule Dashboard – Data Overview

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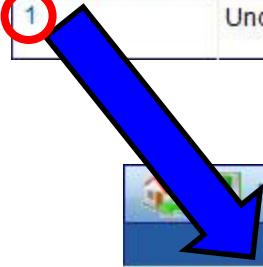
- **ETi – Elapsed Time Index**
 - $ETi_{activity} = \text{Baseline Duration} / \text{Actual Duration}$
 - $ETi_{WBS} = \text{Sum of Baseline Durations} / \text{Sum of Actual Durations}$
- **Slip Start – Number of Calendar Days Start Date Slipped**
 - Slip Start = (ASDATE or ESDATE) – Baseline Start Date
 - A negative number indicates an activity started or scheduled to start earlier
 - A positive number indicates an activity started or scheduled to start later
- **Slip Finish – Number of Calendar Days Finish Date Slipped**
 - Slip Finish = (AFDATE or EFDATE) – Baseline Finish Date
 - A negative number indicates an activity finished or scheduled to finish early
 - A positive number indicates an activity finished or scheduled to finish later
- **NOTE: Slips Are Calculated in Calendar Days – Not Contractor Working Days**



Schedule Dashboard – Slip View

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Project: 000389		1/27/2012	WBS	Slip	Drilldown Reports							
WBS Number	Description	Start Date Slips (Days)				End Date Slips (Days)				ETi		
		< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90			
1	Undefined	5,678	484	295	2,725	4,946	509	338	3,389	1.93 (R)		



Project: 000389		Parent WBS: 1	1/27/2012	WBS	Slip	Drilldown Reports							
WBS Number	Description	Start Date Slips (Days)				End Date Slips (Days)				ETi			
		< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90				
2.1	Design	920	8	7	29	884	18	10	52	.98 (G)			
2.3	Construction Phase	3,935	438	267	1,877	3,495	459	311	2,252	2.09 (R)			
2.4	Commissioning Phase	805	38	21	776	551	32	17	1,040	1.87 (R)			
3.1	M&O Support	12			42	11			43	.94 (G)			
3.2	DOE Support	6			1	5			2	.96 (G)			



Schedule Dashboard – Float View

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Project: 000389		1/27/2012	WBS	Float	Drilldown Reports													
WBS Number	Description	Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi
		> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	
1	Undefined	657	170	387	3,061	1,021	212	498	3,705	2,457	542	861	415	1,952	461	520	2,503	1.93 (R)

Project: 000389		Parent WBS: 1	1/27/2012	WBS	Float	Drilldown Reports												
WBS Number	Description	Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi
		> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	
2.1	Design	6	2	4	38	6	6	38	50	22	22	22	22	28	.98 (G)	.98 (G)	.98 (G)	
2.3	Construction Phase	517	115	270	2,118	821	142	294	2,645	1,722	371	699	228	1,293	345	419	1,845	2.09 (R)
2.4	Commissioning Phase	127	51	102	877	187	68	191	990	642	171	160	184	616	111	101	608	1.87 (R)
3.1	M&O Support	7	2	10	26	7	2	7	29	42	1	2	21	4	20	.94 (G)	.94 (G)	
3.2	DOE Support				1	2			3	1	1	1	1	1	1	2	.96 (G)	





Schedule Dashboard – Float View

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Project: 000389		1/27/2012	WBS	Float	Drilldown Reports													
WBS Number	Description	Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi
		> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	
1	Undefined	657	170	387	3,061	1,021	212	498	3,705	2,457	542	861	415	1,952	461	520	2,503	1.93 (R)

Project: 000389		Parent WBS: 1	1/27/2012	WBS	Float	Drilldown Reports												
WBS Number	Description	Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi
		> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	
2.1	Design	6	2	4	38	6	6	38	50	22	28	.98 (G)						
2.3	Construction Phase	517	115	270	2,118	821	142	294	2,645	1,722	371	699	228	1,293	345	419	1,845	2.09 (R)
2.4	Commissioning Phase	127	51	102	877	187	68	191	990	642	171	160	184	616	111	101	608	1.87 (R)
3.1	M&O Support	7	2	10	26	7	2	7	29	42	1	2	21	4	20	.94 (G)		
3.2																		

Project: 000389		WBS: 3.1	1/27/2012	WBS	Float	Drilldown Reports													
Project	Description	Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi	
		> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0		
3.1	M&O Support	7	2	10	26	7	2	7	29	42	1	2	21	4	20	.94 (G)			
Activity	Description	Org Dur	B-Org Dur	Act Dur	Rem Dur	ETI	%	ASDATE	AFDATE	ESDATE	EFDATE	LSDATE	LFDATE	B-Start	B-Finish	Slip Start	Slip Finish	Total Float	Critical
M&O_OPCT-2013	LOE - M&O Management OPC FY 2013	658	454	658	658	69	(R)	10/1/2012	4/24/2015	12/14/2012	7/23/2014	10/1/2012	7/14/2014			284	-197	C	
WC4020	M&O Finalize WMA for	40	40	40	40	1.00	(G)	9/25/2013	11/19/2013	7/25/2013	9/19/2013	11/30/2012	1/29/2013	299	294	43	C		
WDCCD10A67	Forward DCIF's to DA's & DCC & SRCI Coordinator	1	1	1	1	1.00	(G)	6/24/2013	6/24/2013	1/24/2013	1/28/2013	7/17/2012	7/17/2012	342	342	-151	C		
WDCCD10A69	Incorp Docs West WTL & SWPF to SS	4	4	4	4	1.00	(G)	6/25/2013	6/28/2013	1/25/2013	1/28/2013	7/18/2012	7/23/2012	342	340	-151	C		



MR Dashboard

- Checkbook View of Management Reserve Account
- Transactions Are Tied to Specific Work Element
- Activity and Resource Data Is Not Uploaded into PARS II per DOE Implementation Plan

Attachment	Transaction	Balance	Credit	Debit	REMARKS
	11/25/2011	8,949,946.08	.00	822,386.19	WBS:2.3.5.1.1 OBS:07 Activity: Resource:
	11/25/2011	9,772,332.27	822,386.17	.00	WBS:2.3.5.1.1 OBS:05 Activity: Resource:
	9/30/2011	8,949,946.11			Resource:
	9/30/2011	8,996,442.81			Resource:
	5/27/2011	8,734,417.81			Resource:
	5/27/2011	8,734,417.81			Resource:
	4/24/2009	98,297,627.20	.00	56,181.93	WBS:2.3.2.1.1 OBS:07 Activity: Resource:
	4/24/2009	98,353,809.13	.00	25,410.54	WBS:2.3.1.02.05 OBS:02 Activity: Resource:
	4/24/2009	98,379,219.67	.00	987.12	WBS:2.3.1.01.04 OBS:03 Activity: Resource:

WBS and OBS elements affected by the Transaction

NOTE: Data in the dashboard only available if contractor includes MR Log data in their CPP Upload



MR Dashboard

Project: 000389 1/27/2012

Attachment	Transaction	Balance	Credit	Debit	REMARKS
	11/25/2011	8,949,946.08	.00	822,386.19	WBS:2.3.5.1.1 OBS:07 Activity: Resource:
	11/25/2011	9,772,332.17	822,386.17	.00	WBS:2.3.4.01.01 OBS:05 Activity: Resource:
	9/30/2011	8,949,946.08	.00	46,496.77	WBS:5.0 OBS: Activity: Resource:
	9/30/2011	8,996.77	.00	.00	WBS:4.2 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	.00	.00	WBS:4.2 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	.00	.00	WBS:4.2 OBS: Activity: Resource:
	4/24/2009	98,297,627.20	.00	56,181.93	WBS:2.3.2.1.1 OBS:07 Activity: Resource:
	4/24/2009	98,353,809.13	.00	25,410.54	WBS:2.3.1.02.05 OBS:02 Activity: Resource:
	4/24/2009	98,379,219.67	.00	987.12	WBS:2.3.1.01.04 OBS:03 Activity: Resource:

MR Dashboard Transaction Narrative on 11/25/2011

Cancel

Changes: Create a System Turnover Coordination Team
Change Description and Justification:

This PCR will create a System Turnover Coordination Team work package over the Construction Staff account. Based on the current status of the project, a shift in the need for a constructability review team was no longer required. These personnel will be transferred to the Construction group to prepare for system testing and coordination. This group will prepare turnover sequences in detail to support an efficient transition between the construction installation team to the Commissioning team. The budget for this new work package will come from Management Reserve.
There are no schedule impacts as a result of this change.

Risk Assessment Management Plan Identified Risk:

Risk Number: N/A
Risk Description: N/A

Current MR Balance

Original MR Balance

**REPORT Location: Analysis Reports folder;
Management Reserve (MR) Log**

MR Dashboard



Attachment	Transaction	Balance	Credit	Debit	REMARKS
	11/25/2011	8,949,946.08	.00	822,386.19	WBS:2.3.5.1.1 OBS:07 Activity: Resource:
	11/25/2011	9,772,332.77	822,386.17	.00	WBS:2.3.4.01.01 OBS:05 Activity: Resource:
			.00	46,496.77	WBS:5.0 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	87	52,025.00	.00 WBS:4.2 OBS: Activity: Resource:
	5/27/2011	8,734,417.87	.00	.00	WBS:4.2 OBS: Activity: Resource:
	4/24/2009	98,353,09.13	.00	56,181.93	WBS:2.3.2.1.1 OBS:07 Activity: Resource:
	4/24/2009	98,379,219.67	.00	5,410.54	WBS:2.3.1.02.05 OBS:02 Activity: Resource:
			.00	7.12	WBS:2.3.1.01.04 OBS:03 Activity: Resource:

Current MR Balance

Original MR Balance

Project: 000389		1/27/2012	WBS	CPR	Drilldown Reports									
K(\$)		Incremental				Cumulative				At Complete				
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	BAC	EAC	VAC	
1	Undistributed Budget	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,359	903,361,488	868,061,812	885,015,341	-35,299,676	-16,953,530	203,931,397	1,260,800,161	-56,868,764
UB	Undistributed Budget													
PMB	Performance Baseline	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,359	903,361,488	868,061,812	885,015,341	-35,299,676	-16,953,530	203,931,397	1,260,800,161	-56,868,764
MR	Management Reserve												8,220,611	
Totals:				20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,359	903,361,488	868,061,812	885,015,341	-35,299,676	-16,953,530	203,931,397



Manual Data Entry – CPR Entry Screen

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- Only Project-Level CPR Dashboard Will Have Data Available
- Drill-down Capability Will Not Be Available

WBS		OBS	MR / UB	Incremental			Cumulative	
Number	Description	Parent		BCWS	BCWP	ACWP	BCWS	BCWP
1	Nuclear Facility D&D - Brookhaven G			1,187,224.00	90,566.00	1,417,833.22	60,613,479.00	58,011.77

Project: 000431 1/31/2012 WBS CPR Drilldown Reports

		Incremental				Cumulative			At Complete							
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC		
1	Nuclear Facility D&D - Brookhaven Graphite Research Reactor (BGR)	1,187,224	90,566	1,417,833	-1,096,658	(R)	1,327,267	60,613,479	58,011,771	-2,601,769	(R)	-10,951,419	(R)	61,541,503	73,728,785	-12,187,282
UB	Undistributed Budget															
PMB	Performance Measurement Base															
MR	Management Reserve															

Project: 000431 1/31/2012 WBS Slip Drilldown Reports

Project		Description		< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	ETi		
1	Nuclear Facility D&D - Brookhaven Graphite Research Reactor (BGR)													

Project: 000431 1/31/2012 WBS Drilldown Reports

No data was found.

Project: 000431 1/31/2012 WBS Drilldown Reports

No data was found.

Dashboards Wrap-Up

- **PARS II Dashboards**
 - CPR Dashboard
 - Timephased Dashboard
 - Schedule Dashboard
 - Management Dashboard
- **Contractor Project Data Uploads**
 - Is My Project Required to Upload Data?
 - Upload Data Requirements
 - Dashboards only display data if CPP Data exists

EVMS Overview

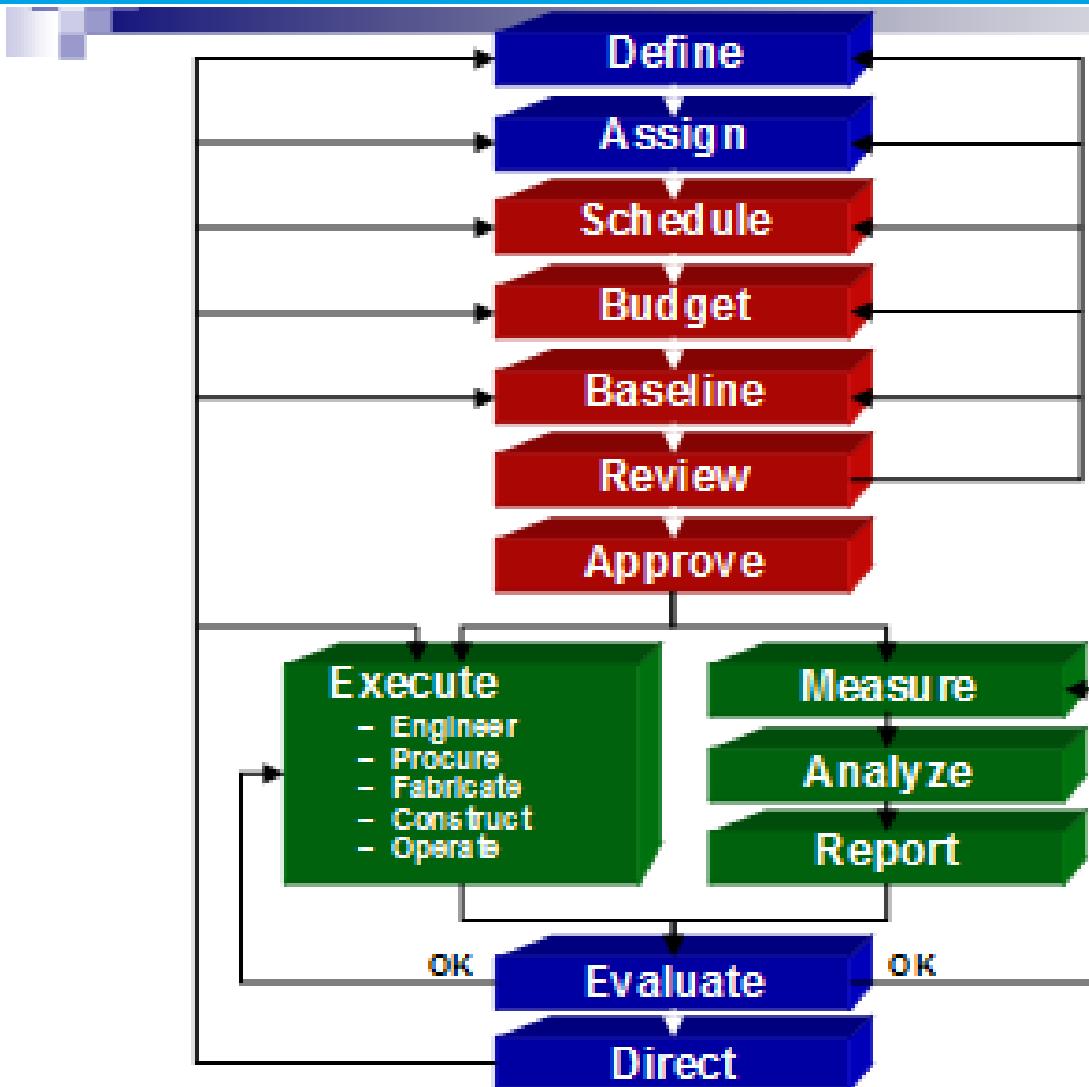




What is an Earned Value Management System?

- An **integrated** set of
 - Documented Management **Processes**
 - Management Information **Systems**
 - **Culture** (People – Roles / Responsibilities)
- Provides reliable and accurate project and program **information**
- Used to support project management as a **decision making tool** and a critical component of risk management.

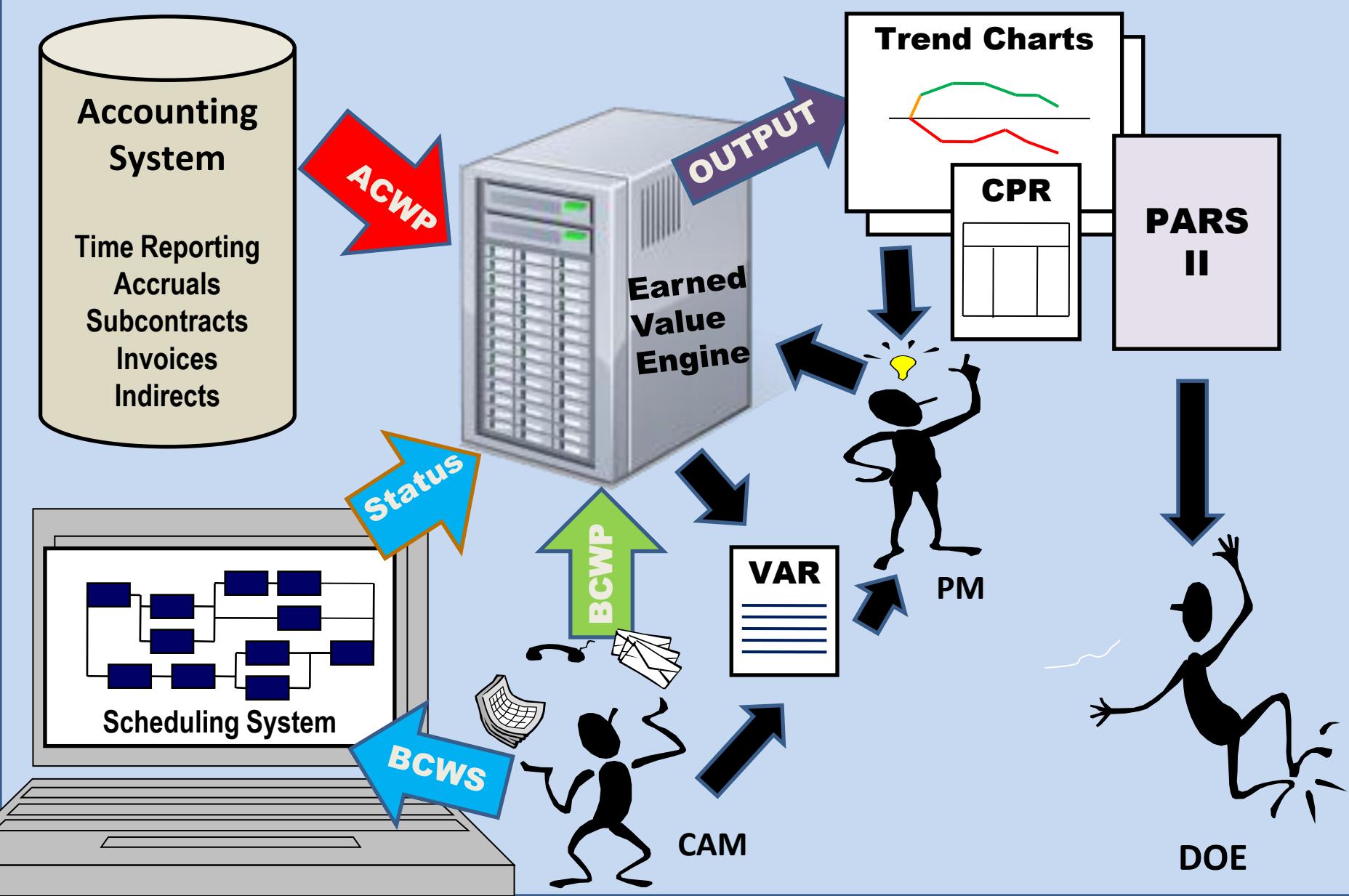
EVMS Processes



The EVMS Process

- Break down the program work scope into finite pieces
- Plan all work scope
- Integrate program work scope, schedule and cost objectives
- Objectively assess accomplishments
- Use actual costs incurred
- Analyze significant variances
- Control changes to the baseline
- Use EVMS information

The EVM System I/O



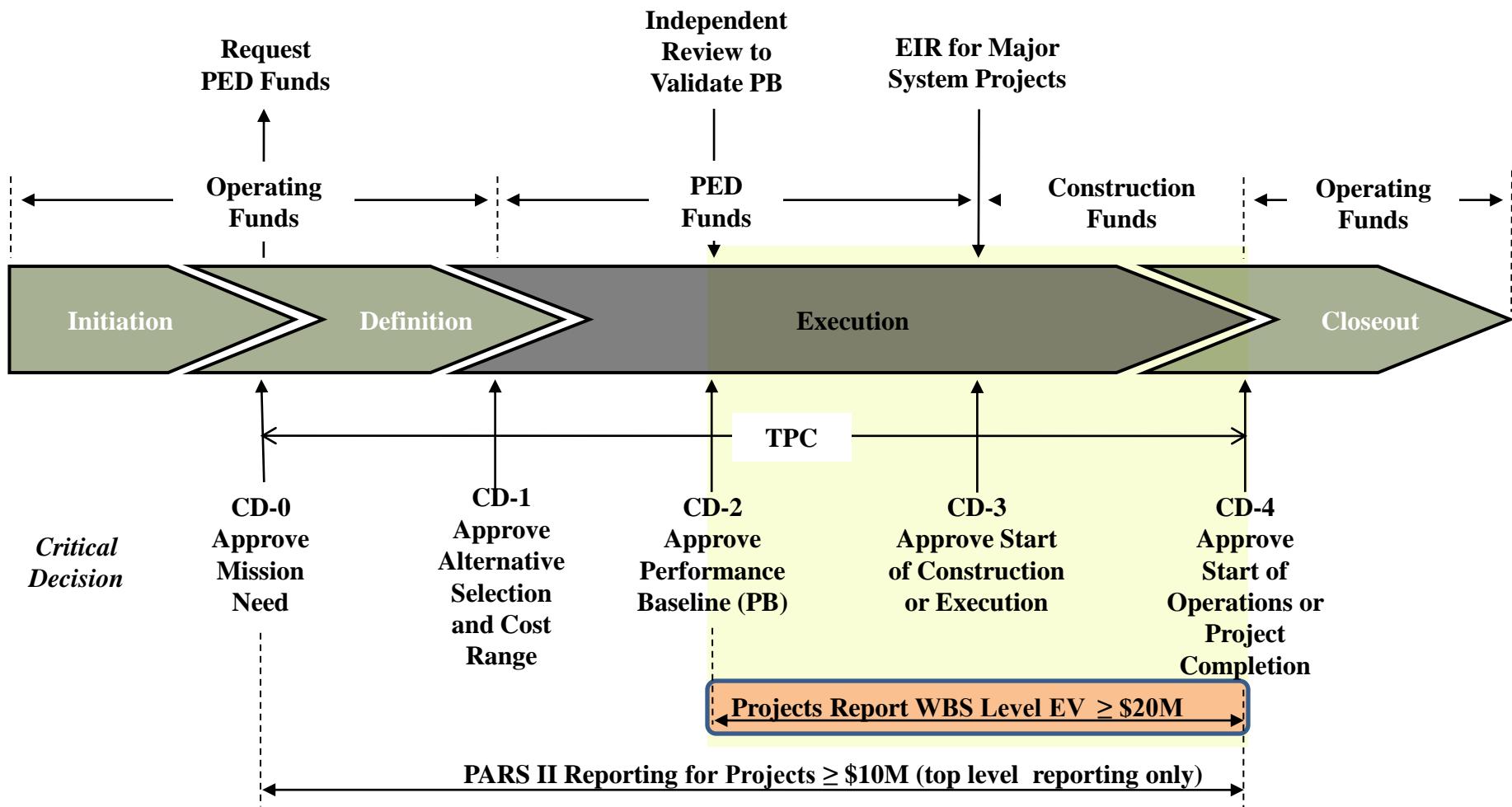


- Department of Energy (DOE) Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, released Nov 10; implementation date May 2011
 - Significant EVMS-related changes:
 - Established thresholds for Certification responsibilities
 - Added a Surveillance requirement
 - Added a Corporate Certification provision
 - Added Notification of Non-Compliance language
- DOE Guide 413.3-10A, March 13, 2012
- DOE Office of Acquisition and Project Management (APM) Standard Operating Procedures (SOP)
 - EVMS Surveillance SOP issued September 26, 2011





EVMS Requirements Tied to DOE's Acquisition Lifecycle



Typical DOE Acquisition Management System for Line Item Capital Asset Projects



Certification and Surveillance Intent

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- The intent of an EVMS Certification/Surveillance process is to:
 - Assess **compliance** of the EVM System with ANSI/EIA-748 across it's applicable DOE Order 413.3B capital asset projects.
 - Ensure **implementation** of the EVMS to monitor and manage cost, schedule, and technical performance across their entity.
 - Assess **maintenance** and continued implementation of the EVMS.
 - Provide a documented and defensible **record** for both DOE and the Contractor in support of any future Government Agency assessment of their EVMS or Order 413.3B compliance.

EVMS certification occurs after full completion of the review process



DOE Certification Assessment Process

Readiness Assessment	<ul style="list-style-type: none">• After CD-1• "Level-set" expectations• 1 Day on-site meeting; two or more months prior to review
Pre-Review Assessment	<ul style="list-style-type: none">• After CD-2• Assess policy/procedures, i.e. System Description• Review and analyze 3 months of data
On-Site EVMS Review	<ul style="list-style-type: none">• CAM and Managerial Interviews• Conduct Data Traces• Typically 5 days on site
Follow Up Review	<ul style="list-style-type: none">• Review CAP Evidence Submittal• Assess CAP Implementation• Typically 1 to 3 days on site
Certification	<ul style="list-style-type: none">• Final Report• Certification Letter from Contracting Officer prior to CD-3
Surveillance	<ul style="list-style-type: none">• Follows Certification• Contractor conducts annual surveillance• Internal APM SOP provides for on-going data driven, risk based analysis



EVMS Changes After Certification

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- **Contractor-proposed EVMS changes require DOE approval prior to implementation per FAR 52.234-4(e) which is incorporated by DOE Order 413.3B, Attachment 1.**
- **DOE advises the Contractor of the acceptability of such changes within 30 calendar days after receipt of the notice of proposed changes from the Contractor.**
 - The DOE Certifying Authority reviews the proposed changes against ANSI/EIA-748B to determine compliance.
 - If so, the changes are recommended for approval to the CO.
 - The implementation verification would be annotated as a possible area of risk, and confirmed based on surveillance activities
 - If the proposed EVMS changes are not considered compliant, the DOE Certifying Authority works with the Contractor to reach agreement. If agreement is not reached, then the CO sends a letter of non-consent.
 - FAR provides for the CO to waive the pre-approval process on a case by case basis. If so granted, the contractor must provide notice 14 days prior to implementation.





EVMS Certification Data Repository

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- **What?**
 - EVMS Certification and Surveillance status is maintained in a Central DOE Repository
- **Where?**
 - PARS II
- **Who?**
 - APM is primary responsible for maintaining a repository of the status of all certifications, regardless of certifying authority and dollar thresholds, across DOE projects, sites, and contractors.
 - The PMSO, when acting as the certifying authority, provides copies of all deliverables and reports for each certification and surveillance to APM when it is accomplished.
 - The FPD ensures copies of contractor self-assessments and annual internal surveillances are provided to APM.
 - The Contractor attaches the system description and supporting procedures within PARS II.
- **Why?**
 - Compliance with Order; Metrics; Auditability

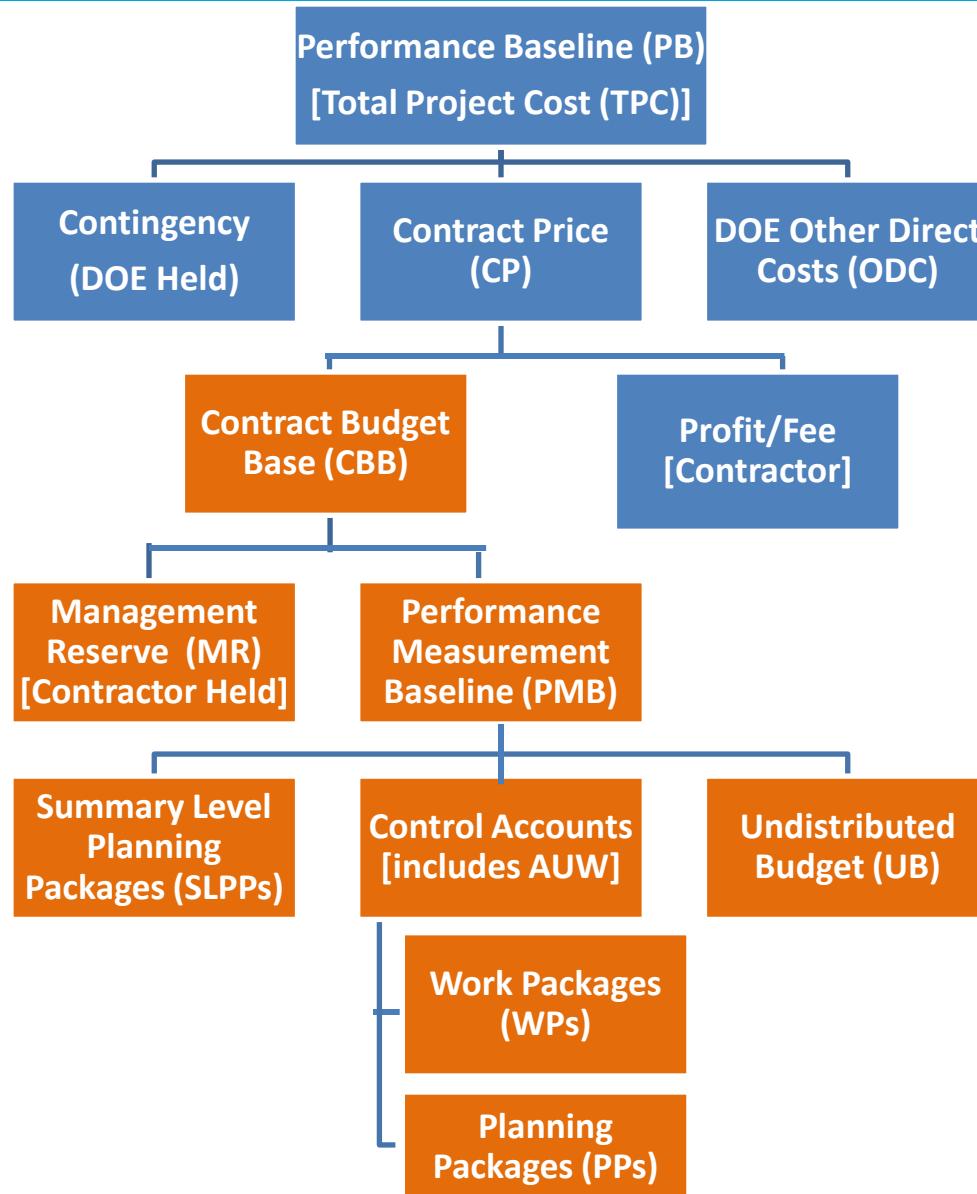


Basics Refresher

- **Materials in your Training Packet:**
 - DOE EVMS Gold Card
 - ANSI/EIA-748 Guidelines & Organization Processes Alignment
 - Guidelines grouped by Process Area
 - Cross-process alignment with Business and Management processes
 - DOE EVMS Risk Assessment Matrix and instructions



Performance Baseline Components





References

- American Nat'l Stds Institute/Electronic Industries Alliance (ANSI/EIA) 748-B
- Federal Acquisition Regulations 34.2 and 52.234, Earned Value Mgmt Systems
- DOE Order 413.3B, Program and Project Mgmt for the Acquisition of Capital Assets
- DOE Guide 413.3-10A, Earned Value Management Systems
- DOE Guide 413.3-20, Change Control Management
- DOE APM EVMS Surveillance Standard Operating Procedure
- GAO-09-3SP, GAO Cost Estimating and Assessment Guide – Best Practices for Developing and Managing Capital Program Costs, March 2009
- National Defense Industry Association (NDIA) EVMS Guides (Intent 2011, Surveillance 2011, Acceptance 2011, Integrated Baseline Review 2010, Application 2006);
http://www.ndia.org/Divisions/Divisions/Procurement/Pages/Program_Management_Systems_Committee.aspx
- Dept. of Defense Earned Value Management Implementation Guide 2006
- OMB Circular A-11, Part 7, Capital Programming Guide



DOE APM EVM Home Page

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SERVICES OPERATIONAL MANAGEMENT MISSION

SEARCH

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EARNED VALUE MANAGEMENT

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Earned Value

[Lessons Learned](#)

[Reviews and Validations](#)

[Documents and Publications](#)

[RCA and CAP](#)

Earned Value Management (EVM) is a systematic approach to the integration and measurement of cost, schedule, and technical (scope) accomplishments on a project or task. It provides both the government and contractors the ability to examine detailed schedule information, critical program and technical milestones, and cost data.

- [EVMS Surveillance Standard Operating Procedure \(ESSOP\)](#) - 26 Sep 2011 (pdf)
 - [EV Guideline Assessment Templates](#) - (MS Word)
 - [DOE EVMS Cross Reference Checklist](#) - (pdf)
 - [DOE EVMS Risk Assessment Matrix](#) - (MS Word)
- [Formulas and Terminology "Gold Card"](#) - Sep 2011 (pdf)
- [Slides from the OECM Road Show: Earned Value \(EV\) Analysis and Project Assessment & Reporting System \(PARS II\)](#) - May 2012 (pdf)
- [DOE EVM Guidance](#)

EVM TUTORIALS

[Module 1 - Introduction to Earned Value](#) (pdf 446.86 kb) July 17, 2003

This module is the introduction to a series of online tutorials designed to enhance your understanding of Earned Value Management. This module's objective is to introduce you to Earned Value and outline the blueprint for the succeeding modules. This module defines Earned Value management. It looks at the differences between Traditional management and Earned Value management, examines how Earned Value management fits into a program and project environment, and defines the framework necessary for proper Earned Value management implementation.

<http://energy.gov/management/office-management/operational-management/project-management/earned-value-management>

[Career Development Program](#)

[Real Estate](#)

[History](#)



EVMS Overview Wrap Up

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EVMS Surveillance Process



EVMS Surveillance – Why Change?

- **From:**
 - Re-certification Approach
 - Every two years or at contract midpoint
- **To:**
 - Risk based, data driven
 - Risk Matrix
 - Portfolio focused
 - Data sources include contractor self-assessments, project peer reviews, Integrated PARS II
- **Why would we want to change?**
 - Common Goal:
 - **Maximize results** via continuous, real-time feedback and assistance; benefits all stakeholders
 - **Minimize surveillances costs** by reducing on-site reviews and disruption to the projects





Risk Approach Based on Best Practices

- **National Defense Industry Association (NDIA) Surveillance Guide 2004, 2011**
 - “Management’s objective should be to select processes based upon the risk associated with the remaining work and content that is specific to the programs being reviewed. The selection of EVM guidelines and processes reviewed should be relevant to the program phase...”
 - “The annual program selection process is initiated by reviewing a list of all potential candidate programs to be surveyed. These are selected for surveillance based upon the risk assessed for the remaining work. This selection criterion allows the surveillance process to provide value-added benefits for the program.”
- **Defense Contract Management Agency (DCMA) EVMS Standard Surveillance Operating Manual (SSOM) 2006**
 - Introduced a risk based approach
- **Energy Facilities Contractors Operating Group (EFCOG)**
 - Addresses a concern from our industry partners



So How Does This Affect You?

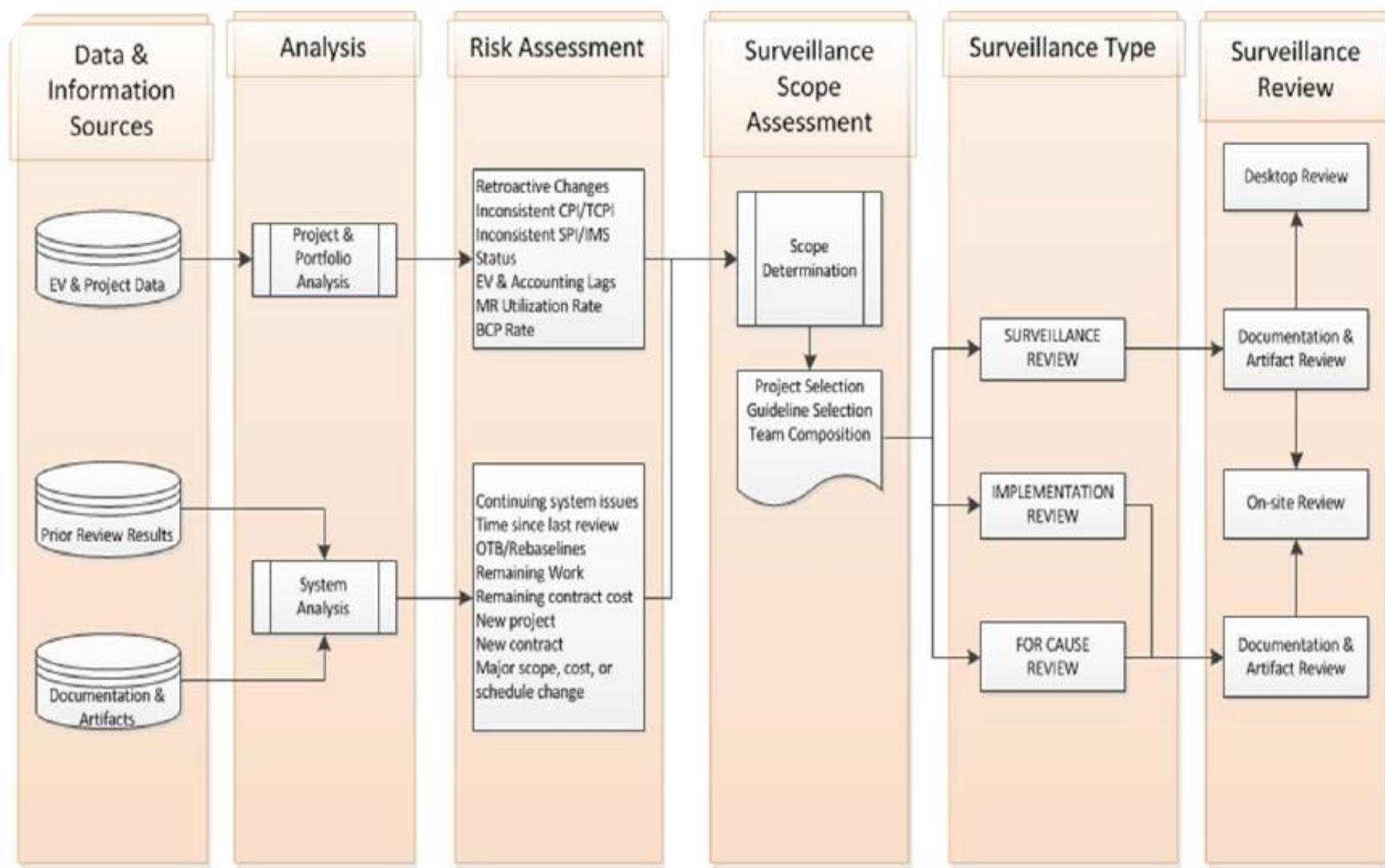
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- **As we said before “Maximize results via continuous, real-time feedback and assistance; benefits all stakeholders”**
- **Who are the stakeholders and how does this affect them?**
 - **APM**
 - Incorporates EVMS surveillance into their project analysis roles
 - Ties other types of reviews to EVMS surveillance
 - **PMSO**
 - Participates with APM on surveillance review
 - Can apply these principles to the PMSO-led reviews
 - **FPD and Project Controls**
 - Needs to understand how APM conducts business as they support APM during the reviews
 - May elect to adopt same risk-based data-driven practices
 - More bang for the buck; less disruption to the project
 - **Contractor**
 - The better they understand the process, the more smoothly the review goes
 - They are responsible for internal surveillance and can adopt the same principles
 - The new process is less disruptive to the contractor so they can focus on the task at hand



EVMS Surveillance Process Overview

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EVMS Surveillance Terminology

- **SURVEILLANCE REVIEW**
 - Conducted to demonstrate continued compliance of a certified system to the ANSI/EIA 748 guidelines, ensure company processes are being followed, verify the EVM data is useful, timely, and effective, and assess whether the data is used to make informed decisions.
- **IMPLEMENTATION REVIEW**
 - Performed in lieu of a Certification Review when EVMS compliance is a requirement. This type review extends a contractor's previously certified system. The extension includes such factors as
 - From one contractor facility to another,
 - From one project to another project after a period of system non-use,
 - From a previously certified system description to a significantly revised system description, and
 - From one certifying entity to another (external, e.g. DoD or CFA to DOE; internal, e.g. PMSO to APM) providing the contracting entity remains the same.
- **REVIEW FOR CAUSE**
 - Conducted on a previously Certified System when concerns exist that the output of the EVMS may no longer meet the intent of the guidelines nor is considered valid for decision-making. The primary objectives of the RFC are to:
 - Evaluate the contractor's progress against the corrective action plan;
 - Identify remaining actions required to reaffirm system acceptability;
 - Ensure accuracy of performance data generated; and
 - Determine if the system validation should be suspended or withdrawn.

Breakdown of the EVMS Surveillance SOP

- **Roles and Responsibilities**

- *APM Project Analyst
- *APM EVM Specialist
- PMSO
- FPD
- Contracting Officer
- Contractor

- **Process**

- Stage 1 Risk Assessment and Monthly Analysis
- Stage 2 Desktop Surveillance
- Stage 3 On-Site Surveillance

- **Documentation**

- Corrective Action Requests and Continuous Improvement Opportunities
- Surveillance Results



*For those PMSOs who are exempt from DOE O 413.3B, the PMSO may choose to fulfill the role of APM.



Surveillance Responsibilities: APM EVM Specialist

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- Serves as the APM subject matter expert for surveillance team activities
- Specific responsibilities include:
 - Coordinating surveillance processes
 - To all stakeholders to increase communication, avoid duplication of effort, minimize cost
 - Evaluating contractor proposed changes to certified EVMS
 - Preparing the continued compliance letter for APM Director's signature to the CO
 - Uploading surveillance documents to APM's repository

Surveillance Responsibilities: APM Project Analyst



- Conduct ongoing project level surveillance and project analysis activities, which includes some or all of the following:
 - Contract Performance Report and Schedule
 - Contract modifications and baseline revisions
 - Management Reserve usage analysis
 - Independent Estimate at Completion
 - Identification of any deficiencies, trends, and data integrity issues
- Coordinating with APM EVM Specialist regarding EVMS issues which are potentially compliance related
- Serves as Lead for the EVMS Surveillance Team
 - Surveillance of **all** EVMS-applicable projects when a contractor's portfolio includes **at least one project** with a TPC equal to or greater than **\$100M**
 - As requested by PMSO or Site





Surveillance Responsibilities:

PMSO

- Leads surveillance activities where the contractor's portfolio includes capital asset projects with at least one TPC equal to or greater than \$50M but none equal to or greater than \$100M
- Provides copies of all surveillance reports to APM
- May request APM to conduct the surveillance
- Participates as a team member in APM-led surveillance activities





Surveillance Responsibilities:

FPD / Site Office

- Assesses the results of the contractor surveillance program to determine if **additional DOE surveillances** are warranted; may request a PMSO led surveillance, or an APM led surveillance (through its program office).
- Encouraged to **conduct annual surveillances** of the contractor EVMS either separately or jointly with the contractor.
- Conducts **periodic physical verifications** to ensure that the progress being reported is commensurate with actual progress being incurred, and that the actual costs are being reported.
 - Verifies on a monthly basis that the data from the certified EVMS is **accurately uploaded** into PARS II.
 - Closely monitor areas previously identified by CARs to assess effectiveness of actions to **prevent reoccurrence**. Repeat findings are of particular concern as they may demonstrate an inherent weakness in the management processes and thus warrant more concentrated surveillance.





Surveillance Responsibilities:

FPD / Site Office

- When the PMSO or APM leads a surveillance review, FPD/Site Office support in accomplishing surveillance is essential.
- This support includes:
 - Keeping the PMSO and APM informed of actions and matters that could affect system surveillance
 - Bringing system and implementation concerns, and data integrity issues to the attention of PMSO and APM
 - Participating as members of the surveillance team as requested
 - Assisting in the resolution of problems cited in surveillance reports

Surveillance Responsibilities:

Contractor



- Develop, implement, and maintain a surveillance plan to include annual surveillance of all 32 guidelines
- Ensure implementation is
 - Done on a consistent basis
 - Used effectively on all applicable projects, and
 - EVMS clauses are flowed down to subcontractors in accordance with the rules applied to the prime.
- Provide documentation of the self-surveillance to
 - Contracting Officer, FPD, PMSO, and APM



Surveillance Responsibilities: Contracting Officer



- Contract:
 - Ensures all applicable EVMS regulatory and contractual requirements, FAR clauses, related data item deliverables, and language included
- Award Fee:
 - Ensures that contractor performance and EVMS health is integrated with the contract award fee determinations
- Letter:
 - Issues letter to contractor affirming continued compliance of the EVMS following successful closeout of HQ surveillance activities.



Breakdown of the EVMS Surveillance SOP

- **Roles and Responsibilities**

- APM Project Analyst
- APM EVM Specialist
- PMSO
- FPD
- Contracting Officer
- Contractor

- **Process**

- Stage 1 Risk Assessment and Monthly Analysis
- Stage 2 Desktop Surveillance
- Stage 3 On-Site Surveillance

- **Documentation**

- Corrective Action Requests and Continuous Improvement Opportunities
- Surveillance Results



DOE Surveillance Process

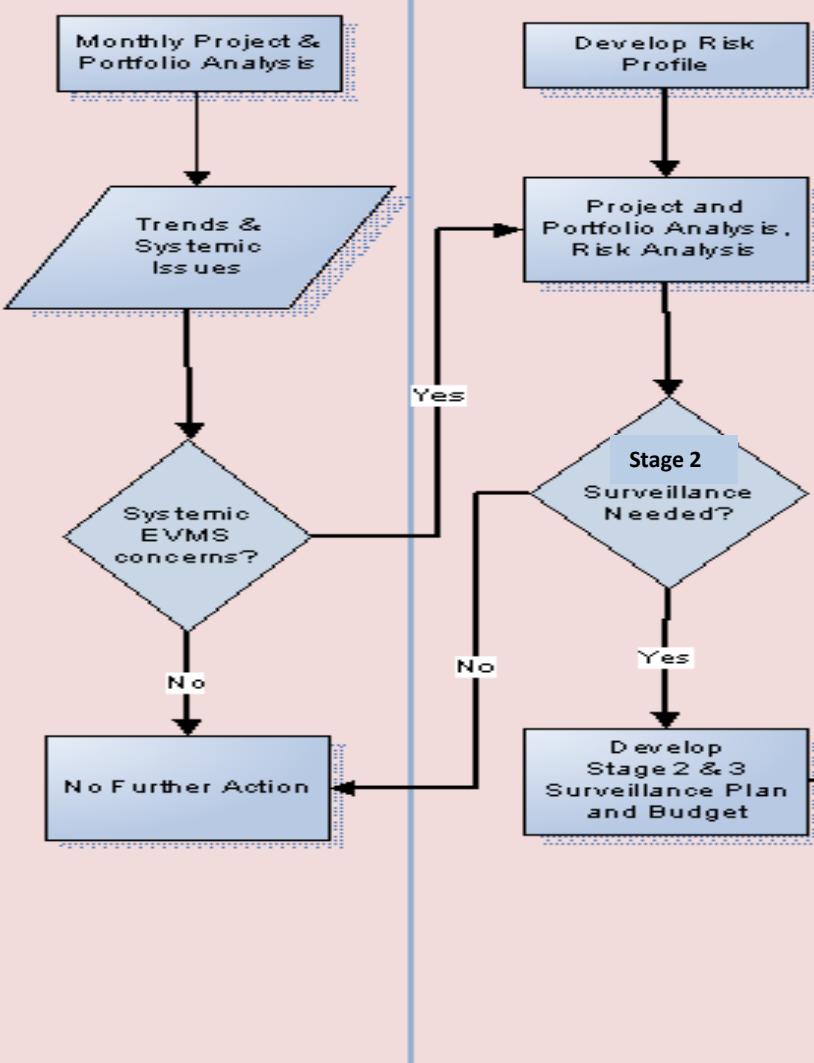
**APM / PMSO PROJECT ANALYSTS
ASSISTED BY
EVMS SPECIALISTS**

**DESKTOP
APM / PMSO
SURVEILLANCE TEAM**

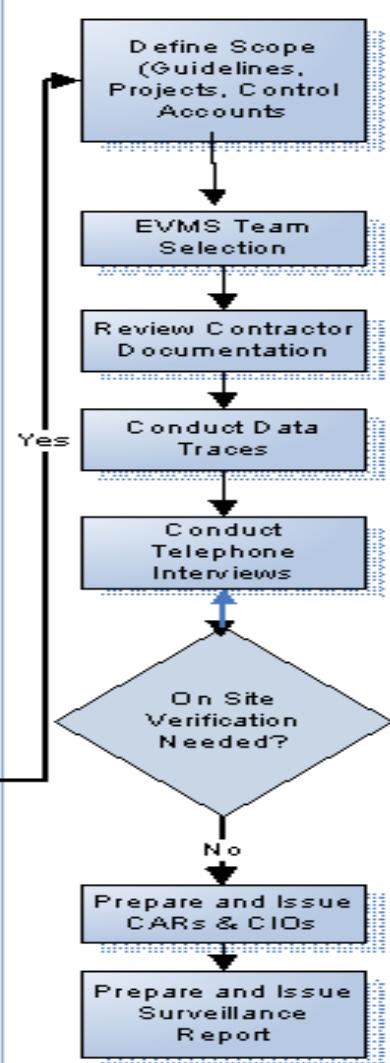
**ONSITE
APM / PMSO
SURVEILLANCE TEAM**

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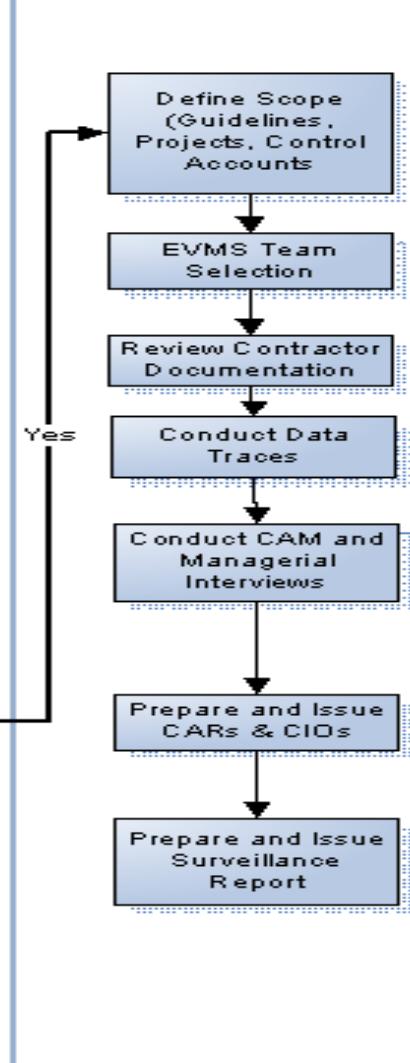
Stage 1 Surveillance



Stage 2 Surveillance



Stage 3 Surveillance



Stage 1 Surveillance – On-going Monthly Analysis and Risk Assessment



- **Step 1: Data Analysis**

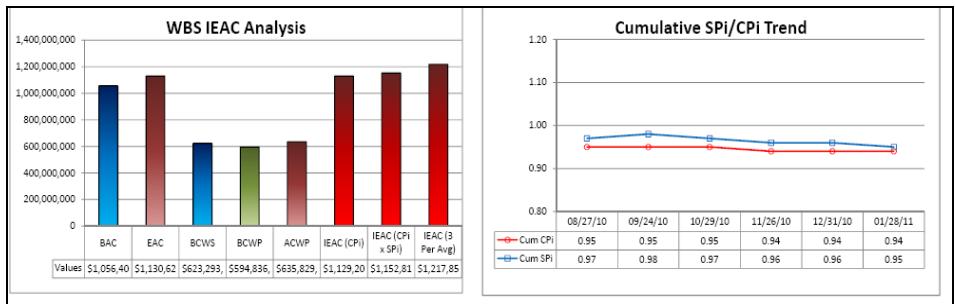
- Conducted in collaboration with APM Project Analysts and EVM Specialist, as well as PMSO, FPD, and project personnel.
- Use PARS II Reports
- Other data sources:
 - Contractor's EVMS self-surveillance documentation
 - Assessments conducted by the FPD, PMSO, and/or APM relative to project performance and EVM system health
- Identify data disconnects, negative trends, and significant changes that may point to systemic issues

Collaboration is an essential part of EVM system surveillance and project analysis.



So What Data is Available?

- PARS II has a wealth of information to begin the analysis process.**
 - Analysis Reports and Project Reports folders
 - More on this subject later . . .



Current FPD Assessment: Yellow **Forecast TPC (\$M):** 1,227 **Forecast CDA:** 1/01/14

During the month of January, the project performed below planned (SPI=.79) and above cost (CPI=.91). Construction of the second level decks as well as second and third level walls continued during the period. Process piping and support installation began in the Central Processing Area and mechanical installations continued to make good progress on the first level. Facility Support Area concrete placements made good progress during the period.

The project continued to be impacted by workarounds in the sequence of walls and decks to mitigate late vendor deliveries. Inclement weather during the period including snow days which closed the Savannah River Site for two days, contributed to the schedule slip. Cost performance continues to be negatively impacted by high engineering costs and costs for new tank vendor which are not currently in the baseline.

Prior APM Assessment: Yellow **Forecast TPC (\$M):** 1,227 **Forecast CDA:** 1/01/13

The project assessment remains YELLOW pending identification of a path forward for the project in light of the delayed delivery of large ASME vessels and associated problems. The Federal project staff recently completed a review and update to the Risk Assessment and Management Plan (RAMP), and Parsons recently submitted a "bottoms-up" Estimate-to-Completion (EAC) and a revised project schedule incorporating a new construction strategy designed to offset the effects of delayed delivery of major ASME vessels. OEMG has not yet been provided with these analyses, which are the topics of ongoing discussions between Parsons and the Federal staff. Although no contract modifications are expected to result from the revised schedule and EAC, the FPD anticipates that an approximately \$70M cost adjustment will be made. Parsons' Performance Measurement Baseline is adjusted to reflect the new schedule and a number of Contractor and DOE risks that have been realized. Parsons' "to go" construction and commissioning costs are approximately \$479M. The updated bottoms-up EAC, revised schedule and updated RAMP originally scheduled for Jan completion has been returned to Parsons for a second time for corrections.

Although the cumulative cost and schedule indices (CPI = .94; SPI = .96) for the project are acceptable, these numbers mask negative cost and schedule trends that should be addressed when the baseline is revised. The monthly CPI's over the past three months (.93,.82,.70) reflect ongoing cost overruns that are largely attributable to increased construction support and vendor support. Throughout much of the past year, this over-spending in support costs had helped to keep the project on schedule. However, the SPI's over the past three months (.83,.72,.81) suggest that the effectiveness of those efforts may be diminishing.

Prior FPD Assessment: Yellow **Forecast TPC (\$M):** 1,227 **Forecast CDA:** 10/23/13

During the month of December, the project performed below planned (SPI=.81) and above cost (CPI=.70). The project continued to be impacted by workarounds in the sequence of walls and decks to mitigate late vendor deliveries. Inclement weather during the period including high wind, very cold temperatures, and rain, contributed to the schedule slip.

EV Project Summary (6-Mo: PMB Level)

Period: 02/25/2011 03/25/2011 04/29/2011

Cumulative to Date			
BCWS	\$659,657,596.03	\$684,942,413.03	\$713,196,217.79
BCWP	\$659,862,983.14	\$683,547,978.06	\$705,571,573.85
ACWP	\$652,688,718.46	\$678,517,746.82	\$699,719,987.07
SV	\$205,387.11	(\$1,394,434.97)	(\$7,624,643.94)
SV%	0.03%	-0.20%	-1.07%
SPi	1.000	0.998	0.989
CV	\$7,174,264.68	\$5,030,231.24	\$5,851,586.78
CV%	1.09%	0.74%	0.83%
CPi	1.011	1.007	1.008

Current Period			
BCWS	\$36,364,214.15	\$25,284,817.00	\$28,253,804.76
BCWP	\$65,026,378.23	\$23,684,994.92	\$22,023,595.79
ACWP	\$16,859,675.33	\$25,829,028.36	\$21,202,240.25
SV	\$28,662,164.08	(\$1,599,822.08)	(\$6,230,208.97)
SV%	78.82%	-6.33%	-22.05%
SPi	1.788	0.937	0.779
CV	\$48,166,702.90	(\$2,144,033.44)	\$821,355.54
CV%	74.07%	-9.05%	3.73%
CPi	3.857	0.917	1.039

At Complete			
BAC	\$1,202,539,560.15	\$1,202,539,560.15	\$1,202,539,558.84
EAC	\$1,204,336,082.39	\$1,204,346,002.01	\$1,204,930,270.88
VAC	(\$1,796,522.24)	(\$1,806,441.86)	(\$2,390,712.04)
ACi	0.999	0.999	0.998
TCPi (To EAC)	0.984	0.987	0.984
TCPi (To BAC)	0.987	0.990	0.988
% Scheduled	54.86%	56.96%	59.31%
% Complete	54.87%	56.84%	58.67%
% Spent	54.28%	56.42%	58.19%

IEAC			
Cum CPI	\$1,189,465,123.01	\$1,193,690,068.59	\$1,192,566,418.13
Cum SPi X Cum Cpi	\$1,189,298,047.49	\$1,194,741,017.94	\$1,197,892,282.57
3 Period Moving Average	\$957,384,034.24	\$967,161,086.04	\$986,456,453.18

Stage 1, Step 2: Assess Project Risk and Develop Risk Profile



- **Purpose of the risk ratings**
 - To assist in prioritizing the EVM surveillance schedule, and to determine depth and scope should Stage 2 surveillance be warranted.
- **Semi-annually**
 - Use **DOE EVMS Risk Matrix**
 - Conduct risk assessment to **generate a risk profile** for the entire portfolio of projects for each contract and/or site
 - Based on the EVM risk associated with each project **assign relative weights** to each risk
 - **Identify and select** projects for additional surveillance



Assessing Project Risk

- **For EVMS Surveillance purposes:**
 - APM uses this when at least one of the projects within a contractor's portfolio is > \$100M; applied to all
 - Recommended for all who are responsible for EVMS surveillance
 - Apply Risk Matrix to *each EVM-applicable project within a contractor's portfolio*
 - Includes ALL capital asset projects >\$20M
 - Rate each project in each of 14 areas
 - Look at results from portfolio perspective to determine where to focus surveillance efforts

DOE EVMS RISK ASSESSMENT MATRIX

EVMS RISK MATRIX (rev 05/15/2012)		DATE:		ANALYST:	
CONTRACTOR:	PMSO:		PROJECT:		
RISK	HIGH	MEDIUM	LOW	RISK LEVEL	
PROJECT PHASE	PRIOR to CD-3: Organizing, Scheduling, Work/Budget Authorization	EARLY to MID CD-3: Accounting, Material Mgmt, Change Incorporation	LATE CD-3: Managerial Analysis, Change Incorporation		
PM EVM EXPERIENCE	< 2 YRS Organizing, Scheduling, Managerial Analysis	2 – 5 YRS Scheduling, Managerial Analysis	> 5 YRS Managerial Analysis		
CONTRACT BUDGET BASE VALUE	≥ \$100M Work/Budget Authorization, Accounting, Managerial Analysis	\$50M ≤ \$100M Work/Budget Authorization	\$20M < \$50M Scheduling		
PRIME WORK REMAINING %	> 50% Managerial Analysis, Change Incorporation	10 - 50% Managerial Analysis, Change Incorporation	< 10% Accounting, Material Mgmt		
SUBCONTRACTOR WORK REMAINING %	> 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis	10 – 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis	< 10% Accounting, Subcontract Management		
MATERIAL REMAINING %	>30% Work/Budget Auth, Scheduling, Accounting, Material Management	15 – 30% Accounting, Material Management	< 15% Material Management		
MANAGEMENT RESERVE REMAINING %	< 5% BCWR Work/Budget Authorization, Change Incorporation	5 – 10% BCWR Work/Budget Authorization, Change Incorporation	> 10% BCWR Change Incorporation		
BASELINE RESETS	2 OR MORE Work/Budget Authorization, Change Incorporation, Scheduling	1 Work/Budget Authorization, Organizing	NONE Organizing		
SV%, CV%, OR VAC%	> 10% Accounting, Indirect Mgmt, Managerial Analysis	5 - 10% Indirect Management, Managerial Analysis	< 5% Managerial Analysis		
MISSING SCHEDULE LOGIC	>15% Scheduling, Managerial Analysis	5 – 15% Scheduling	< 5% Scheduling, Work/Budget Authorization		
BASELINE VOLATILITY	> 15% Change Incorporation, Accounting	5 - 15% Change Incorporation, Accounting	< 5% Managerial Analysis		
CURRENT PERIOD CHANGES	>0% Change Incorporation	0% (NEGLIGIBLE) Change Incorporation	BLANK NA		
DATA VALIDITY	CONTINUAL CONCERNS Managerial Analysis	PERIODIC CONCERNS Managerial Analysis	NO CONCERN NA		
ONGOING SYSTEMS ISSUES	MULTIPLE UNRESOLVED Affected Processes:	SINGLE UNRESOLVED Affected Processes:	NONE NA		
TIME SINCE LAST REVIEW	>12 MO. All Process Groups	6 -12 MO. Processes Not Yet Reviewed	< 6 MO. Follow All Above		



Let's Go Through The Matrix, pg. 1 of 3

INSTRUCTIONS FOR EVMS RISK ASSESSMENT MATRIX

PROJECT PHASE: Determine current phase of the project: Prior to CD-3, Early to Mid CD-3, Late CD-3 (less than 6 months to CD-4). See PARS II Project Overview Report.

PM EVM EXPERIENCE: How many years of EVM experience does the Contractor's Program Manager have?

CBB VALUE: What is the value of the CBB (Performance Measurement Baseline plus Management Reserve) for the project? See PARS II Project Overview Report.

PRIME AND SUBCONTRACTOR WORK REMAINING PERCENTAGE: If the CPR data in PARSII is not segregated by 'prime' vs 'subcontractor', then obtain the data from the contractor to determine value of prime vs subcontractor work remaining.

If the data reported in the PARS II uses a WBS structure that allows visibility into prime vs subcontractor effort, then from the BAC and BCWPcum for each (prime, subcontractor), calculate the BCWR using the following formula:

Budgeted cost of work remaining, BCWR = BAC-BCWPcum

Lastly, calculate % of BCWR for each as compared to the total effort remaining.
(Subcontractor % plus prime % equals 100%).



Let's Go Through The Matrix, pg. 2 of 3

MATERIAL REMAINING %: Of total original material budget, what is the percentage of remaining material budget? $(\text{Material BAC} - \text{Material BCWPcum}) / \text{Material BAC}$
Information is available from the contractor's EVMS, either from a) a contractor provided report with a code to designate material cost, or b) by obtaining the entire CPR by element of cost. Note: The contractor should always be able to produce this (GL 9) and we have the access to this data per DOE O 413.3B and FAR 52.2.

MANAGEMENT RESERVE REMAINING %: Calculate MR remaining as a percentage of budgeted cost of work remaining (BCWR). $\text{MR} / (\text{BAC} - \text{BCWP})$

BASELINE RESETS: Determine the number of times the baseline has been reset since inception, i.e. variances were eliminated by rebaselining actions. Use the number of external BCPs and single point adjustments (internal BCPs).

SV%, CV%, AND VAC%. Calculate the cum SV%, CV%, and VAC% based on the most recent CPR data and select highest. For high dollar projects, using the 6 or 12 month cum may be more indicative of risk. See PARS II Project Summary Report.

MISSING SCHEDULE LOGIC: Use Schedule Missing Logic (Activity Level) report from PARS II to determine % of missing logic.

BASELINE VOLATILITY: Use the Baseline Volatility - Past and Near-Term (PMB Level) report from PARS II (based on end of period Format 3 baseline plan for next 6 periods) to determine % average percent change of PMB over a six month period (based on last 12 months of data). (choose greater of absolute values of min/max and first/last).



Let's Go Through The Matrix, pg. 3 of 3

CURRENT PERIOD CHANGES: Use the Baseline Volatility – Past and Near-Term (PMB level) report from PARS II to determine the extent of current period changes over the past 6 months. Choose the largest monthly value from the past six months.

DATA VALIDITY: Using the PARS II EV Data Validity (WBS Level) report, review the monthly reports to determine if data validity concerns are (1) continual, periodic, or negligible, and (2) explainable or caused by process issues.

ONGOING SYSTEM ISSUES: Looking at the open EVM-related CARs from previously reviews, how many systemic issues are still unresolved – Multiple, Single, or none? Consider the number of unresolved CARs escalated, if system compliance in jeopardy, or if system compliance has been revoked.

Type affected processes into the **pink** block spelled exactly as they are in this list:
Organizing, Scheduling, Work/Budget Authorization, Accounting, Indirect Management, Management & Analysis, Change Incorporation, Material Mgmt, Subcontractor Mgmt.

TIME SINCE LAST REVIEW: How long has it been since this project was last reviewed under System-Level Surveillance? DOE 413-3B requires at least every 24 months. If it has been more than 12 months or is a new contract never reviewed, rate this element as high risk and consider this program/contract for review for all process groups when prioritizing projects for the Annual EVMS System Schedule. Likewise, if it has been 6 to 12 months since last reviewed, then rate this element as moderate risk and consider all processes not yet reviewed as moderate risk.



Risk Matrix: PARS II Baseline Volatility (PMB Level) Report

- This report is used to determine baseline volatility for the past six months and future six months for risk purposes, as well as current period changes for past six months. Current period is month highlighted in white background (Jan 12 in this example).

Baseline Volatility - Past and Near-Term (PMB Level)

Status	Date	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12
Feb-11		\$22,053,172											
Mar-11		\$22,071,598	\$25,977,814										
Apr-11		\$22,025,002	\$24,928,895	\$22,540,488									
May-11		\$20,352,332	\$22,810,561	\$21,725,561	\$23,301,520								
Jun-11		\$20,497,262	\$22,864,798	\$22,117,359	\$22,368,832	\$28,512,005							
Jul-11		\$19,535,214	\$22,234,522	\$20,479,056	\$22,599,274	\$28,554,338	\$18,048,060						
Aug-11		\$19,535,214	\$22,241,215	\$20,473,882	\$22,579,411	\$28,549,625	\$18,040,127	\$19,852,991	\$22,466,075	\$19,782,023	\$17,483,516	\$20,749,204	\$14,057,938
Sep-11			\$22,241,215	\$18,609,937	\$18,886,026	\$23,305,187	\$21,944,475	\$21,404,897	\$26,051,371	\$20,209,828	\$19,036,624	\$23,213,123	\$15,275,412
Oct-11				\$18,609,937	\$16,819,535	\$23,363,093	\$21,834,525	\$22,132,431	\$26,235,504	\$20,214,125	\$19,524,486	\$23,211,418	\$15,273,113
Nov-11					\$16,819,515	\$21,468,073	\$20,165,613	\$20,854,493	\$23,996,126	\$18,363,919	\$23,365,775	\$23,158,116	\$15,362,380
Dec-11						\$21,468,073	\$20,163,699	\$20,852,350	\$23,976,371	\$18,350,942	\$23,356,668	\$23,135,919	\$15,362,551
Jan-12							\$20,163,699	\$20,839,005	\$23,958,408	\$18,326,233	\$23,331,163	\$23,104,038	\$15,337,046

Min	\$19,535,214	\$22,234,522	\$18,609,937	\$16,819,535	\$21,468,073	\$18,040,127	\$19,852,991	\$22,466,075	\$18,326,233	\$17,483,516	\$20,749,204	\$14,057,938
Max	\$22,071,598	\$25,977,814	\$22,540,488	\$23,301,520	\$28,554,338	\$21,944,475	\$22,132,431	\$26,235,504	\$20,214,125	\$23,365,775	\$23,213,123	\$15,362,551
% Change	13%	17%	21%	39%	33%	22%	11%	17%	10%	34%	12%	9%

Average % Change last 6 months 24%

Average % Change next 6 months 16%

First	\$22,053,172	\$25,977,814	\$22,540,488	\$23,301,520	\$28,512,005	\$18,048,060	\$19,852,991	\$22,466,075	\$19,782,023	\$17,483,516	\$20,749,204	\$14,057,938
Last	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,535	\$21,468,073	\$20,163,699	\$20,839,005	\$23,958,408	\$18,326,233	\$23,331,163	\$23,104,038	\$15,337,046
% Change	-11%	-14%	-17%	-28%	-25%	12%	5%	7%	-7%	33%	11%	9%

Average % Change last 6 months -14%

Average % Change next 6 months 10%

Prior	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,535	\$21,468,073	\$20,163,699
Current	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,515	\$21,468,073	\$20,163,699
% Change				0%		

Average % Change last 6 months 0%

Schedule Risk: Missing Logic

- **Rationale**
 - **Discrete** tasks must be linked (have predecessors and successors) in order to properly calculate the Total Float in the program. If the logic is missing, the true critical path for the program is unknown.
- **What are the benefits of this metric?**
 - Helps identify how well or poorly the schedule is linked together
 - Even if links exist, the logic still needs to be verified by the technical leads to ensure that the links make sense
- **What is the calculation?**

$$\left[\frac{\text{# of Discrete Tasks Missing Logic}}{\text{# of Incomplete Discrete Tasks}} \right] * 100 = \%$$



All Incomplete Discrete Tasks should be linked

PARS II Schedule Missing Logic (Activity Level) Report

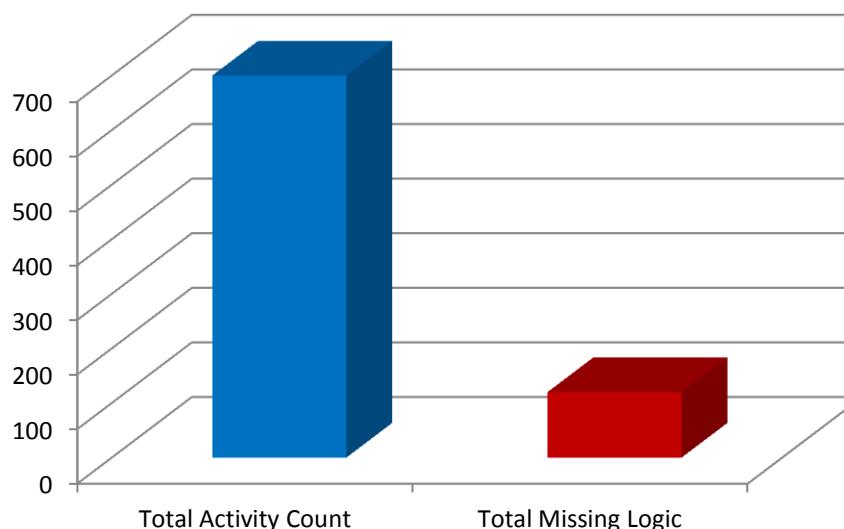


- NOTE: This report currently includes Level Of Effort (LOE) tasks so keep that in mind when using this report to assess schedule health.
- The number of discrete tasks without predecessors and/or successors should not exceed 5%

Schedule Missing Logic (Activity Level)					
Total Activity Count	Activities Missing Predecessor	Activities Missing Successor	Missing Both Predecessor and Successor	Total Missing Logic	% Missing Logic
700	24	103	7	120	17.14%

For Risk purposes,
apply these
thresholds:

- Low: < 5%
- Medium: 5 to 15%
- High: > 15%



Risk Matrix: PARS II EV Data Validity (WBS Level) Report



EV Data Validity (WBS Level)

For risk purposes, consider how valid the data has been since the last matrix

CPI/SPI Thresholds																	
No Fill	<= ±	10%															
Yellow	<= ±	20%															
Red	> ±	20%															
Cum CPI	Cum SPI	BAC	EAC	VAC	% Compl	TCPI to	Negati ve SPA	Inc SPA >	BCWP > BAC	Cum ACWP	CV < VAC	CPi < TCPI	EAC without BAC	Missing ETC	Extra ETC		
2.45	1.68	650,826	598,941	51,885	16.3%	0.98							1.46				
1.47	0.25	1,265,640	1,265,640		22.5%	0.91							0.56				
0.95	1.00	576,566	577,397	(831)	2.3%	1.00											
0.95	1.00	576,566	577,397	(831)	2.3%	1.00											
0.68	0.63	45,757,030	51,338,078	(5,581,048)	38.2%	1.10					X	X	-0.42				
1.01	0.63	1,774,836	1,774,836		85.7%	0.94							0.07				
0.66	0.62	39,789,451	45,161,553	(5,372,102)	38.9%	1.12					X	X	-0.47				
0.73	0.43	4,132,742	4,401,689	(208,947)	11.3%	0.99							-0.26				
1.10	0.29	11,880,202	12,013,599	(133,397)	15.2%	0.97							0.13				
1.33	0.28	5,293,824	5,296,010	(2,186)	20.3%	0.94							0.39				
0.87	0.32	6,586,378	6,723,589	(137,211)	11.0%	0.99							-0.12				
0.90	0.87	108,644,667	119,289,137	(10,644,470)	56.6%	0.93											
1.01	0.64	10,072,341	12,415,920	(2,343,579)	45.6%	0.70							0.32				
1.05	1.02	5,293,336	5,138,403	154,933	60.0%	1.01	Inc ACWP										
0.98	0.66	686,912	812,134	(225,222)	84.7%	0.93	Inc BCWP						0.66				
0.83	0.60	45,655,349	54,945,426	(9,290,077)	76.4%	0.85	Inc BCWP										
1.01	1.05	30,807,704	30,625,294	182,410	51.3%	1.01											
1.01	1.26	8,274,196	7,397,130	877,066	20.7%	1.15	Inc ACWP						-0.15				

Risk Matrix: PARS II EV Project Summary (6-Mo; PMB Level) Report



- For risk purposes, determine SV%, CV%, and VAC%.

EV Project Summary (6-Mo; PMB Level)

Period:	08/26/2011	09/30/2011	10/28/2011	11/25/2011	12/30/2011	01/27/2012
Cumulative to Date						
BCWS	\$804,059,048.57	\$826,300,263.63	\$844,910,200.20	\$861,729,715.47	\$883,197,788.38	\$903,361,487.84
BCWP	\$779,698,227.98	\$800,886,557.41	\$817,560,396.98	\$834,203,802.54	\$853,128,800.22	\$868,061,811.56
ACWP	\$778,151,089.23	\$806,124,254.16	\$824,748,712.25	\$843,465,867.50	\$863,982,970.58	\$885,015,341.10
SV	(\$24,360,820.59)	(\$25,413,706.22)	(\$27,349,803.22)	(\$27,525,912.93)	(\$30,068,988.16)	(\$35,299,676.28)
SV%	-3.03%	-3.08%	-3.24%	-3.19%	-3.40%	-3.91%
SPI	0.970	0.969	0.968	0.968	0.966	0.961
CV	\$1,547,138.75	(\$5,237,696.75)	(\$7,188,315.27)	(\$9,262,064.96)	(\$10,854,170.36)	(\$16,953,529.54)
CV%	0.20%	-0.65%	-0.88%	-1.11%	-1.27%	-1.95%
CPI	1.002	0.994	0.991	0.989	0.987	0.981
Current Period						
BCWS	\$19,535,214.17	\$22,241,215.06	\$18,609,936.57	\$16,819,515.27	\$21,468,072.91	\$20,163,699.46
BCWP	\$16,818,233.35	\$21,188,329.43	\$16,673,839.57	\$16,643,405.56	\$18,924,997.68	\$14,933,011.34
ACWP	\$19,651,011.21	\$27,973,164.93	\$18,624,458.09	\$18,717,155.25	\$20,517,103.08	\$21,032,370.52
SV	(\$2,716,980.82)	(\$1,052,885.63)	(\$1,936,097.00)	(\$176,109.71)	(\$2,543,075.23)	(\$5,230,688.12)
SV%	-13.91%	-4.73%	-10.40%	-1.05%	-11.85%	-25.94%
SPI	0.861	0.953	0.896	0.990	0.882	0.741
CV	(\$2,832,777.86)	(\$6,784,835.50)	(\$1,950,618.52)	(\$2,073,749.69)	(\$1,592,105.40)	(\$6,099,359.18)
CV%	-16.84%	-32.02%	-11.70%	-12.46%	-8.41%	-40.84%
CPI	0.856	0.757	0.895	0.889	0.922	0.710
At Complete						
BAC	\$1,203,751,397.79	\$1,203,931,397.00	\$1,203,931,397.00	\$1,203,931,397.08	\$1,203,931,397.09	\$1,203,931,397.10
EAC	\$1,240,720,762.53	\$1,241,124,701.21	\$1,246,412,143.24	\$1,251,302,179.13	\$1,260,800,606.00	\$1,260,800,160.88
VAC	(\$36,969,364.74)	(\$37,193,304.21)	(\$42,480,746.24)	(\$47,370,782.05)	(\$56,869,208.91)	(\$56,868,763.78)
VAC%	-3.07%	-3.09%	-3.53%	-3.93%	-4.72%	-4.72%
ACi	0.970	0.970	0.966	0.962	0.955	0.955
TCPI (To EAC)	0.917	0.927	0.916	0.907	0.884	0.894
TCPI (To BAC)	0.996	1.013	1.019	1.026	1.032	1.053
% Scheduled	66.80%	68.63%	70.18%	71.58%	73.36%	75.03%
% Complete	64.77%	66.52%	67.91%	69.29%	70.86%	72.10%
% Spent	64.64%	66.96%	68.50%	70.06%	71.76%	73.51%
IEAC						
Cum CPI	\$1,201,362,819.28	\$1,211,804,956.00	\$1,214,516,839.34	\$1,217,298,503.26	\$1,219,248,751.85	\$1,227,444,568.90
Cum SPI X Cum Cpi	\$1,214,585,608.12	\$1,224,678,002.85	\$1,227,555,731.17	\$1,229,633,719.85	\$1,231,770,287.36	\$1,241,369,430.85
3 Period Moving Average	\$1,242,988,255.20	\$1,299,373,471.51	\$1,292,860,685.78	\$1,286,515,519.81	\$1,252,499,750.87	\$1,285,830,403.85



EXERCISE #1: Risk Matrix

- Let's do some Risk Matrix calculations.
- Take out your calculators, sharpen your pencils, here we go.



Exercise 1: EVMS Risk Matrix, pg 1 of 7

Complete the Risk Matrix Form by putting an High (H), Medium (M), or Low (L) in the far right column to designate which risk area you chose based on the data provided.

Attached are the forms you will need to complete this exercise. These include:

- DOE EVMS Risk Matrix Form
- PARS II Project Overview
- PARS II Analysis Report: EV Project Summary (6-mo; PMB Level)
- PARS II Analysis Report: Baseline Volatility – Past and Near-Term (PMB Level)
- PARS II Analysis Report: Schedule Missing Logic (Analysis Level)

In addition to the above PARS II reports, there would be other data you would gather based on your project knowledge or from working with the FPD's staff. Since this is an exercise, that information is provided below.

1. Contractor's PM EVM Experience: 7 years
2. The percentage of work remaining for the Prime is 60%, the percentage of work remaining for the Subcontractor is 40%.
3. On this project the Material budget at completion is \$500,000 and the Material BCWPcum is \$250,000.
4. In addition to the BCPs, there have been 2 single point adjustments. (Hint: The number of BCPs is noted on one of the attached PARS II reports.)
5. During the 12 months, there were data validity issues in two of the months.
6. Three unresolved CARs; GLs 3, 6, and 21
7. Contractor's EVMS was Certified in 2010; no HQ surveillances to date.



Exercise 1: EVMS Risk Matrix, pg 2 of 7

DOE EVMS RISK ASSESSMENT MATRIX

EVMS RISK MATRIX (rev 05/15/2012)		DATE:		ANALYST:	
CONTRACTOR:		PMSO:		PROJECT:	
RISK	HIGH	MEDIUM	LOW	RISK LEVEL	
PROJECT PHASE	PRIOR to CD-3: Organizing, Scheduling, Work/Budget Authorization		EARLY to MID CD-3: Accounting, Material Mgmt, Change Incorporation	LATE CD-3: Managerial Analysis, Change Incorporation	
PM EVM EXPERIENCE	< 2 YRS Organizing, Scheduling, Managerial Analysis		2 – 5 YRS Scheduling, Managerial Analysis	> 5 YRS Managerial Analysis	
CONTRACT BUDGET BASE VALUE	≥ \$100M Work/Budget Authorization, Accounting, Managerial Analysis		\$50M ≤ \$100M Work/Budget Authorization	\$20M < \$50M Scheduling	
PRIME WORK REMAINING %	> 50% Managerial Analysis, Change Incorporation		10 - 50% Managerial Analysis, Change Incorporation	< 10% Accounting, Material Mgmt	
SUBCONTRACTOR WORK REMAINING %	> 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis		10 – 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis	< 10% Accounting, Subcontract Management	
MATERIAL REMAINING %	>30% Work/Budget Auth, Scheduling, Accounting, Material Management		15 – 30% Accounting, Material Management	< 15% Material Management	
MANAGEMENT RESERVE REMAINING %	< 5% BCWR Work/Budget Authorization, Change Incorporation		5 – 10% BCWR Work/Budget Authorization, Change Incorporation	> 10% BCWR Change Incorporation	
BASELINE RESETS	2 OR MORE Work/Budget Authorization, Change Incorporation, Scheduling		1 Work/Budget Authorization, Organizing	NONE Organizing	
SV%, CV%, OR VAC%	> 10% Accounting, Indirect Mgmt, Managerial Analysis		5 - 10% Indirect Management, Managerial Analysis	< 5% Managerial Analysis	
MISSING SCHEDULE LOGIC	>15% Scheduling, Managerial Analysis		5 – 15% Scheduling	< 5% Scheduling, Work/Budget Authorization	
BASELINE VOLATILITY	> 15% Change Incorporation, Accounting		5 - 15% Change Incorporation, Accounting	< 5% Managerial Analysis	
CURRENT PERIOD CHANGES	>0% Change Incorporation		0% (NEGLIGIBLE) Change Incorporation	BLANK NA	
DATA VALIDITY	CONTINUAL CONCERNS Managerial Analysis		PERIODIC CONCERNS Managerial Analysis	NO CONCERNS NA	
ONGOING SYSTEMS ISSUES	MULTIPLE UNRESOLVED Affected Processes:		SINGLE UNRESOLVED Affected Processes:	NONE NA	
TIME SINCE LAST REVIEW	>12 MO. All Process Groups		6 -12 MO. Processes Not Yet Reviewed	< 6 MO. Follow All Above	



Exercise 1: EVMS Risk Matrix, pg 3 of 7

INSTRUCTIONS FOR EVMS RISK ASSESSMENT MATRIX

COMPLETE ALL AREAS IN BLUE.

PROJECT PHASE: Determine current phase of the project: Prior to CD-3, Early to Mid CD-3, Late CD-3 (less than 6 months to CD-4). See PARS II Project Overview Report.

PM EVM EXPERIENCE: How many years of EVM experience does the Contractor's Program Manager have?

CBB VALUE: What is the value of the CBB (Performance Measurement Baseline plus Management Reserve) for the project? See PARS II Project Overview Report.

PRIME AND SUBCONTRACTOR WORK REMAINING PERCENTAGE: If the CPR data in PARSII is not segregated by 'prime' vs 'subcontractor', then obtain the data from the contractor to determine value of prime vs subcontractor work remaining.

If the data reported in the PARS II uses a WBS structure that allows visibility into prime vs subcontractor effort, then from the BAC and BCWPcum for each (prime, subcontractor), calculate the BCWR using the following formula: Budgeted cost of work remaining, $BCWR = BAC - BCWPcum$

Lastly, calculate % of BCWR for each as compared to the total effort remaining. (Subcontractor % plus prime % equals 100%).

MATERIAL REMAINING %: Of total original material budget, what is the percentage of remaining material budget? $(Material\ BAC - Material\ BCWPcum) / Material\ BAC$

Information is available from the contractor's EVMS, either from a) a contractor provided report with a code to designate material cost, or b) by obtaining \ the entire CPR by element of cost. Note: The contractor should always be able to produce this (GL 9) and we have access to this data per DOE O 413.3B and FAR 52.2.

MANAGEMENT RESERVE REMAINING %: Calculate MR remaining as a percentage of budgeted cost of work remaining (BCWR). $MR / (BAC - BCWPcum)$

BASELINE RESETS: Determine the number of times the baseline has been reset since inception, i.e. variances were eliminated by rebaselining actions. Use the number of external BCPs and single point adjustments (internal BCPs).

SV%, CV%, AND VAC%. Calculate the cum SV%, CV%, and VAC% based on the most recent CPR data and select highest. For high dollar projects, using the 6 or 12 month cum may be more indicative of risk. See PARS II Project Summary Report.

MISSING SCHEDULE LOGIC: Use Schedule Missing Logic (Activity Level) report from PARS II to determine % of missing logic

BASELINE VOLATILITY: Use the Baseline Volatility - Past and Near-Term (PMB Level) report from PARS II (based on end of period Format 3 baseline plan for next 6 periods) to determine % average percent change of PMB over a six month period (based on last 12 months of data). (choose greater of absolute values of min/max and first/last).

CURRENT PERIOD CHANGES: Use the Baseline Volatility – Past and Near-Term (PMB Level) report from PARS II to determine the extent of current period changes over the past 6 months. Choose the largest monthly value from the past six months.

DATA VALIDITY: Using the PARS II EV Data Validity (WBS Level) report, review the monthly reports to determine if the validity concerns are (1) continual, periodic, or negligible, and (2) explainable or caused by process issues.

ONGOING SYSTEM ISSUES: Looking at the open EVM-related CARs from previous reviews, how many systemic issues are still unresolved – Multiple, Single, or none? Consider the number of unresolved CARs escalated, if system compliance in jeopardy, or if system compliance has been revoked.

Type affected processes into the pink block spelled exactly as they are in this list: Organizing, Scheduling, Work/Budget Authorization, Accounting, Indirect Management, Management and Analysis, Change Incorporation, Material Management, Subcontractor Management.

TIME SINCE LAST REVIEW: How long has it been since this project was last reviewed under System-Level Surveillance? DOE O 413.3B requires at least every 24 months. If it has been more than 12 months or is a new contract never reviewed, rate this element as high risk and consider this program/contract for review for all process groups when prioritizing projects for the Annual EVMS System Schedule. Likewise, if it has been 6 to 12 months since last reviewed, then rate this element as moderate risk and consider all processes not yet reviewed as moderate risk.



Exercise 1: EVMS Risk Matrix, pg 4 of 7

Project Overview

Project Identification

PARS II Project ID: 111
 DOE Project No: 11-D-111
 Project Name: Germantown

Points of Contact

Federal Project Director

Critical Decisions

Current CD: CD3
 Current BCP: BCP-01

CD3 Approved By: John Doe
 BCP-01 Approved By: John Doe

TPC (Approved): \$1,339,000,000
 CD4 Date (Approved): Oct 2015

	Planned Dates	Approved Dates
CD0:	n/a	Jun 2001
CD1:	n/a	Aug 2004
CD2:	n/a	Sep 2007
CD3:	n/a	Jan 2009
CD3A:	Sep 2007	Sep 2007
CD4:	Oct 2015	
Closeout:	n/a	

Current Assessments - POST CD-2

Current DOE Assessment Period: March 2012

FPD Assessment: Yellow
 Change from Prior: No
 Get to Green Estimate: June 2012

APM Assessment: Yellow
 # of Months at Red: 37

FPD Forecasted TPC: \$1,305,000,000
 FPD Forecasted CD4: Apr 2015

OECM Forecasted TPC: \$1,339,000,000
 OECM Forecasted CD4: Oct 2015

Performance Baseline - POST CD-2

Low	High
-----	------

CD1 TPC Range: \$375,000,000 \$400,000,000

Original CD2 TPC: \$900,000,000
 Latest Approved TPC: \$1,339,000,000
 APM Forecasted TPC: \$1,339,000,000
 FPD Forecasted TPC: \$1,305,000,000
 Actual CD4 TPC:

Original CD4: Nov 2013
 Latest Approved CD4: Oct 2015
 APM Forecasted CD4: Oct 2015
 FPD Forecasted CD4: Apr 2015
 CD4 Approved Date:

Scope (KPPs): 3 KPP(s) entered.
See PROJECT KPPs for details.

Performance Snapshot - POST CD-2

EV Performance Period: January 2012

* Cum CPI/SPI Based on Performance Since 12/08/2008
 Cum CPI: 0.98 Cum SPI: 0.96 % Complete: 72%

	At BCP-01	Remaining
Contingency (\$):	\$116,800,000	\$114,360,097
Contingency (Days):	420 days	226 days
DOE ODCs:	\$45,500,000	\$0
Profit/Fee:	\$61,800,000	\$13,032,096
Contractor MR:	\$158,000,000	\$8,220,611

	At BCP-01	Current
Contractor PMB:	\$957,000,000	\$1,203,931,397
Contractor EAC:		\$1,260,800,161

IEAC1 AC + (BCWR / CPI)	IEAC2 AC + BCWR / CPI * SPI	IEAC3 AC + (BCWR / Avg CPI)
\$1,227,444,569	\$1,241,369,431	\$1,285,830,404



Exercise 1: EVMS Risk Matrix, pg 5 of 7

EV Project Summary (6-Mo; PMB Level)

Period:	08/26/2011	09/30/2011	10/28/2011	11/25/2011	12/30/2011	01/27/2012
Cumulative to Date						
BCWS	\$804,059,048.57	\$826,300,263.63	\$844,910,200.20	\$861,729,715.47	\$883,197,788.38	\$903,361,487.84
BCWP	\$779,698,227.98	\$800,886,557.41	\$817,560,396.98	\$834,203,802.54	\$853,128,800.22	\$868,061,811.56
ACWP	\$778,151,089.23	\$806,124,254.16	\$824,748,712.25	\$843,465,867.50	\$863,982,970.58	\$885,015,341.10
SV	(\$24,360,820.59)	(\$25,413,706.22)	(\$27,349,803.22)	(\$27,525,912.93)	(\$30,068,988.16)	(\$35,299,676.28)
SV%	-3.03%	-3.08%	-3.24%	-3.19%	-3.40%	-3.91%
SPI	0.970	0.969	0.968	0.968	0.966	0.961
CV	\$1,547,138.75	(\$5,237,696.75)	(\$7,188,315.27)	(\$9,262,064.96)	(\$10,854,170.36)	(\$16,953,529.54)
CV%	0.20%	-0.65%	-0.88%	-1.11%	-1.27%	-1.95%
CPI	1.002	0.994	0.991	0.989	0.987	0.981
Current Period						
BCWS	\$19,535,214.17	\$22,241,215.06	\$18,609,936.57	\$16,819,515.27	\$21,468,072.91	\$20,163,699.46
BCWP	\$16,818,233.35	\$21,188,329.43	\$16,673,839.57	\$16,643,405.56	\$18,924,997.68	\$14,933,011.34
ACWP	\$19,651,011.21	\$27,973,164.93	\$18,624,458.09	\$18,717,155.25	\$20,517,103.08	\$21,032,370.52
SV	(\$2,716,980.82)	(\$1,052,885.63)	(\$1,936,097.00)	(\$176,109.71)	(\$2,543,075.23)	(\$5,230,688.12)
SV%	-13.91%	-4.73%	-10.40%	-1.05%	-11.85%	-25.94%
SPI	0.861	0.953	0.896	0.990	0.882	0.741
CV	(\$2,832,777.86)	(\$6,784,835.50)	(\$1,950,618.52)	(\$2,073,749.69)	(\$1,592,105.40)	(\$6,099,359.18)
CV%	-16.84%	-32.02%	-11.70%	-12.46%	-8.41%	-40.84%
CPI	0.856	0.757	0.895	0.889	0.922	0.710
At Complete						
BAC	\$1,203,751,397.79	\$1,203,931,397.00	\$1,203,931,397.00	\$1,203,931,397.08	\$1,203,931,397.09	\$1,203,931,397.10
EAC	\$1,240,720,762.53	\$1,241,124,701.21	\$1,246,412,143.24	\$1,251,302,179.13	\$1,260,800,606.00	\$1,260,800,160.88
VAC	(\$36,969,364.74)	(\$37,193,304.21)	(\$42,480,746.24)	(\$47,370,782.05)	(\$56,869,208.91)	(\$56,868,763.78)
VAC%	-3.07%	-3.09%	-3.53%	-3.93%	-4.72%	-4.72%
ACi	0.970	0.970	0.966	0.962	0.955	0.955
TCPi (To EAC)	0.917	0.927	0.916	0.907	0.884	0.894
TCPi (To BAC)	0.996	1.013	1.019	1.026	1.032	1.053
% Scheduled	66.80%	68.63%	70.18%	71.58%	73.36%	75.03%
% Complete	64.77%	66.52%	67.91%	69.29%	70.86%	72.10%
% Spent	64.64%	66.96%	68.50%	70.06%	71.76%	73.51%
IEAC						
Cum CPI	\$1,201,362,819.28	\$1,211,804,956.00	\$1,214,516,839.34	\$1,217,298,503.26	\$1,219,248,751.85	\$1,227,444,568.90
Cum SPI X Cum Cpi	\$1,214,585,608.12	\$1,224,678,002.85	\$1,227,555,731.17	\$1,229,633,719.85	\$1,231,770,287.36	\$1,241,369,430.85
3 Period Moving Average	\$1,242,988,255.20	\$1,299,373,471.51	\$1,292,860,685.78	\$1,286,515,519.81	\$1,252,499,750.87	\$1,285,830,403.85



Exercise 1: EVMS Risk Matrix, pg 6 of 7

Baseline Volatility - Past and Near-Term (PMB Level)

Status Date	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12
Feb-11	\$22,053,172											
Mar-11	\$22,071,598	\$25,977,814										
Apr-11	\$22,025,002	\$24,928,895	\$22,540,488									
May-11	\$20,352,332	\$22,810,561	\$21,725,561	\$23,301,520								
Jun-11	\$20,497,262	\$22,864,798	\$22,117,359	\$22,368,832	\$28,512,005							
Jul-11	\$19,535,214	\$22,234,522	\$20,479,056	\$22,599,274	\$28,554,338	\$18,048,060						
Aug-11	\$19,535,214	\$22,241,215	\$20,473,882	\$22,579,411	\$28,549,625	\$18,040,127	\$19,852,991	\$22,466,075	\$19,782,023	\$17,483,516	\$20,749,204	\$14,057,938
Sep-11		\$22,241,215	\$18,609,937	\$18,886,026	\$23,305,187	\$21,944,475	\$21,404,897	\$26,051,371	\$20,209,828	\$19,036,624	\$23,213,123	\$15,275,412
Oct-11			\$18,609,937	\$16,819,535	\$23,363,093	\$21,834,525	\$22,132,431	\$26,235,504	\$20,214,125	\$19,524,486	\$23,211,418	\$15,273,113
Nov-11				\$16,819,515	\$21,468,073	\$20,165,613	\$20,854,493	\$23,996,126	\$18,363,919	\$23,365,775	\$23,158,116	\$15,362,380
Dec-11					\$21,468,073	\$20,163,699	\$20,852,350	\$23,976,371	\$18,350,942	\$23,356,668	\$23,135,919	\$15,362,551
Jan-12						\$20,163,699	\$20,839,005	\$23,958,408	\$18,326,233	\$23,331,163	\$23,104,038	\$15,337,046

Min	\$19,535,214	\$22,234,522	\$18,609,937	\$16,819,535	\$21,468,073	\$18,040,127	\$19,852,991	\$22,466,075	\$18,326,233	\$17,483,516	\$20,749,204	\$14,057,938
Max	\$22,071,598	\$25,977,814	\$22,540,488	\$23,301,520	\$28,554,338	\$21,944,475	\$22,132,431	\$26,235,504	\$20,214,125	\$23,365,775	\$23,213,123	\$15,362,551
% Change	13%	17%	21%	39%	33%	22%	11%	17%	10%	34%	12%	9%

Average % Change last 6 months 24%

Average % Change next 6 months 16%

First	\$22,053,172	\$25,977,814	\$22,540,488	\$23,301,520	\$28,512,005	\$18,048,060	\$19,852,991	\$22,466,075	\$19,782,023	\$17,483,516	\$20,749,204	\$14,057,938
Last	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,535	\$21,468,073	\$20,163,699	\$20,839,005	\$23,958,408	\$18,326,233	\$23,331,163	\$23,104,038	\$15,337,046
% Change	-11%	-14%	-17%	-28%	-25%	12%	5%	7%	-7%	33%	11%	9%

Average % Change last 6 months -14%

Average % Change next 6 months 10%

Prior	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,535	\$21,468,073	\$20,163,699
Current	\$19,535,214	\$22,241,215	\$18,609,937	\$16,819,515	\$21,468,073	\$20,163,699
% Change				0%		

Average % Change last 6 months 0%

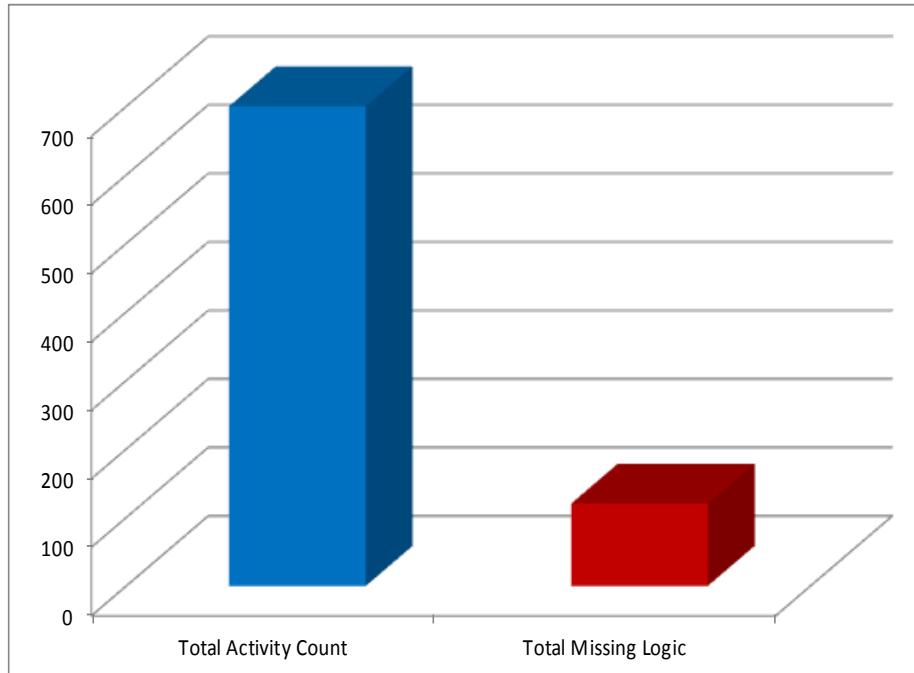


Exercise 1: EVMS Risk Matrix, pg 7 of 7

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Schedule Missing Logic (Activity Level)

Total Activity Count	Activities Missing Predecessor	Activities Missing Successor	Missing Both Predecessor and Successor	Total Missing Logic	% Missing Logic
700	24	103	7	120	17.14%





Exercise 1: EVMS Risk Matrix

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OUT BRIEF





Surveillance: Applying the Risk Matrix

Results to Determine Scope

Once all the risk matrices are complete for all projects for a particular contractor, then the risk matrix worksheet populates the data for each project, by Business and Management Process Area.

This type of tabulation assists in identifying where to focus surveillance by identifying which projects carry the risks in different areas.

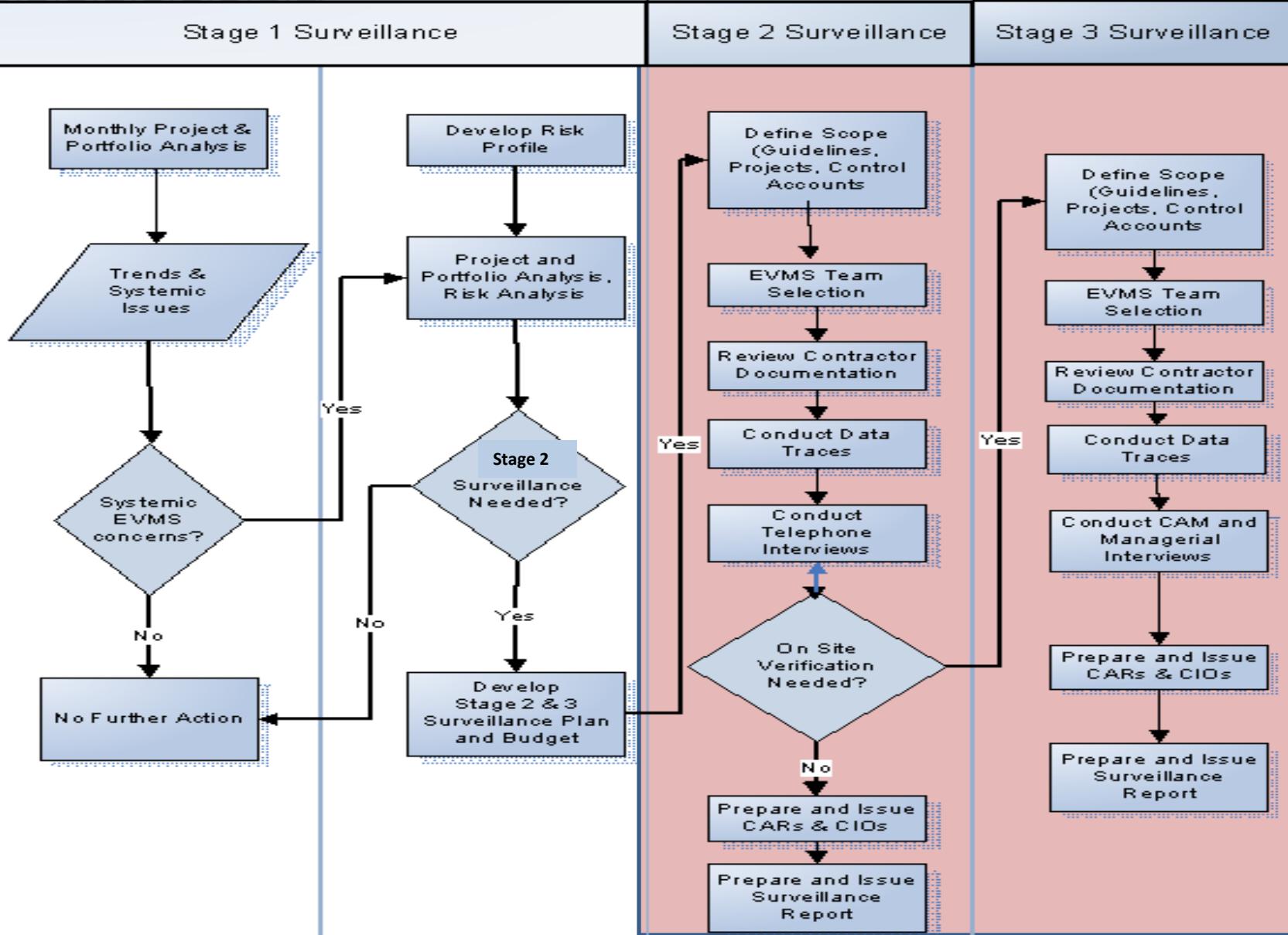
Risks	PROJECT #	Project 1	Project 2	Project 3	SCHEDULE
Organizing	H, H	L, L	M, L		
Scheduling	M, H, H, H, H, H	L, M, H, M, M	L, L, L		
Work/Budget Authorization	H, M, H, H, H	H, M, H, H, H			
Accounting	M, H, H, H, H				
Indirect Management	H				
Managerial Analysis	L, H, H, L, H, M, H				
Change Incorporation	M, H, H, H, H, H, H				
Material Management	M, M, H, H, H				
Subcontractor Management	M, H				

DOE Surveillance Process

**APM / PMSO PROJECT ANALYSTS
ASSISTED BY
EVMS SPECIALISTS**

**DESKTOP
APM / PMSO
SURVEILLANCE TEAM**

**ONSITE
APM / PMSO
SURVEILLANCE TEAM**





Stage 2 and 3 Surveillance

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- **Develop prioritized surveillance schedule based on:**
 - high and medium risk areas on high impact contractors/projects and DOE Order 413.3B requirements.
- **Identify the contractor's EVMS processes to be reviewed, the selected projects, and the anticipated timeframe.**
- **Using a continuous, data-driven approach, the surveillance may be conducted over several months or during a single review.**
- **Most surveillance will be off-site desk top reviews of individual projects.**



Stage 2 Surveillance – Desk Review

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- **Stage 2 of the surveillance process is focused on specific procedures, project documentation, and management processes.**
- **Input:**
 - One or more high risk areas identified during the Stage 1 surveillance.
 - Typically these would be specific processes or procedures that do not appear to comply with ANSI/EIA-748
 - Review additional EVMS documentation and artifacts
- **Objective:**
 - Validate the concerns from the Stage 1 surveillance
 - When warranted issue CARs and CIOs



Stage 2 Surveillance – Scope Meeting

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- **Chaired by APM; includes Program/FPD and APM reps**
- **Defined based on the risk matrix and data analysis**
- **Project selection:**
 - In order to determine if any systemic issues exist, the entire contractor portfolio of all projects requiring EVMS will be considered for EVMS surveillance
 - Based on the risk profile, scope of the surveillance, including examination of multiple projects and control accounts within those projects is determined
- **Results:**
 - A determination of the guideline areas to be examined;
 - The documentation and artifacts necessary for the surveillance;
 - The team composition; and
 - The timeline for the surveillance



Surveillance: Determining the Scope

- For contractors with multiple projects:
 - Review the risk ratings for each project
 - Determine which projects and control accounts should be reviewed
- The higher the risk, the more intense the surveillance.
 - Examples:
 - If Change Management is a high risk, review logs to determine which control accounts had replanning or rebaselining activity.
 - If Material Management is high risk, then select the control accounts that have the greatest amount of material.

Stage 2 Surveillance – Documentation and Artifacts Review



- **Documentation - static information (procedures)**
- **Artifacts - dynamic outputs (data)**
- **Typical data requested:**
 - At least three months of EVMS monthly reports
 - EVM variance analysis and correction action
 - Program schedules
 - Risk management plans
 - System Description Document and other pertinent procedures
 - WBS/OBS and WBS dictionary
 - EAC supporting documentation
 - Contract budget logs, e.g. CBB, MR, UB, PMB
 - Responsibility Assignment Matrix (RAM) (Dollarized)
 - Work authorization documentation



Stage 2 Surveillance – Data Traces

- **Tracing the data flow between processes is a critical element of the review process for the review team.**
 - Appendix C of the EVMS Surveillance Standard Operating Procedure provides information for conducting data traces
 - Disconnects between the EVMS processes indicates that the system is not functioning as intended and that the processes and procedures must be examined in detail.
 - This in-depth examination includes discussions with affected CAMs and/or project controls staff
 - Contractor discussions should be accomplished using audio, web-based, and/or video teleconferences to provide the insight necessary to determine if and what type of corrective action is necessary.



Stage 2 Surveillance – Interviews

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- **Some of the interview areas to consider are:**
 - Work authorization
 - Organization
 - EVM methodologies
 - Cost and schedule integration
 - Cost accumulation
 - Scheduling and budgeting
 - Material management
 - Subcontract management and integration of data
 - Risk assessment and mitigation
 - Variance analysis
 - Use of the information
 - Change control and maintenance
 - EAC process
 - EVMS program training



Tips for Conducting Surveillance

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- When conducting surveillance of a contractor's system, we must exercise due professional care.
- It isn't enough that the contractors give us the correct answers to our questions or we believe the accuracy of the output without examination and analysis.
- We need to require them to **show, prove, demonstrate** that they are using the system to manage their programs.
- We need to **drill down, trace, analyze** to make sure the data is accurate.
- We need to **conduct a critical assessment** of the tools, procedures and processes, and how they are used to manage the work.

TRUST BUT VERIFY



Stage 3 Surveillance

- **On-Site segment consisting of:**
 - Interviews with CAMs, management, and other project staff,
 - Observation of demonstrations of tools and traces that could not be conducted remotely, and
 - Physical verification of progress to assess reported work performed is accurately reflected.
 - A focused review, specifically to assess concerns raised in Stages 1 and 2 that could not be completely evaluated via the desk top surveillance.

Breakdown of the EVMS Surveillance SOP

- **Roles and Responsibilities**
 - APM Project Analyst
 - APM EVM Specialist
 - PMSO
 - FPD
 - Contracting Officer
 - Contractor
- **Process**
 - Stage 1 Risk Assessment and Monthly Analysis
 - Stage 2 Desktop Surveillance
 - Stage 3 On-Site Surveillance
- **Documentation**
 - Corrective Action Requests and Continuous Improvement Opportunities
 - Surveillance Results





Documenting Findings and Recommendations

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- **Corrective Action Request (CAR):**
 - A CAR is a systemic or limited occurrence of an ANSI/EIA 748-B non compliance or a significant impact to reporting, and requires a Corrective Action Plan (CAP).
- **Continuous Improvement Opportunity (CIO):**
 - A CIO is a recommended improvement or expansion of good practices for wider application and does not require a CAP.



Corrective Action Requests

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- **Typical Fields**

- Tracking record number
- Project name
- CAM/PM or other responsible individual
- Surveillance event type
- Date of review
- Date response is due
- Initiator or contact person
- Type of finding
- EVMS process affected
- EVMS Guideline intent violated (guideline number)
- Indicate if a repeat finding – if so include previous finding tracking number
- System Description reference
- Description of finding



Corrective Action Plans

Page 172

- The contractor responds to each CAR via a CAP.
- At a minimum, a CAP should include:
 - Corrective action owner
 - **Root cause** of the finding of non-compliance
 - Corrective action plan and schedule
 - **Preventive measures** to ensure non-recurrence
 - **Verifiable evidence** of CAP completion
- CAP is approved by the certifying authority.



CAP Approval / Verification of CAP

Page 173

- **CAP approval criteria:**
 - Thoroughness of root cause analysis
 - Adequacy of corrective action to prevent recurrence
 - Review for repeat non-compliances
 - Verify guideline compliance
 - Closure criteria, e.g. clear activities required to be successfully accomplished before the CAR can be closed out.
 - The surveillance team documents the status of these activities and is responsible for ensuring that the statuses of activities are documented.
- **CAP / CAR verification and closure:**
 - Verification of completion of CAP activities may include any or all of the following:
 - Review evidence packages
 - Conduct additional CAM interviews
 - Data sampling



Documenting Surveillance Results

Page 174

- **The system surveillance report is issued to document the surveillance actions.**
- **Recommended content to capture essential information for record keeping and future referral includes:**
 - Contractor Identification, Site Name, Project(s)
 - Major Critical Subcontractors
 - Surveillance Selection Risk Matrix(s);
 - Guidelines and Process(es) reviewed;
 - PM and CAM(s) interviewed and control accounts examined;
 - System deficiencies identified
 - CAR and Contractor CAP
 - Actions taken to correct the deficiency and prevent future occurrence
 - Analysis of trends and systemic issues
 - Best Practices Identified



Closing the Surveillance Activities

Page 175

- **Surveillance report is issued after closure of all CARs.**
- **Certifying authority transmits the surveillance report via memorandum to the CO; copies internal stakeholders**
- **The CO will issue formal notification to the contractor**
 - Successful resolution of EVMS surveillance;
 - Continued compliance with ANSI/EIA-748B



Surveillance Documentation via Metrics

Page 176

- Examples of metrics that may be used to monitor surveillance effectiveness and EVMS health (source: NDIA's Surveillance Guide, Rev 1, 02/21/2011)
 - Number of findings by:
 - Guideline, Guideline Process Area, Project, Site
 - Findings by type, e.g., process, implementation, training
 - Repeat findings
 - Trends in open findings, e.g., increasing or decreasing
 - Closure cycle time

Surveillance Documentation via Metrics

- **A note about surveillance review metrics:**
 - Purpose of metrics is to allow management to understand surveillance results and determine the health of a process or system.
 - Key to metric selection is to ensure that the data are readily available, accurate, meaningful, and focused on desirable corrective action.
 - It is recommended that these metrics be briefed at Executive Management Levels as well as at EVM Functional Levels as feedback





EVMS Surveillance Wrap Up

Page 178



EVM Common Issues





Common Compliance Issues

- **EVMS Description:**
 - Incomplete or inadequate
 - Post-certification changes not communicated (FAR requirement)
- **Control Accounts:**
 - Mixing LOE with discrete effort within a work package
 - Inappropriate use of Earned Value methods
 - Too large to adequately manage
 - Typically 6 to 18 months for discrete; longer for LOE
 - Rule of thumb: what can be managed daily; consider character of work, breakout of labor, span of control
- **Work Packages/Discrete Tasks**
 - A good rule of thumb is work packages/discrete tasks durations should be no longer than 60 calendar days (44 working days) in length for near-term tasks (next six months or within the EVM rolling wave)
 - Durations should reflect the ‘most likely’ estimate of the time required to accomplish the work



Common Compliance Issues

- **Estimate At Completion**
 - Comprehensive estimates not done at least annually
 - Monthly EAC review/revision not accomplished
- **Baseline Change Control**
 - Current period/retroactive budget changes
 - Budget transfers without scope and vice versa
 - Misuse of Management Reserve
 - Improper replanning (eliminating variances)
- **Subcontract management**
 - Prime responsible for the sub
 - Inadequate flow down of system/reporting requirements
 - Lack of surveillance
 - Unreliable EACs

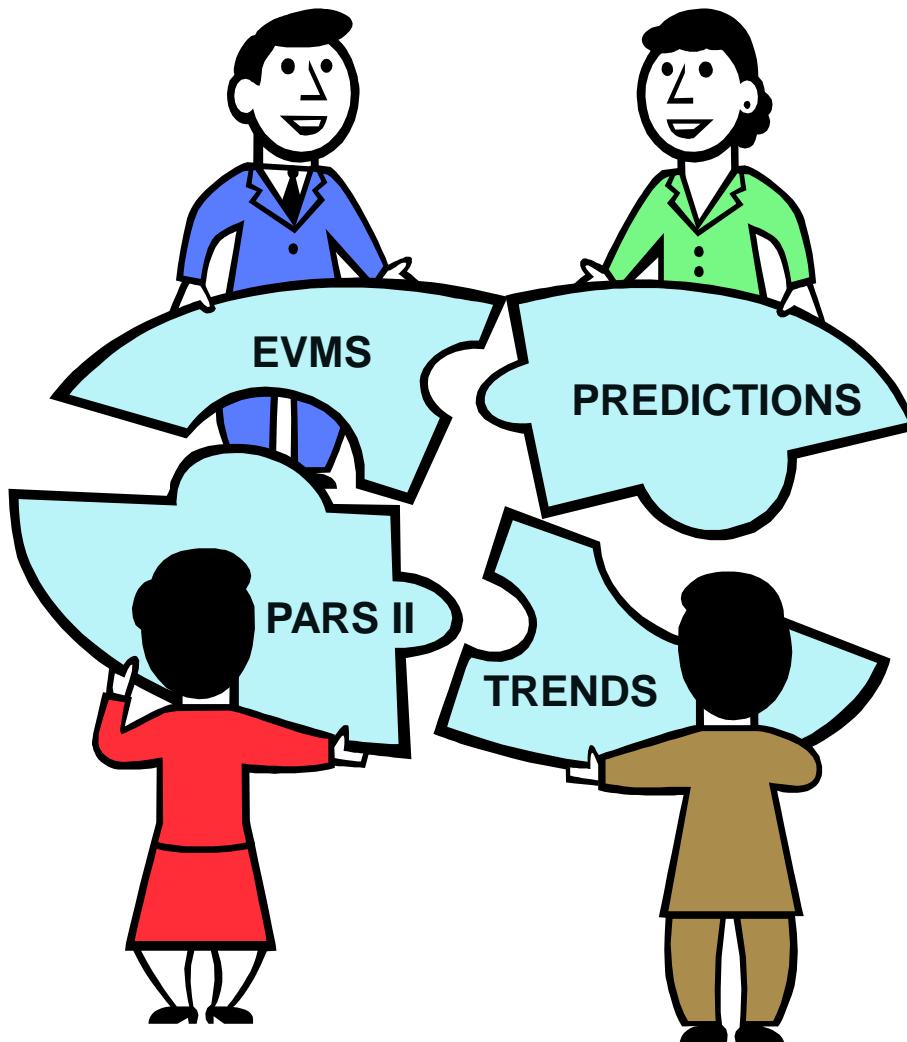


Common Compliance Issues - Schedules

Page 182

- An expert schedule analyst should periodically review the schedule to ensure compliance to sound scheduling principles.
- **Critical Path Refresher**
 - A sequence of discrete tasks/activities in the network that has the longest total duration through the contract or project.
 - The critical path and near-critical paths are calculated based on precedence relationships, lag times, durations, constraints, and status.
 - Artificial constraints and incorrect, incomplete, or overly constrained logic shall be avoided because they can skew the critical path and near-critical paths.
- **Schedule Integration Issues**
 - Lower level schedules do not roll up accurately to higher level schedules
- **Recommended Schedule Reference:**
 - Planning and Scheduling Excellence Guide (PASEG)
http://www.ndia.org/Divisions/Divisions/Procurement/Documents/PMSCommittee/CommitteeDocuments/PASEG/Planning_and_SchedulingExcellenceGuide_PASEG_v2.pdf

Questions / Comments Regarding Day 1



Agenda – Day 2

8:00 – 9:00 Budget vs. Funds

9:00 – 9:15 Break

9:15 – 11:00 EV Data Analysis

11:00 – 12:30 Lunch

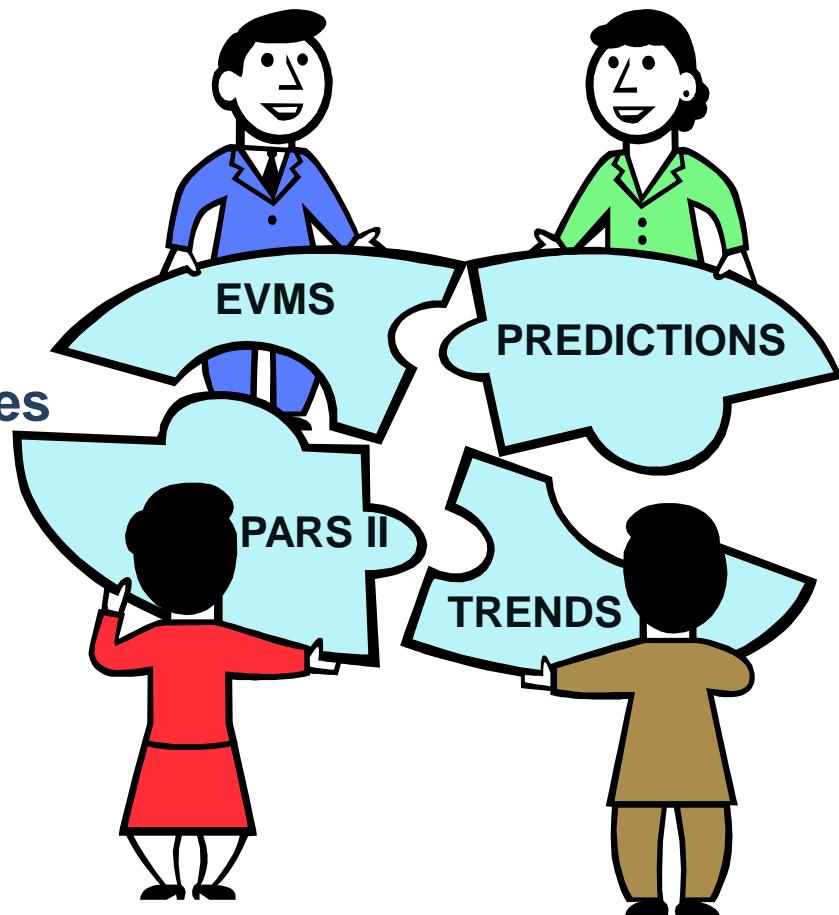
12:30 – 1:15 PARS II Assessment Roles

1:15 – 2:00 PARS II DepSec Monthly Report

2:00 – 2:15 Break

2:15 – 2:45 PARS II Reporting

2:45 – 4:00 PARS II Wrap-Up



Budget vs Funds



Management Reserve & DOE Contingency

Budget vs. Funds: The Difference

- Budget cannot be spent.
- It can only be used for measurement purposes.
- It is a metric.



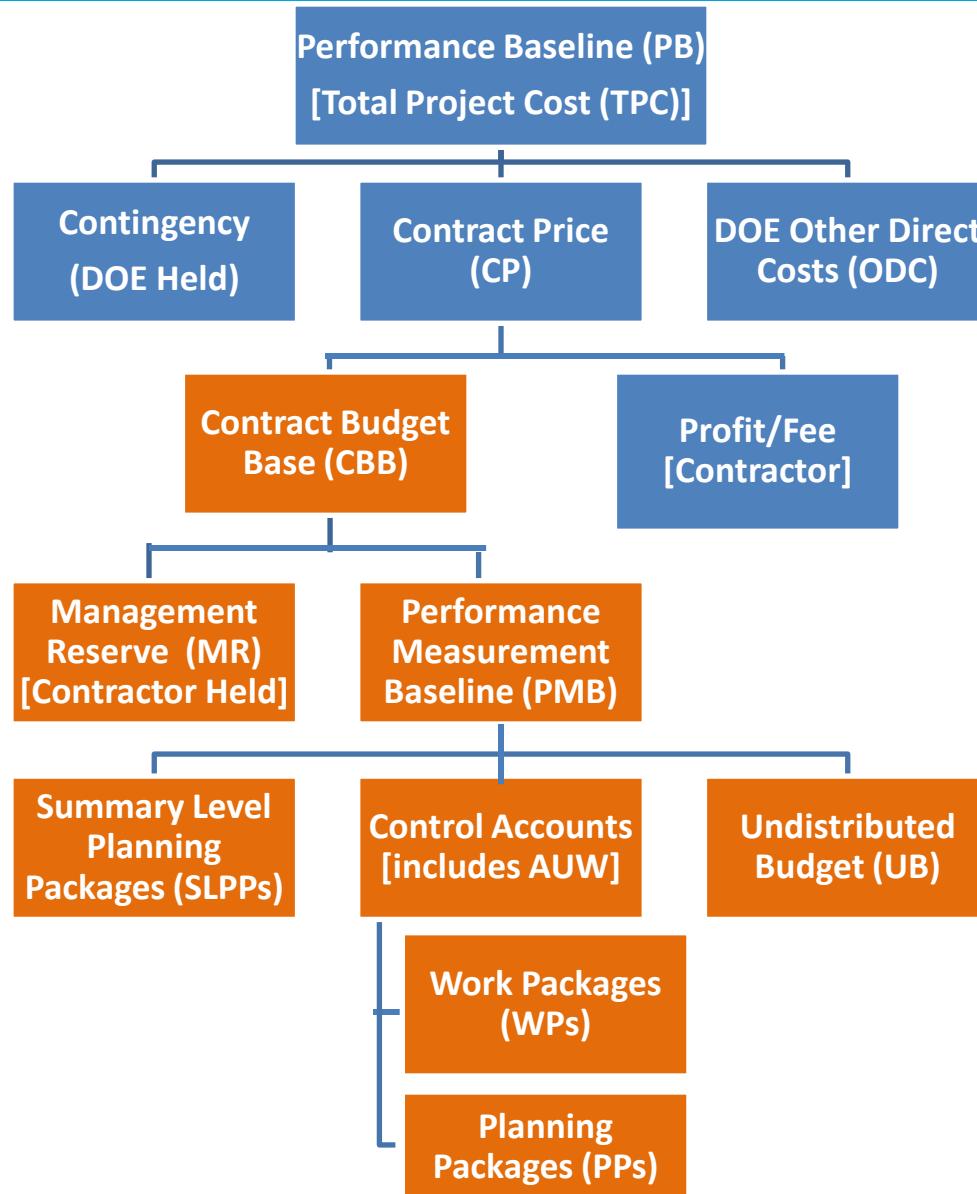
vs.



- Funds are real dollars being spent and those real dollars forecasted to be spent.



Performance Baseline Components





Budget and Management Reserve (MR)

- MR is Budget, not Funds so not a Financial Reserve
- Cannot be used to cover Budget overruns or to recover underruns
- Program cannot be successfully run without MR; Customer expects to see MR on Performance Reports
- Can be used to re-plan ***future*** work based on improved knowledge
- ***ANSI: “unexpected growth within the currently authorized work scope, rate changes, risk handling, and other program unknowns”***
- ***Used for activities within the scope of the project (SOW) but outside the scope of any existing control account***



Management Reserve (MR)

Page 190

- **Acceptable Uses (Debits)**
 - “Realized Risks” Identified in the Risk Register or unidentified risks; i.e. *in-scope unplanned*
 - Significant changes in execution strategy, e.g. make/buy (also credits)
 - SOW transfer, e.g., one control account to another (also credits)
 - Labor rate and/or overhead rate adjustments for work not yet completed (also credits) [or may be reflected in EAC]
- **Assure that MR is not used to**
 - Cover overruns [MR is not funds]
 - Changing budget (crediting MR) for completed tasks that have underrun
 - Source funding for added work scope



Funds, Budget, and Contingency

Page 191

- **Contingency is applied as:**
 - **Funds** obligated by government agencies to **ensure adequate funds are available** to complete all program/project work.
 - **Budget** authorized by government agencies for **scope changes**, i.e. additions to the statement of work, authorized via contract modifications



Two Types of Contingency

- **Type A – Cost Growth:**
 - For additional, authorized, negotiated work
 - » *Additional scope always requires contingency budget*
 - » *Additional scope ‘may’ require contingency funding*, whether fully or partially or none (if underrunning)
- **Type B – Cost Overruns:**
 - *Funding* to reimburse the contractor for project cost overruns



Contingency Type A Examples

- **Cost Growth/Increase [Clear] – Fully or partially funded**
 - Added Contractual SOW
 - Exercised Options
 - Engineering Change Proposal (ECP)
 - DOE Owned Realized Risks
 - Project Changes
 - Renegotiated Schedule – Customer Caused Impact
- **Cost Growth [Fuzzy]**
 - Re-accomplish (SOW unclear when begun)
 - Requests for Equitable Adjustment (subject to approval)



The Customer Caused Schedule Variance

Page 194

- Funding limits cutting into the baseline
- Late spec approvals and drawings
- Government Furnished Equipment (GFE)/Government Furnished Material (GFM) late/inoperative
- Joint testing equipment/chambers/facilities not available
- Directed slips
- Additional SOW – Internal replanning impact



Contingency Type B

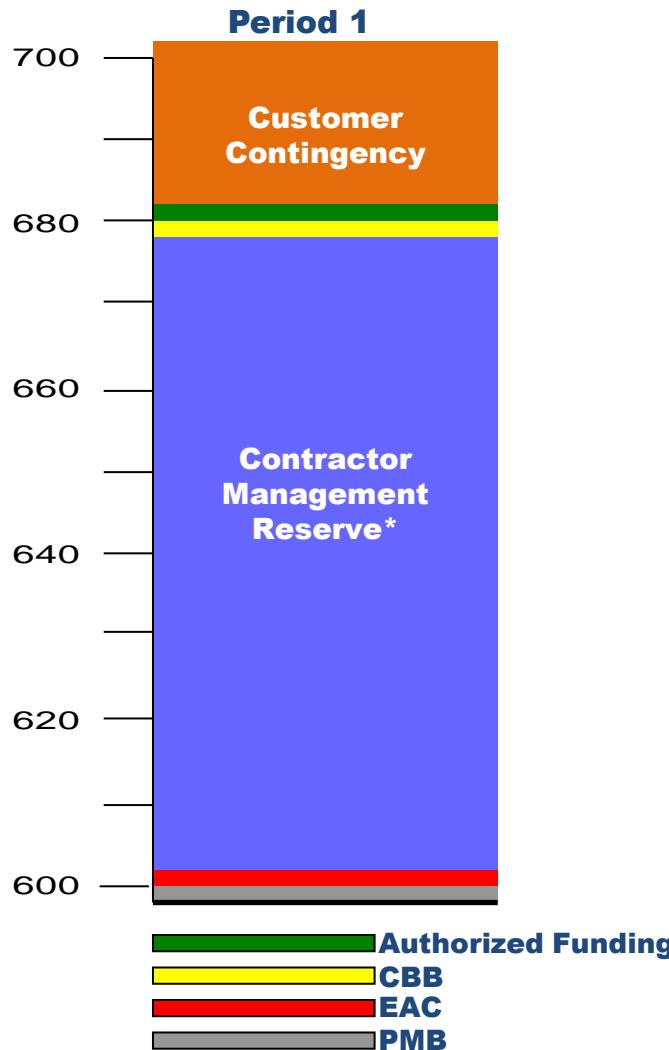
Page 195

- **Cost Overruns**
 - The SOW did not change; it just costs more than planned
 - Underestimating management, administration, and support costs.
 - Not clearly understanding the cost of Data Item Requirements, Delivery Dates, Customer Reviews, and Oversight Support, etc.

Management Reserve and Contingency Usage



Scenarios, pg 1 of 16



- It's important to have a clear understanding of the difference between contractor management reserve and government contingency.
- In planning the execution of a project the contractor identifies, schedules, and budgets those activities for the known scope.
- Let's walk through some scenarios.



Management Reserve and Contingency Usage

Scenarios, pg 2 of 16

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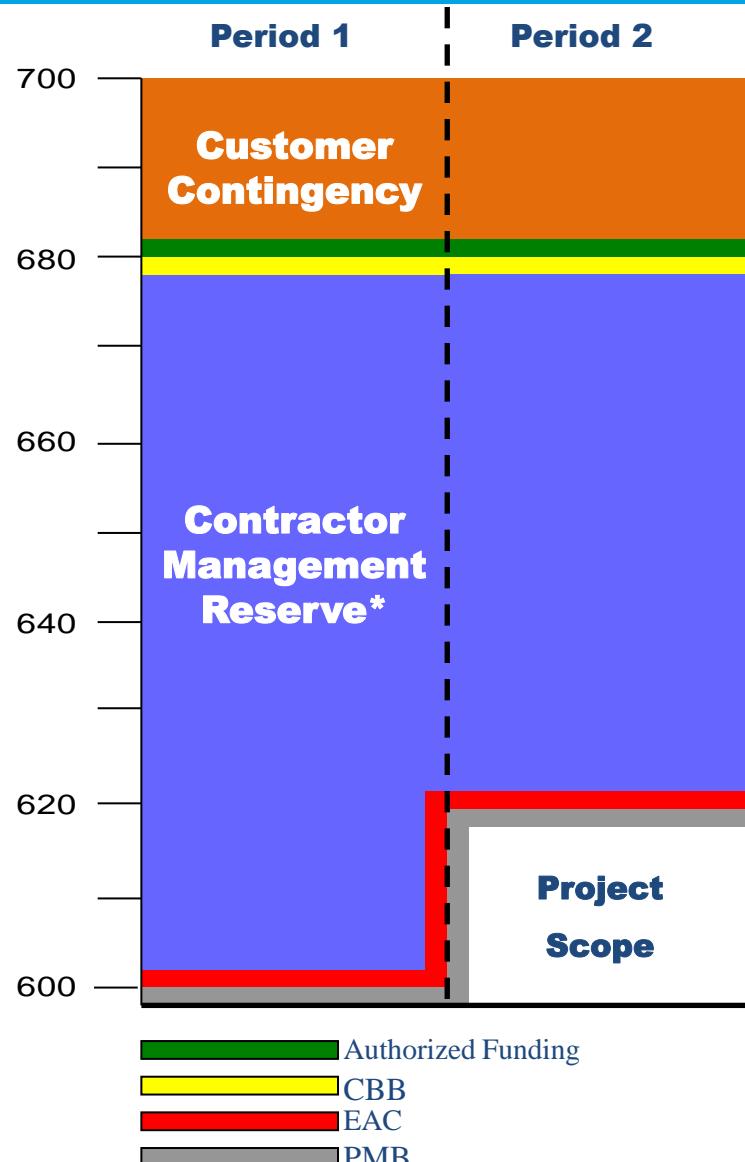
- **The budget associated with known scope can have two components.**
 - Distributed Budget is that already assigned and communicated (i.e. distributed) to responsible managers.
 - The second component is Undistributed Budget which is for known scope but has not been assigned to a responsible person to manage.
 - Together Distributed and Undistributed Budget comprise the Performance Measurement Baseline (PMB).
 - In addition to the PMB, a budget allowance is set aside to use for unforeseen or unanticipated in-scope work that may appear in the course of project execution. This budget allowance is called Management Reserve (MR).
 - Together the PMB and MR comprise the Contract Budget Base or CBB. Other terms we will use in this presentation include EAC or Estimate At Completion and BAC or Budget At Completion.
 - After a rebaselining, EACs are equal to BACs, but it's easy to understand why they are not always the same value.
- **In Period 1, we have an example of a project that has just been though a rebaselining.**
- **The PMB for the contractor is at \$600M, and there is MR available of \$80M that has a potential funding requirement.**
- **This gives a current funding coverage requirement to the DOE customer of \$680M.**
- **At this time, the DOE has an authorized funding level of \$700M, which allows for \$20M of funding Contingency.**



Management Reserve and Contingency Usage

Scenarios, pg 3 of 16

Page 198



*Represents an MR forecast in the Most Likely EAC



Scenarios, pg 4 of 16

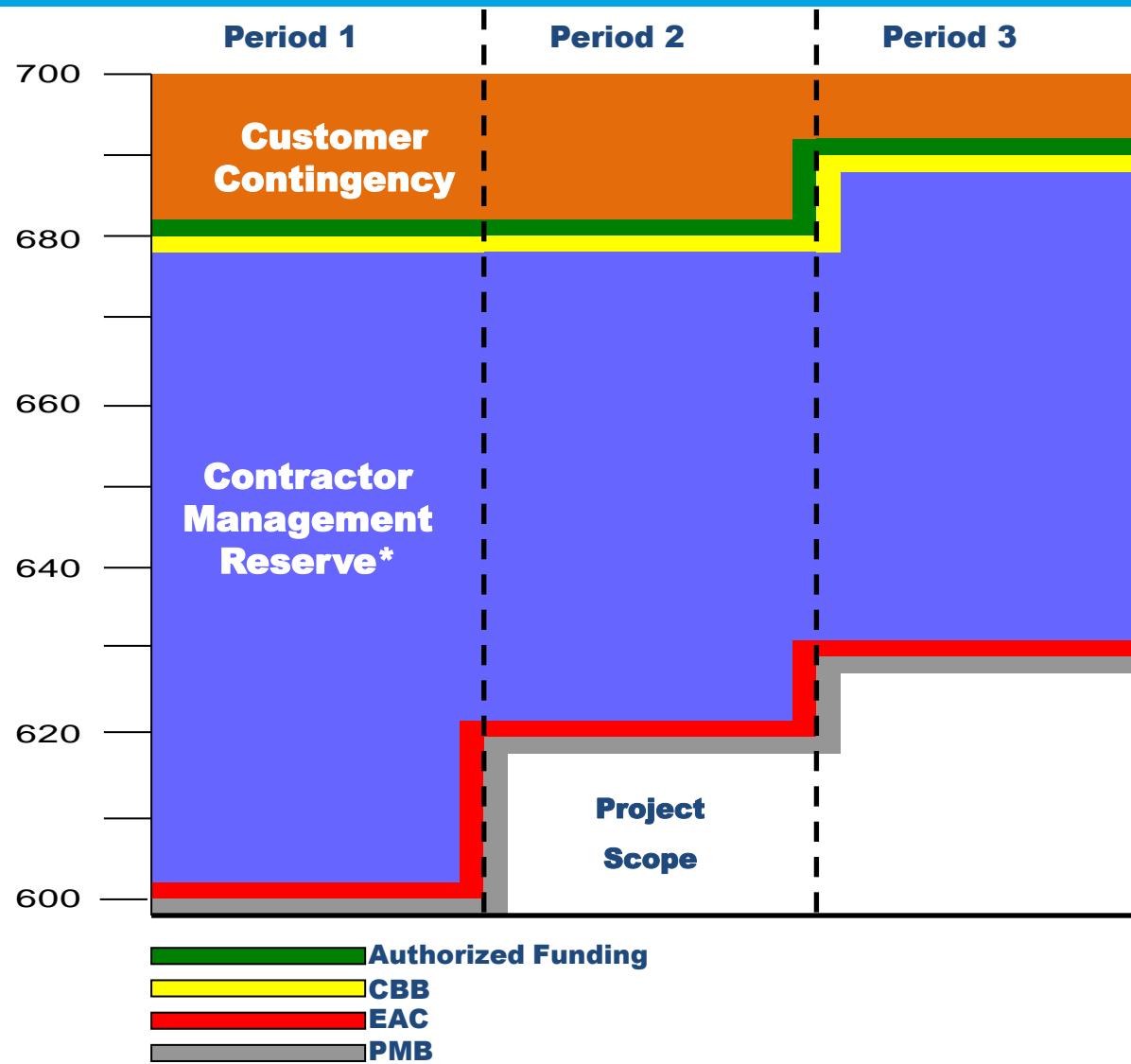
- In Period 2, the contractor applied MR to the PMB due to the realization that additional unanticipated waste treatment testing would need to be done as part of their risk mitigation program.
- Because of this internal application of budget, the PMB (and therefore the BAC and EAC associated with this effort) increased accordingly, however there is no additional funding impact for the customer and the \$680M is still the contractor's Contract Budget Base.



Management Reserve and Contingency Usage

Scenarios, pg 5 of 16

Page 200



*Represents an MR forecast in the Most Likely EAC

Management Reserve and Contingency Usage

Scenarios, pg 6 of 16



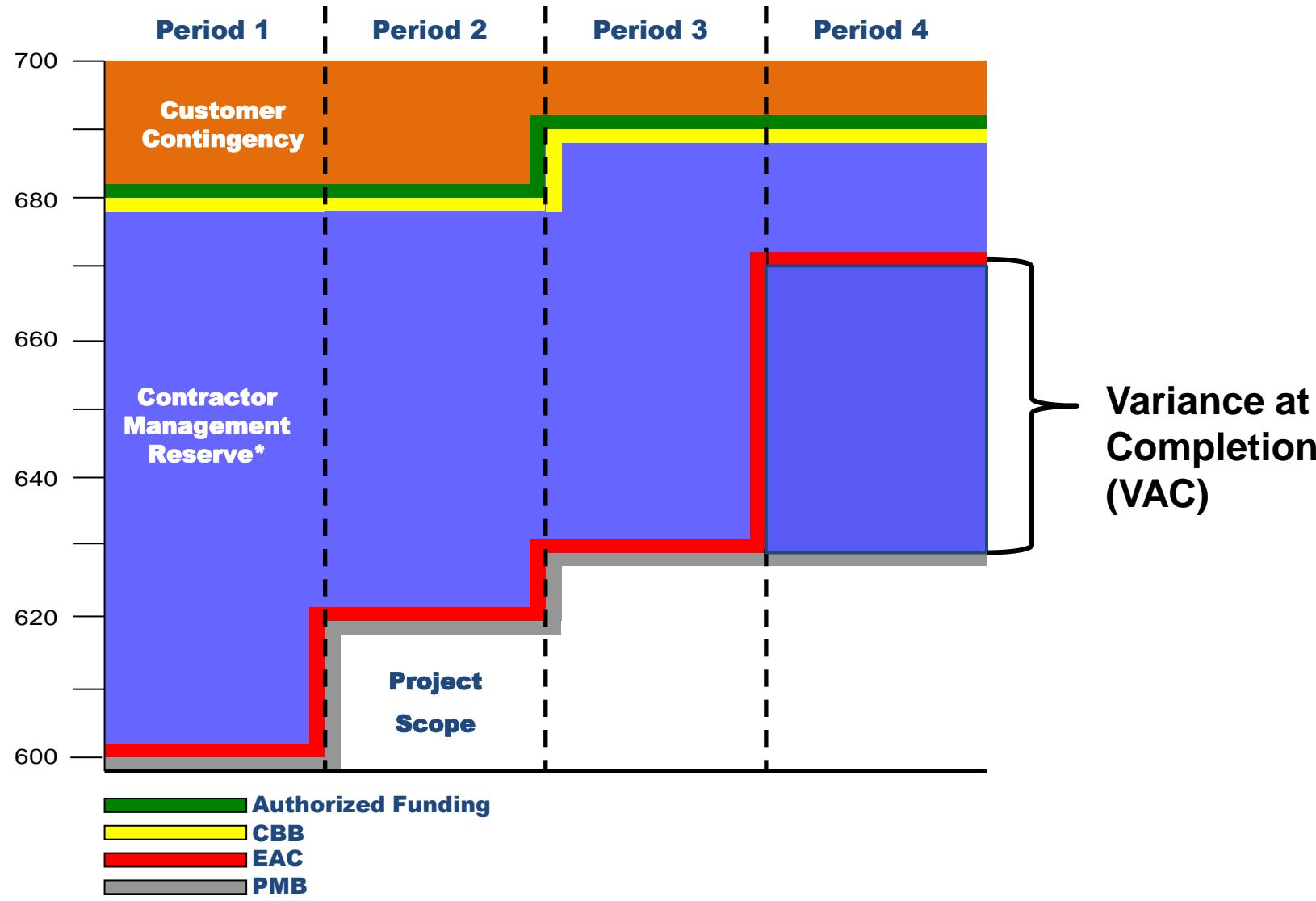
- In Period 3, the DOE customer modifies the contract to add two additional holding tanks, a new scope of work estimated at \$10M.
- This out-of-scope change is an increase not only in the contractor PMB (and therefore the BAC & EAC for this effort), but also the CBB.
- This change decreases the available government Contingency and increases the total value of the contract.



Management Reserve and Contingency Usage

Scenarios, pg 7 of 16

Page 202



*Represents an MR forecast in the Most Likely EAC



Scenarios, pg 8 of 16

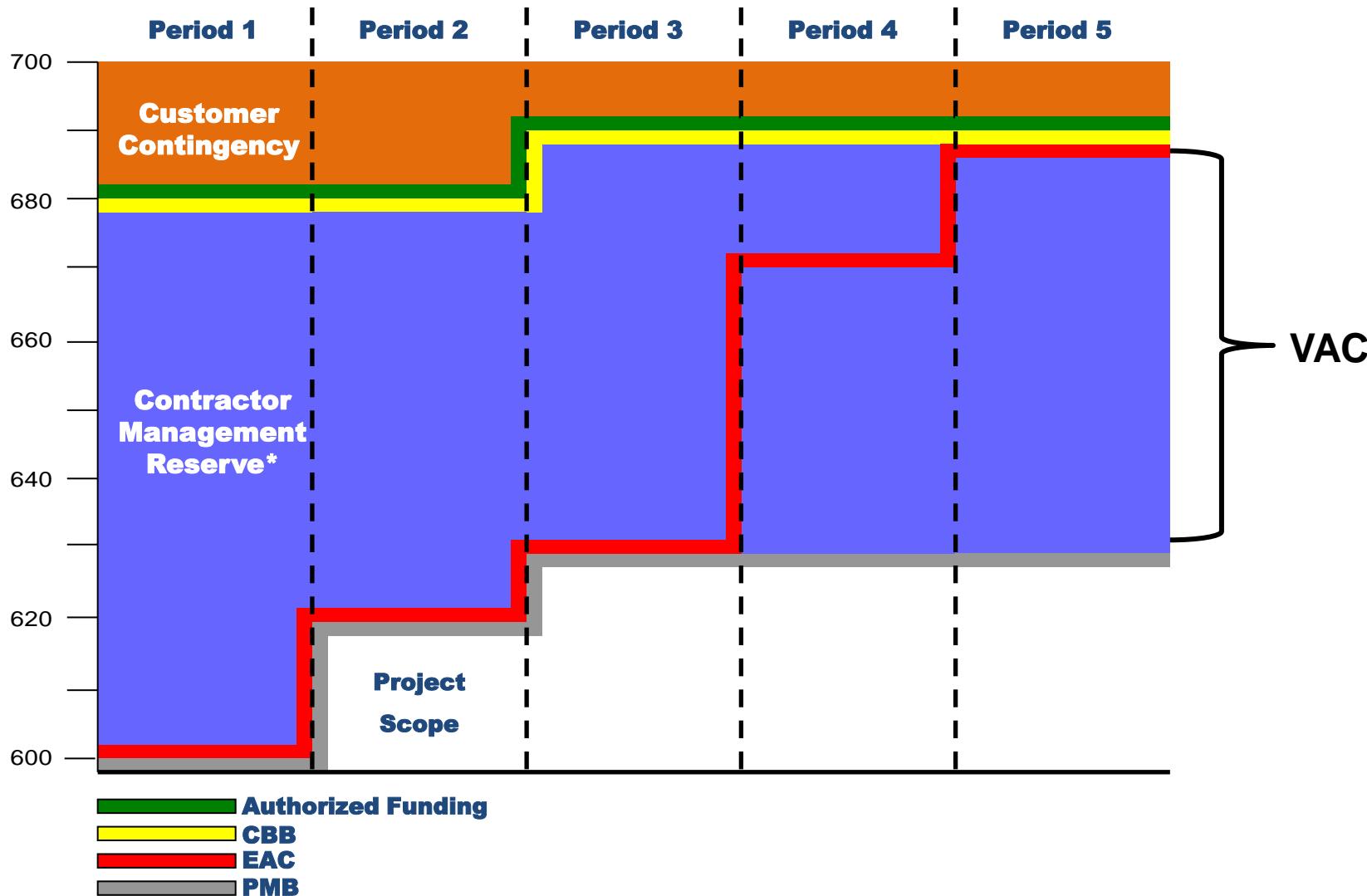
- In Period 4, a project wide bottoms-up EAC exercise has resulted in a \$40M forecasted overrun to the current PMB.
- Note that the PMB does not change. The EAC simply is the best estimate at the time of what the responsible managers think will be the ultimate cost of the work they have to do when it is finished.
- Because they are within the boundaries of the contract (CBB) there is no need for the DOE to dip into their remaining Contingency (yet). The bottom line is that the project now has a projection to overrun the PMB.
- If the contractor ends up not using all the Management Reserve, there may be enough left to balance this projected overrun. The graph shows what portion of the Management Reserve is excess above and beyond the EAC.



Management Reserve and Contingency Usage

Scenarios, pg 9 of 16

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*Represents an MR forecast in the Most Likely EAC



Management Reserve and Contingency Usage

Scenarios, pg 10 of 16

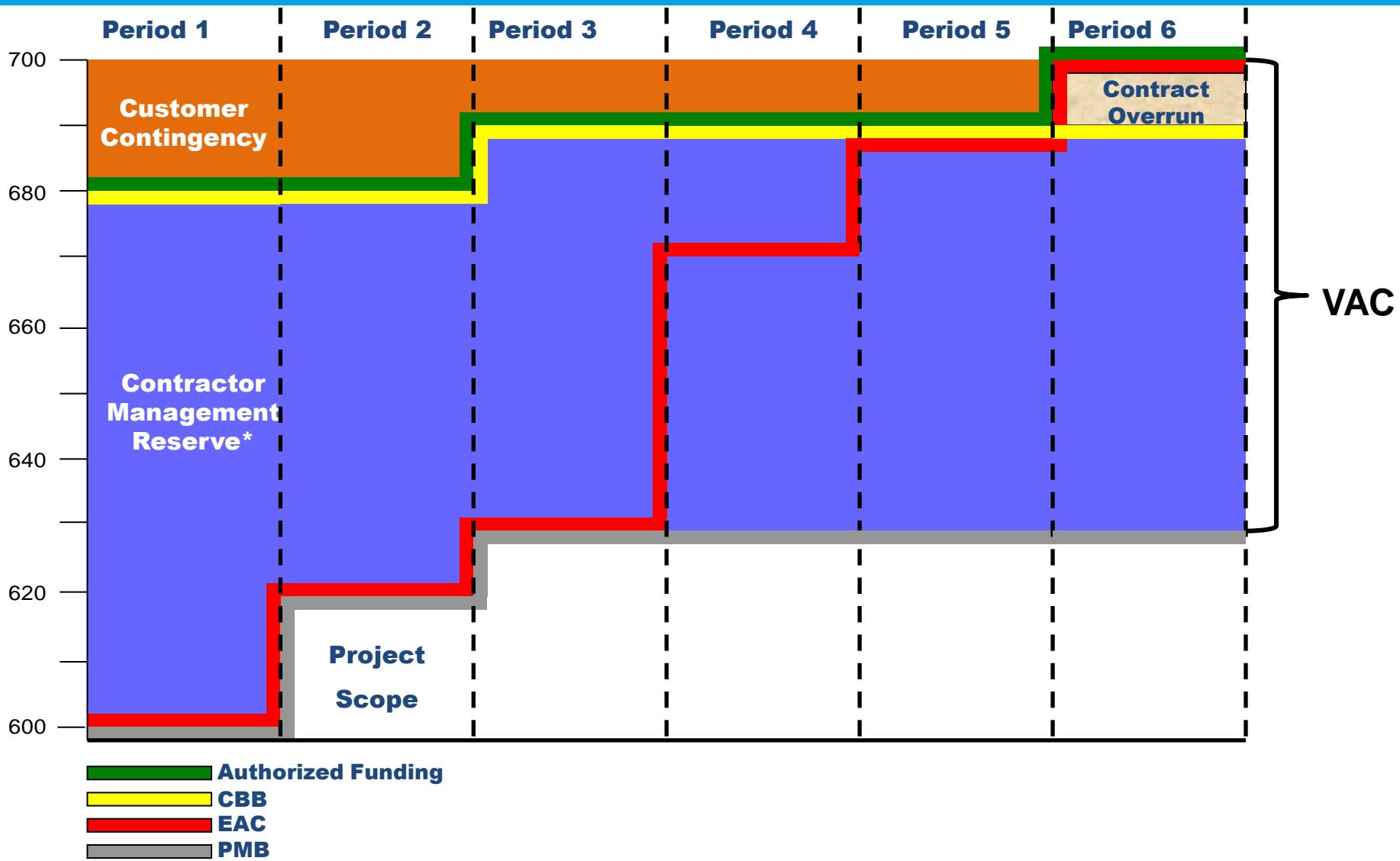
- In Period 5, the weld process for the stainless steel containers is proving more difficult than originally planned. Two tanks have to be scrapped and the process re-invented.
- This causes an estimated \$20M increase in costs.
- The overrun has eliminated any possibility that there might be enough unused MR budget to offset any additional overruns.
- DOE is still holding \$10M of Contingency, and has not yet increased the authorized funding limits on the contract.
- Should the contractor need to apply MR, it would result in an immediate increase to not only the PMB but to the EAC if the need for the use of MR was not considered in the ETC development.
- Remember – MR can be used for future work within scope of contract but outside scope of an existing control account.



Management Reserve and Contingency Usage

Scenarios, pg 11 of 16

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*Represents an MR forecast in the Most Likely EAC

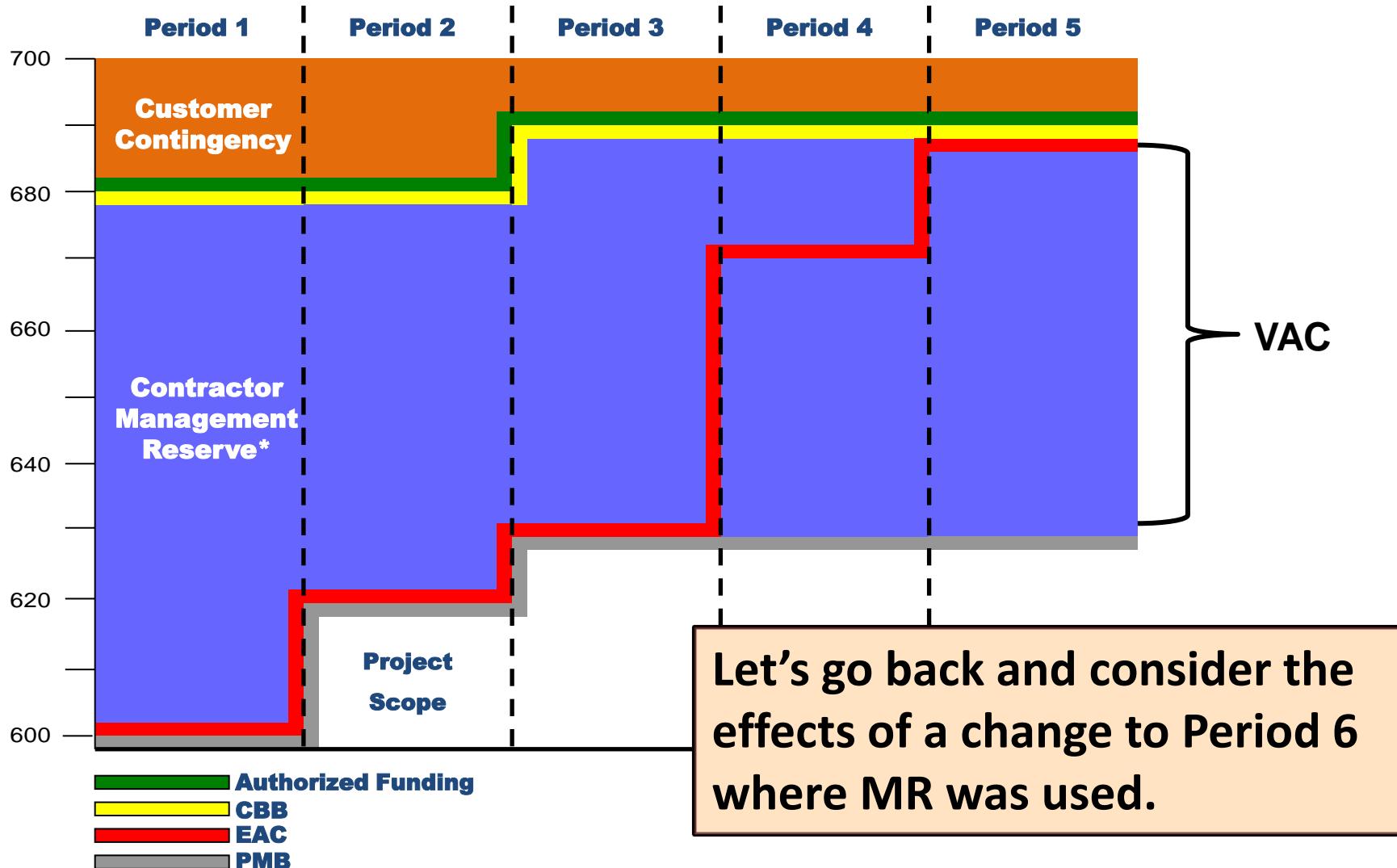


Management Reserve and Contingency Usage

Scenarios, pg 12 of 16

- Period 6 Scenario 1: Unfortunately, the impact from the welding issues is \$10M more than originally projected as the contractor struggles to perfect the process.
- This doesn't change the contract value (CBB) since ***it's only a funding increase***, but it does require the customer to change the funding authorization to match the increase in EAC.
- The Contingency is gone as is any flexibility for the DOE customer to make additional program adjustments.

Management Reserve and Contingency Usage Scenarios, pg 13 of 16



Let's go back and consider the effects of a change to Period 6 where MR was used.

*Represents an MR forecast in the Most Likely EAC



Management Reserve and Contingency Usage

Scenarios, pg 14 of 16

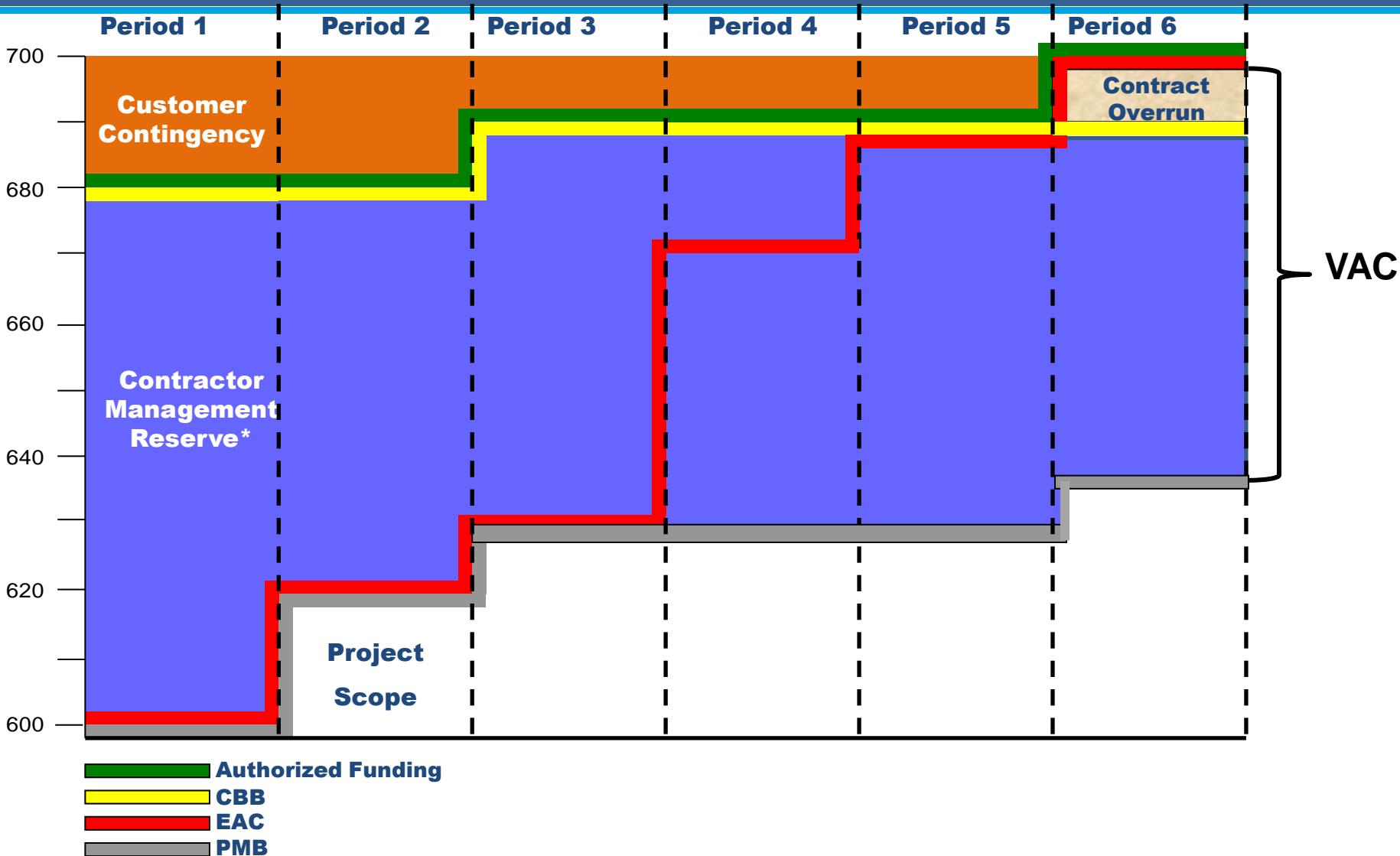
- Now – let's go back to Period 5. Remember, the weld process for the stainless steel containers is proving more difficult than originally planned. Two tanks have to be scrapped and the process re-invented. This causes an estimated \$20M increase in costs.
- This unanticipated impact depletes the remaining Management Reserve. The overrun has eliminated any possibility that there might be enough unused MR budget to offset any additional overruns.
- The DOE Customer is still holding \$10M of Contingency, and has not yet increased the authorized funding limits on the contract.
 - Should the contractor need to apply MR, it would result in an immediate increase to not only the PMB but to the EAC if the need for the use of MR was not considered in the ETC development.
- ***What happens when more MR is used*** in period 6. How does that affect Authorized Funding?



Management Reserve and Contingency Usage

Scenarios, pg 15 of 16

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*Represents an MR forecast in the Most Likely EAC



Management Reserve and Contingency Usage

Scenarios, pg 16 of 16

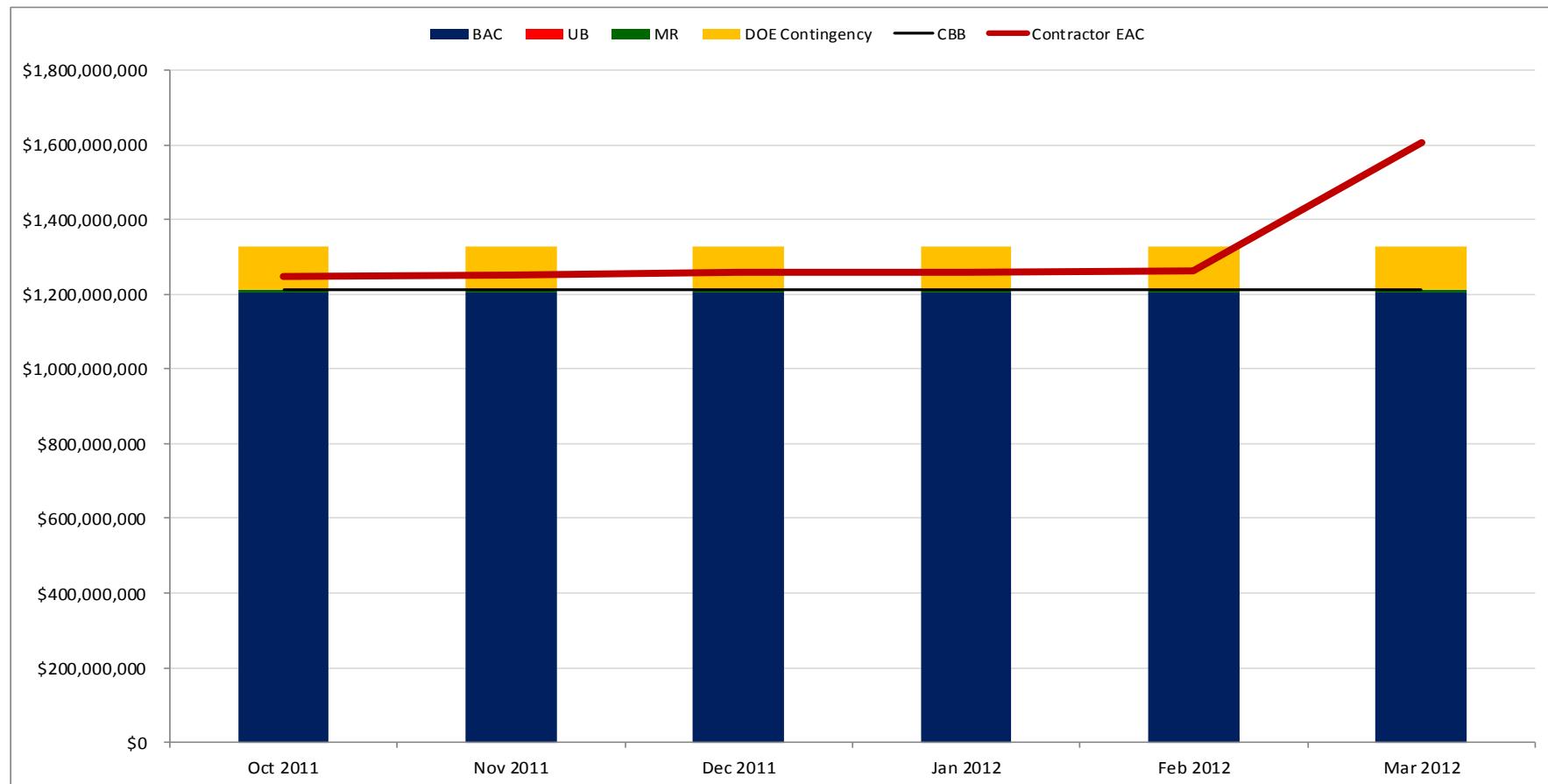
- Period 6 scenario 2: The contractor applied \$10M MR to the PMB due to the realization that additional unanticipated ground water testing would need to be done as part of their risk mitigation program. Because of this internal application of budget, the PMB (and therefore the BAC and EAC associated with this effort) increased accordingly.
- This time when MR increased there is a need for contingency funds because the EAC associated with the new scope pushes above the authorized funding. Again, this doesn't change the contract value (CBB) since it's only a funding increase, but it does require the customer to change the funding authorization to match the increase in EAC. The Contingency is gone as is any flexibility for DOE to make additional program adjustments.
- Note the \$10M above the CBB is labeled here as “contract overrun” since it exceeds the CBB. The VAC estimated at \$60M less the \$10M contract overrun is considered estimated “PMB overrun”.
- What this means to DOE is ***that if the contractor uses any MR in the future, an increase to the authorized funding would be likely*** so DOE needs to take action now to increase their TPC to replenish the contingency based on the current projections.



PARS II Project Funding Status

Page 212

Funding Status (Monthly at Project Level)



	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012
DOE Cost Contingency	\$114,360,097	\$114,360,097	\$114,360,097	\$114,360,097	\$114,360,097	\$114,360,097
Management Reserve (MR)	\$8,220,611	\$8,220,611	\$8,220,611	\$8,220,611	\$8,220,611	\$8,220,611
Undistributed Budget (UB)	\$0	\$0	\$0	\$0	\$0	\$0
Budget At Complete (BAC)	\$1,203,931,397	\$1,203,931,397	\$1,203,931,397	\$1,203,931,397	\$1,203,931,397	\$1,203,931,397
Contract Budget Base (CBB)	\$1,212,152,008	\$1,212,152,008	\$1,212,152,008	\$1,212,152,008	\$1,212,152,008	\$1,212,152,008
Estimate At Complete (EAC)	\$1,246,412,143	\$1,251,302,179	\$1,260,800,606	\$1,260,800,161	\$1,261,647,039	\$1,605,143,206



PARS II Project Funding Status

- Purpose: Demonstrate if sufficient funding is available to complete the project.
- Major components of TPC are plotted in a stack column:
 - identify current balances of each major TPC component - mainly DOE Contingency and CBB.
- Analysis:
 - Compare contractor-reported forecast (EAC) against TPC to determine if additional funding may be required to complete the project.
 - Verify that all components of TPC are being accurately reported and the height of each column for each period is the same or very close.
 - Indicators that the risk reserves and contractor baseline have not been reported accurately or are being used improperly.
 - Fluctuations in the CBB line without corresponding reverse changes in DOE Contingency
 - A significant change in Contingency balance that is not reflected in CBB line
 - A decrease in Contingency and an associated increase in MR without any change to BAC

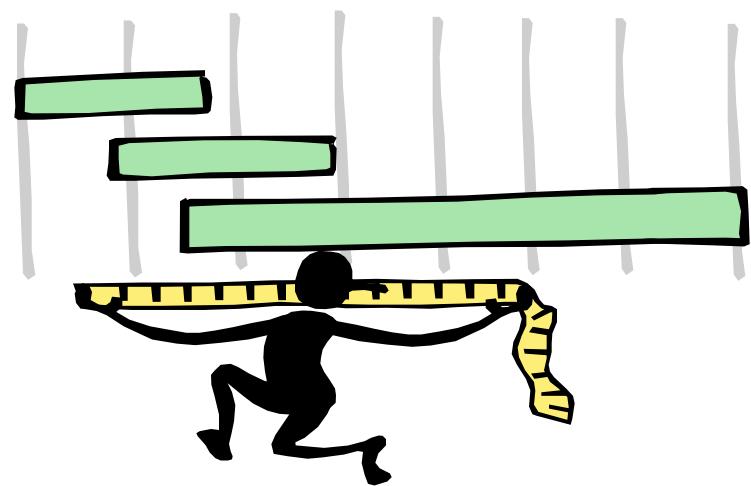


Budget Vs. Funds Wrap Up

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EV Data Analysis





Access to Data

- **FAR 52.234-4(f)**
 - The Contractor shall provide access to all pertinent records and data requested by the Contracting Officer or a duly authorized representative as necessary to permit Government surveillance to ensure that the EVMS conforms, and continues to conform, with the performance criteria referenced in paragraph (a) of this clause.
- **DOE O 413.3B, Attachment 1, Contractor Requirements Document**
 - 2.a. For a cost reimbursement contract, the required project performance data shall include:
 - ANSI/EIA-748B earned value;
 - Earned value time-phased incremental cost and quantity;
 - Management reserve;
 - Schedule;
 - Variance analysis; and
 - Risk management data.

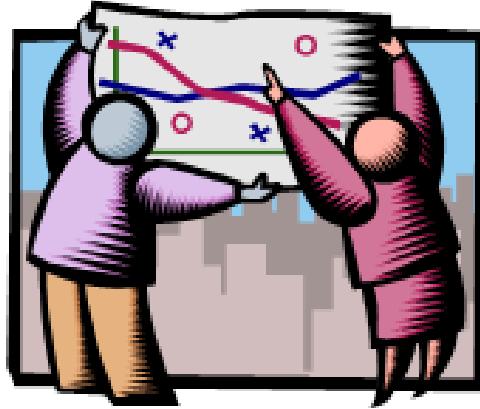
1. Validity check of data

2. Analyze variances

3. Analyze trends

4. Assess realism of contractor's EAC

5. Predict future performance and an IEAC



Why Assess Data Validity?

- First and foremost, to ***use the EV data to manage the project and make informed decisions and projections***, we first must be able to rely on data accuracy and reliability
- **EV data receives high visibility**
 - Briefed at DepSec level for PARS II reportable capital asset projects
 - Critical that EVMS data reported to stakeholders is accurate
- **Trends and indices mean nothing if the data is incorrect**
- **Responsibility**
 - Contractor - primary
 - FPD and IPT - ‘boots on the ground’ verification
 - HQ - ‘trust but verify’
- **Primary purpose of a surveillance program**





How Do We Assess Validity?

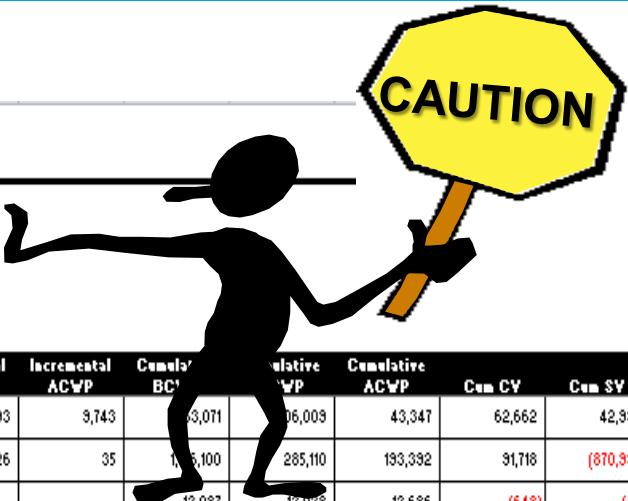
Page 219

- **Review several of the EV warning triggers**
 - PARS II
 - Automatically issues warnings upon upload
 - Check the new PARS II Analysis Reports Folder for the EV Data Validity (WBS Level) report for areas to investigate
 - Analysts can create further sorts and filters
 - Again, PARS II is designed for FPD, Program Office, and HQ – everyone viewing the same data, the same way
- **And always important –**
 - Physical verification by technical team's knowledge of project status
 - Does the data reflect reality?





PARS II EV Data Validity (WBS Level) Report



EV Data Validity (WBS Level)



CPI/SPi Thresholds		
No Fill	<= ±	10%
Yellow	<= ±	20%
Red	> ±	20%

Incremental BCWP	Incremental ACWP	Cumulative BCWP	Relative BCWP	Cumulative ACWP	Cum CV	Cum SV	Cum CPI	Cum SPi	BAC	EAC	VAC	% Compl	TCPi to Negati ve SPA	Inc SPA >	BCWP > BAC	Cum ACWP	Cum VAC	CPI < TCPi	EAC without BAC	Missin g ETC	Extra ETC	
15,793	9,743	13,071	106,009	43,347	62,662	42,938	2.45	1.68	650,826	598,941	51,885	16.3%	0.98					1.46				
13,726	35	13,060	1285,110	133,392	91,718	(870,390)	1.47	0.25	1,265,640	1,265,640		22.5%	0.91						0.56			
		13,067	13,036	13,686		(648)		(49)	0.95	1.00	576,566	577,397	(831)	2.3%	1.00							
		13,067	13,038	13,686		(648)		(49)	0.95	1.00	576,566	577,397	(831)	2.3%	1.00							
916,580	2,409,389	21,913,531	17,500,385	25,725,021	(8,224,036)	(10,412,546)	0.68	0.63	45,751,030	51,338,078	(5,581,048)	38.2%	1.10				X	X	-0.42			
15,904	77,924	1,705,759	1,520,471	1,503,325	17,146	(185,288)	1.01	0.89	1,774,836	1,774,836		85.7%	0.94						0.07			
898,017	2,302,774	25,045,906	15,483,662	23,545,007	(8,061,345)	(3,562,244)	0.66	0.62	33,789,451	45,161,553	(5,372,102)	38.9%	1.12				X	X	-0.47			
2,659	23,292	1,161,866	436,852	676,630	(173,838)	(665,014)	0.73	0.43	4,192,742	4,401,689	(208,947)	11.3%	0.99						-0.26			
84,163	103,154	6,163,140	1,803,302	1,644,320	158,382	(4,365,838)	1.10	0.29	11,880,202	12,019,593	(103,397)	15.2%	0.97						0.13			
55,553	77,742	3,878,066	1,076,327	803,815	266,512	(2,801,739)	1.03	0.28	5,293,824	5,296,010	(2,186)	20.3%	0.94						0.39			
28,616	31,412	2,291,075	726,375	834,505	(107,530)	(1,564,100)	0.87	0.32	6,586,378	6,723,589	(137,211)	11.0%	0.99						-0.12			
4,103,754	7,113,575	70,519,502	61,657,177	68,877,252	(7,220,075)	(8,862,325)	0.90	0.87	108,644,667	119,289,137	(10,644,470)	56.8%	0.93									
17,636	8,177	5,446,717	4,594,663	4,543,119	51,564	(852,034)	1.01	0.84	10,072,341	12,415,320	(2,343,573)	45.6%	0.70						0.32			
843	(1,305)	3,125,675	3,174,943	3,036,184	138,765	49,274	1.05	1.02	5,293,336	5,138,403	154,933	60.0%	1.01	Inc ACWP								
(14)	5,753	676,768	581,627	591,180	(9,553)	(35,141)	0.98	0.86	686,912	912,134	(225,222)	84.7%	0.93	Inc BCWP						0.66		
(482,738)	1,815,562	44,910,402	35,781,463	43,281,183	(7,505,714)	(3,128,933)	0.83	0.80	45,655,343	54,345,426	(9,290,077)	78.4%	0.85	Inc BCWP								
4,564,344	5,313,322	14,937,346	15,808,265	15,714,631	93,574	810,919	1.01	1.05	30,807,704	30,625,234	182,410	51.3%	1.01									
3,015	(27,339)	1,362,593	1,716,184	1,704,836	11,288	353,591	1.01	1.26	8,274,196	7,397,130	877,066	20.7%	1.15	Inc ACWP								

Note: This is a partial view of the Report



Data Validity Features

- **Negative BCWS, BCWP, or ACWP entries in incremental period**
 - Indicates a retroactive change that needs to be explained and verified
 - Investigate changes in % complete
- **Incremental BCWS, BCWP, or ACWP greater than cumulative (error)**
- **BCWP > BAC (error)**
- **ACWP_{cum} > EAC (error)**
- **CV < VAC (more negative, e.g. CV = -\$280k; VAC = -\$30k)**
 - Indicates EAC does not reflect the overrun to date
- **TCPI_{EAC} differs from CPI by more than 5%**
 - EAC reasonableness indicator which warrants investigation if delta greater than .05



Data Validity Features

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- **EAC with no BAC (indicates an unbudgeted activity)**
- **Missing ETC indicates $BCWP < BAC$ yet there is no future ETC planned as $ACWP \geq EAC$**
 - Baseline work incomplete yet no work in future planned ETC
- **Extra ETC indicates all work is accomplished because $BCWP = BAC$, yet $ACWP < EAC$**
 - All baselined work completed yet future planned work in ETC

PARS II Retroactive Change Indicator (6-mos; PMB Level) Report



Contractor Performance Period End Date	7/22/2012				8/24/2012				9/26/2012				10/22/2012				11/25/2012				12/19/2012			
	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC
03/30/2009	\$3,393,475	\$49,078,038	\$48,643,888		\$3,393,475	\$49,078,038	\$48,643,888		\$3,393,475	\$49,078,038	\$48,643,888		\$3,393,475	\$49,078,038	\$48,643,888		\$53,416,000	\$49,078,038	\$48,643,888		\$53,416,000	\$49,078,038	\$48,643,888	
04/26/2009	\$3,851,567	\$49,078,038	\$49,631,688		\$3,851,567	\$49,078,038	\$49,631,688		\$3,851,567	\$49,078,038	\$49,631,688		\$3,851,567	\$49,078,038	\$49,631,688		\$54,078,764	\$49,078,038	\$49,631,688		\$54,078,764	\$49,078,038	\$49,631,688	
05/24/2009	\$4,386,018	\$49,078,038	\$50,237,764		\$4,386,018	\$49,078,038	\$50,237,764		\$4,386,018	\$49,078,038	\$50,237,764		\$4,386,018	\$49,078,038	\$50,237,764		\$54,795,440	\$49,078,038	\$50,237,764		\$54,795,440	\$49,078,038	\$50,237,764	

Contractor Performance Period End Date	4/22/2012				3/25/2012			
	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC	Cum BCWS	Cum BCWP	Cum ACWP	Cum ACWP + ETC
03/30/2009	\$3,393,475	\$49,078,038	\$48,643,888		\$53,416,001	\$49,078,038	\$48,643,888	
04/26/2009	\$3,851,567				\$54,078,764	\$49,078,038	\$49,631,688	
05/24/2009	\$4,386,018	\$49,078,038	\$50,237,764		\$54,795,440	\$49,078,038	\$50,237,764	
06/21/2009	\$4,834,514	\$55,554,891	\$51,945,311		\$55,317,179	\$55,554,891	\$51,945,311	
07/26/2009	\$5,337,752	\$55,853,136	\$54,512,317		\$55,843,138	\$55,853,136	\$54,512,317	

02/20/2011	\$85,045,102	\$110,125,202	\$113,309,882		\$85,045,102	\$110,125,202	\$113,309,882		\$85,045,102	\$110,125,202	\$113,309,882		\$124,015,863	\$110,125,202	\$113,309,882		\$124,015,863	\$110,125,202	\$113,309,882	
03/20/2011	\$85,102,893	\$113,224,486	\$117,078,531		\$85,102,893	\$113,224,486	\$117,078,531		\$85,102,893	\$113,224,486	\$117,078,531		\$127,808,652	\$113,224,486	\$117,078,531		\$127,808,652	\$113,224,486	\$117,078,531	
04/24/2011	\$89,192,583	\$117,082,106	\$121,807,706		\$89,192,583	\$117,082,106	\$121,807,706		\$89,192,583	\$117,082,106	\$121,807,706		\$132,315,994	\$117,082,106	\$121,807,706		\$132,315,994	\$117,082,106	\$121,807,706	
05/22/2011	\$89,751,462	\$119,933,951	\$124,815,171		\$89,751,462	\$119,933,951	\$124,815,171		\$89,751,462	\$119,933,951	\$124,815,171		\$137,198,202	\$119,933,951	\$124,815,171		\$137,198,202	\$119,933,951	\$124,815,171	
06/19/2011	\$91,279,208	\$124,837,175	\$128,625,389		\$91,279,208	\$124,837,175	\$128,625,389		\$91,279,208	\$124,837,175	\$128,625,389		\$136,423,496	\$124,837,175	\$128,625,389		\$136,423,496	\$124,837,175	\$128,625,389	
07/24/2011	\$92,984,523	\$128,227,147	\$134,232,287		\$92,984,523	\$128,227,147	\$134,232,287		\$92,984,523	\$128,227,147	\$134,232,287		\$141,090,645	\$128,227,147	\$134,232,287		\$141,090,645	\$128,227,147	\$134,232,287	
08/21/2011	\$96,137,953	\$133,520,891	\$139,955,229		\$96,137,953	\$133,520,891	\$139,955,229		\$96,137,953	\$133,520,891	\$139,955,229		\$147,117,331	\$133,520,891	\$139,955,229		\$147,117,331	\$133,520,891	\$139,955,229	
09/25/2011	\$99,103,646	\$138,525,557	\$147,159,656		\$99,103,646	\$138,525,557	\$147,159,656		\$99,103,646	\$138,525,557	\$147,159,656		\$153,836,646	\$138,525,557	\$147,159,656		\$153,836,646	\$138,525,557	\$147,159,656	
10/23/2011	\$102,072,702	\$140,612,042	\$149,827,467		\$102,072,702	\$140,612,042	\$149,827,467		\$102,072,702	\$140,612,042	\$149,827,467		\$157,950,925	\$140,612,042	\$149,827,467		\$157,950,925	\$140,612,042	\$149,827,467	
11/20/2011	\$104,902,876	\$144,520,176	\$154,616,296		\$104,902,876	\$144,520,176	\$154,616,296		\$104,902,876	\$144,520,176	\$154,616,296		\$161,023,587	\$144,520,176	\$154,616,296		\$161,023,587	\$144,520,176	\$154,616,296	
12/18/2011	\$104,450,516	\$147,081,848	\$158,883,364		\$104,450,516	\$147,081,848	\$158,883,364		\$104,450,516	\$147,081,848	\$158,883,364		\$163,980,767	\$147,081,848	\$158,883,364		\$163,980,767	\$147,081,848	\$158,883,364	
01/22/2012	\$107,506,636	\$149,773,259	\$162,791,308		\$107,506,636	\$149,773,259	\$162,791,308		\$107,506,636	\$149,773,259	\$162,791,308		\$167,282,072	\$149,773,259	\$162,791,308		\$167,282,072	\$149,773,259	\$162,791,308	
02/19/2012	\$110,449,073	\$153,045,646	\$166,740,727		\$110,449,073	\$153,045,646	\$166,740,727		\$110,449,073	\$153,045,646	\$166,740,727		\$174,309,695	\$153,045,646	\$166,740,727		\$174,309,695	\$153,045,646	\$166,740,727	
03/25/2012	\$114,100,384	\$156,077,371	\$170,817,916		\$114,100,384	\$156,077,371	\$170,817,916		\$114,100,384	\$156,077,371	\$170,817,916		\$180,455,451	\$156,077,371	\$170,817,916		\$180,455,451	\$156,077,371	\$170,817,916	
04/22/2012	\$156,746,766	\$160,556,250	\$175,673,723		\$156,746,766	\$160,556,250	\$175,673,723		\$156,746,766	\$160,556,250	\$175,673,723		\$183,477,257	\$160,556,250	\$175,673,723		\$183,477,257	\$160,556,250	\$175,673,723	
05/20/2012	\$159,127,232	\$164,376,288	\$179,229,781		\$159,127,232	\$164,376,288	\$179,229,781		\$159,127,232	\$164,376,288	\$179,229,781		\$186,506,024	\$164,376,288	\$179,229,781		\$186,506,024	\$164,376,288	\$179,229,781	
06/24/2012	\$164,557,896	\$171,715,855	\$186,881,165		\$164,557,896	\$171,715,855	\$186,881,165		\$164,557,896	\$171,715,855	\$186,881,165		\$195,551,311	\$171,715,855	\$186,881,165		\$195,551,311	\$171,715,855	\$186,881,165	
07/22/2012	\$170,424,291	\$176,209,468	\$193,249,911	\$193,249,911	\$170,424,291	\$176,209,468	\$193,249,911	\$193,249,911	\$170,424,291	\$176,209,468	\$193,249,911	\$193,249,911	\$198,067,813	\$176,209,468	\$193,249,911	\$193,249,911	\$198,067,813	\$176,209,468	\$193,249,911	\$193,249,911

Enlarged portion indicates changes were made to historical time phasing of BCWS.

Questions to ask:

1. Why was budget removed? Was scoped removed?
2. Does rationale meet Guideline 30, e.g. correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data?
3. Why was the change made to history rather than in current period?

Systemic vs Single Occurrence

- **Identify multiple elements with similar validity issues**
 - Overall validity problems, e.g., same error occurring within same IPT or function, or across multiple control accounts or project(s)
 - This is key when identifying systemic issues with an Earned Value Management System as opposed to a single occurrence



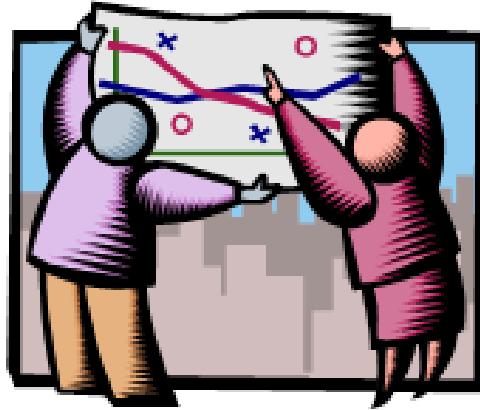
1. Validity check of data

2. Analyze variances

3. Analyze trends

4. Assess realism of contractor's EAC

5. Predict future performance and an IEAC



Analyze Variances

- After checking the data validity:
 - Identify and investigate variances
 - Review cumulative variances, sorting by size
 - Also review current period variances to help spot growing concerns
- The PARS II Performance Analysis (WBS Level) Report is helpful as seen on the next slide.





Analyze Variances

Cumulative

At Complete

BCWS	BCWP	ACWP	SV	CV	BAC	EAC	VAC
\$883,197,788.38	\$853,128,800.22	\$863,982,970.58	(\$30,068,988.16)	(\$10,854,170.36)	\$1,203,931,397.09	\$1,260,800,606.00	(\$56,869,208.91)
\$248,912,596.50	\$248,756,313.88	\$249,543,569.77	(\$156,282.62)	(\$787,255.89)	\$249,086,697.30	\$249,965,883.17	(\$879,185.87)
\$14,132,836.70	\$14,132,836.70	\$14,115,047.18		\$17,789.52	\$14,132,836.70	\$14,115,047.18	\$17,789.52
\$18,916,512.00	\$18,916,512.00	\$18,914,884.03		\$1,627.97	\$18,916,512.00	\$18,914,884.03	\$1,627.97
\$14,517,200.00	\$14,517,200.00	\$14,514,564.96		\$2,635.04	\$14,517,200.00	\$14,514,564.96	\$2,635.04
\$31,305,140.97	\$31,305,140.97	\$31,300,141.27		\$4,999.70	\$31,305,140.97	\$31,300,141.27	\$4,999.70
\$130,652,121.92	\$130,652,121.92	\$131,455,924.79		(\$803,802.87)	\$130,652,121.92	\$131,455,924.79	(\$803,802.87)
\$12,569,864.47	\$12,569,864.47	\$12,294,354.50		\$275,509.97	\$12,569,864.47	\$12,294,354.50	\$275,509.97
\$25,841,965.92	\$25,841,965.92	\$25,818,452.39		\$23,513.53	\$25,841,965.92	\$25,818,452.39	\$23,513.53
\$976,954.52	\$820,671.90	\$1,130,200.65	(\$156,282.62)	(\$309,528.75)	\$1,151,055.32	\$1,552,514.05	(\$401,458.73)
\$573,625,433.14	\$544,567,614.56	\$562,024,024.39	(\$29,057,818.58)	(\$17,456,409.83)	\$782,950,431.96	\$842,501,545.01	(\$59,551,113.05)
\$136,638,824.63	\$136,638,824.63	\$139,684,638.88		(\$3,045,814.25)	\$136,638,824.63	\$139,684,638.88	(\$3,045,814.25)
\$145,662,416.37	\$145,662,416.37	\$147,685,407.68		(\$2,022,991.31)	\$145,662,416.37	\$147,685,407.68	(\$2,022,991.31)
\$66,627,190.29	\$66,627,190.29	\$65,355,185.40		\$1,272,004.89	\$66,627,190.29	\$65,355,185.40	\$1,272,004.89
\$55,546,709.38	\$56,916,991.33	\$56,537,478.52	\$1,370,281.95	\$379,512.81	\$112,090,647.60	\$122,360,148.60	(\$10,269,501.00)
\$104,510,344.64	\$81,168,768.98	\$90,997,637.47	(\$23,341,575.66)	(\$9,828,868.49)	\$213,286,686.07	\$248,116,582.82	(\$34,829,896.75)

Performance Analysis (WBS Level) Report; view Report tab; sort on SV, CV, or VAC

\$9,243,732.12	\$9,243,732.12	\$9,323,882.85		(\$80,150.73)	\$9,243,732.12	\$9,323,882.85	(\$80,150.73)
\$11,373,700.15	\$10,518,813.19	\$9,321,556.57	(\$854,886.96)	\$1,197,256.62	\$116,964,331.71	\$113,323,090.97	\$3,641,240.74
\$24,584,422.65	\$24,584,422.65	\$23,988,835.00		\$595,587.65	\$28,354,417.00	\$28,354,417.00	
\$15,457,903.82	\$15,457,903.82	\$9,781,102.00		\$5,676,801.82	\$17,331,787.00	\$17,331,787.00	
\$883,197,788.38	\$853,128,800.22	\$863,982,970.58	(\$30,068,988.16)	(\$10,854,170.36)	\$1,203,931,397.09	\$1,260,800,606.00	(\$56,869,208.91)



Project Analysis Using EV

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- **Analyze variances**
 - Determine the cause
 - Determine if recurring or non-recurring
(price of one-time purchase)
 - Isolate the non-recurring data when performing trend analysis
 - Target problem areas



In Search of the Root Cause

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Schedule Variance

Cost Variance

Unfavorable

- Lack of resources due to...
- Late vendor deliveries because...
- Rework required due to...
- Work more complex than expected because...
- Unclear requirements in the areas of...

Favorable

- Increased efficiency due to...
- Work less complex than anticipated in the areas of...
- Fewer revisions and rework because...
- Subcontractor ahead of schedule because...

- Work is more complex than anticipated because....
- Extensive Design Review comments have resulted in....
- Material price escalation due to...
- The estimate was understated because.....

- Efficiencies being realized because....
- We used less expensive resources to accomplish the work and...
- We negotiated a lower price with the supplier due to...
- The new CAD system reduced the time required...

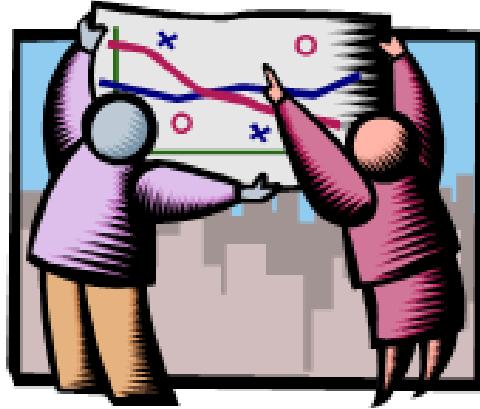
1. Validity check of data

2. Analyze variances

3. Analyze trends

4. Assess realism of contractor's EAC

5. Predict future performance and an IEAC



Trends

- What do the contractor's performance trends indicate over time?
- Is the current level of contractor performance projected to continue and why?
- What performance changes are expected and what are the drivers?
- Are MR and Contingency burn rates and use acceptable?
 - Mask/hide cost overruns?





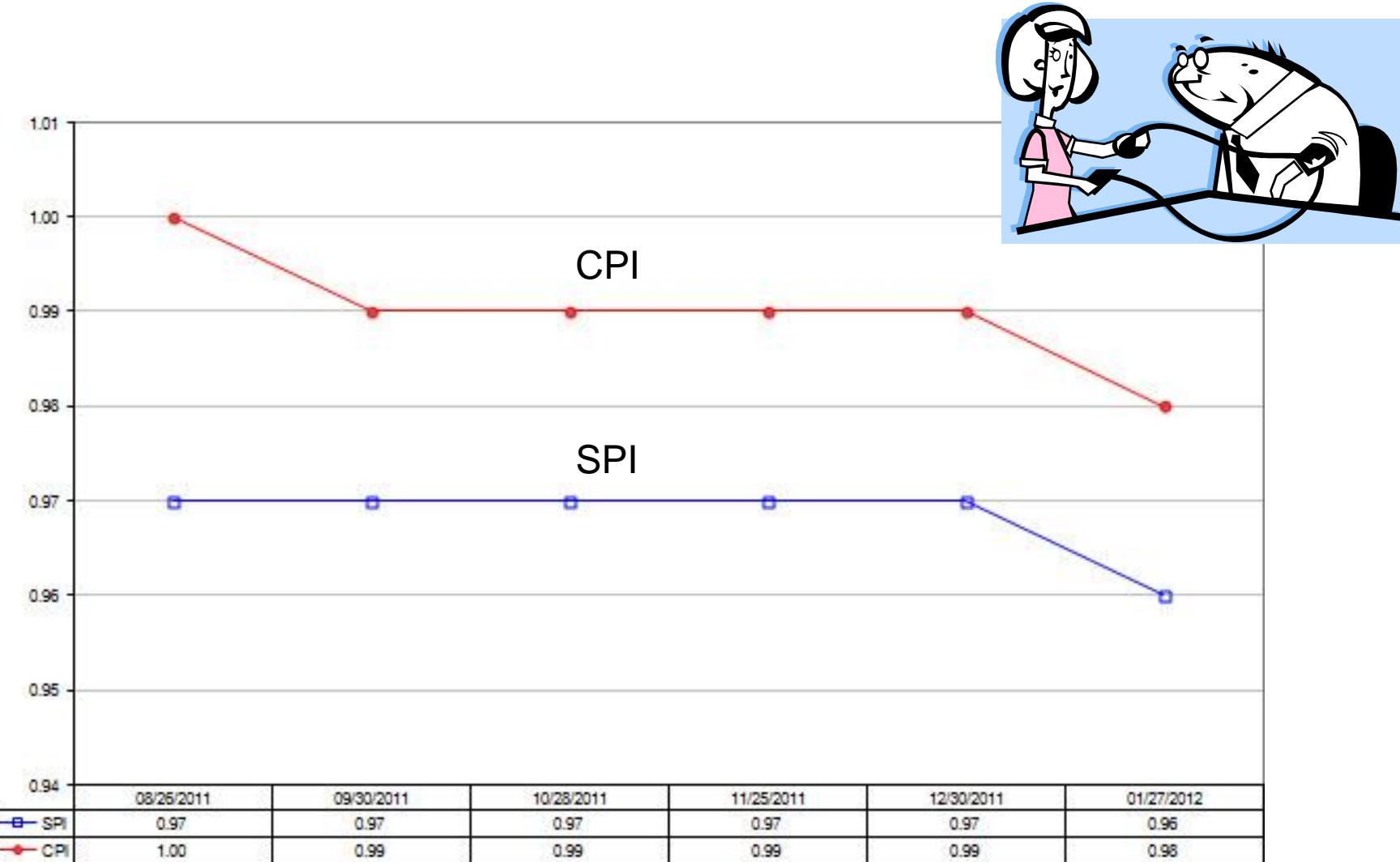
How Can We Use the Data

Variance Analysis Cumulative (WBS Level)

2	THRESHOLD				CHANGE		COMMENTS					
3	STATUS	MAX	STATUS	ARROW								
4	Red	0.80	Better	▲								
5	Yellow	0.90	No Change	-								
6	Green	1.00	Worse	▼								
8	WBS Number	DESCRIPTION	SV	CV	VAC	SPi	CPi					
137	2.3.4.02.02	Engineering Support and Project Planning	▼	▲	▼	1.00	0.97					
138	2.3.4.02.04	Engineering Design COnstruction Support	▼	▼	▲	1.26	0.83					
139	2.3.4.02.06	Construction Support - Process Engineering	▼	▲	-	1.00	1.12					
140	2.3.4.02.07	Construction Support - Nuclear Safety	▲	▲	-	0.99	1.21					
141	2.3.4.03	Construction Procurement	▲	▲	▼	0.91	0.87					
142	2.3.4.03.01	Remaining Procurements	▲	▲	▼	0.91	0.87					
143	2.3.5	Construction - Balance	▼	▼	▼	0.78	0.89					
144	2.3.5.1	Construction Management, Support and ODCs	▼	▼	▼	0.88	0.96					
145	2.3.5.1.1	Construction Mgmt, Support & ODCs - CM, Spt 8	▼	▼	▼	0.97	0.93					
146	2.3.5.1.2	Construction Mgmt, Support & ODCs - Discipline	-	▼	▼	1.00	0.98					
147	2.3.5.1.4	Construction Mgmt, Support & ODCs - Bulk Mat	▲	▼	-	0.88	1.14					
148	2.3.5.1.6	HVAC Subcontract	▼	▼	-	0.84	0.98					
149	2.3.5.1.7	CSA Subcontracts - Welders	▼	▼	-	0.34	0.84					
150	2.3.5.1.8	Mechanical Subcontracts	▼	▼	-	0.89	0.88					
151	2.3.5.2	Yard	▼	▼	▲	0.50	0.59					
152	2.3.5.1.9	Electrical Subcontracts	▼	▼	-	0.97	0.41					
153	2.3.5.2.1	Yard - Common Area	▼	▲	-	0.16	3.96					
154	2.3.5.2.2	Yard - Diesel Generator	-	-	-							
155	2.3.5.2.3	Yard - Compressor Building	▼	▼	▲	0.02	1.13					
156	2.3.5.2.4	Yard - Chiller	▲	▲	▲	15.52	2.68					
157	2.3.5.2.5	Yard - Substation	▼	▼	-	0.35	1.40					
158	2.3.5.3	Administration Building	-	-	-	1.00	0.95					
159	2.3.5.2.6	Yard - Exhaust Stack	-	-	-	1.00	0.95					
160	2.3.5.4	Process Building	▼	▼	▼	0.62	0.71					
161	2.3.5.3.1	Administration Building	▲	▼	-	0.88	1.06					
162	2.3.5.4.1	Process Building - Process Cell Area	▼	▼	▼	0.61	0.69					

SPI / CPI Trends by WBS

Performance Index Trends (WBS Level)





PARS II Management Reserve (MR) Log

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- Review MR log

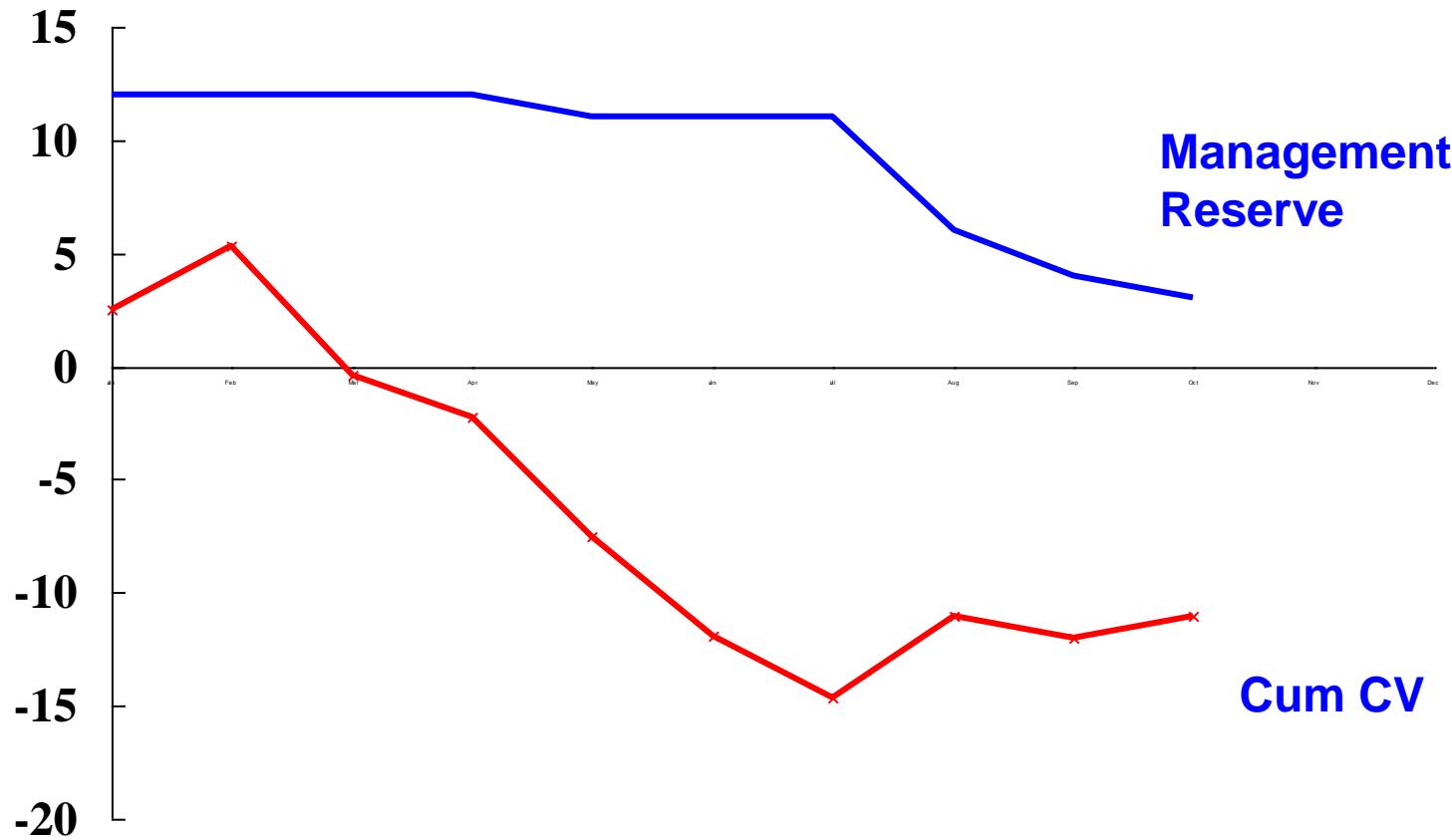
Management Reserve (MR) Log					
Transaction	Balance	Credit	Debit	Remarks	Narrative
7/31/2009	\$72,731.41	\$1,503.43		WBS:2.3.2.4.2 OBS:07 Activity: Resource:	Changes: Schedule Extension Request for Realized Risks (Vendor Performance) Change Description: Risk recognized in the SWPF Risk Assessment and Management Plan has been realized resulting in rework, <u>additional work scope and delay in start</u> approved sk ent Plan risk rocess-2" atisfactory in February lier delivered for that had ge includes the surance oversight
<p>Examine log to understand what is changing and why, consider burn rate and how that may impact the project, and identify appropriate or inappropriate uses of MR.</p>					
					required for PL-2 procurements of engineered equipment that are considered to be high-risk either



Analysis of Management Reserve Trends

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Is MR applied to effectively mask the cum CV?



MR Balance v. CV, VAC, & EAC Trends Report; select MR v. CV tab

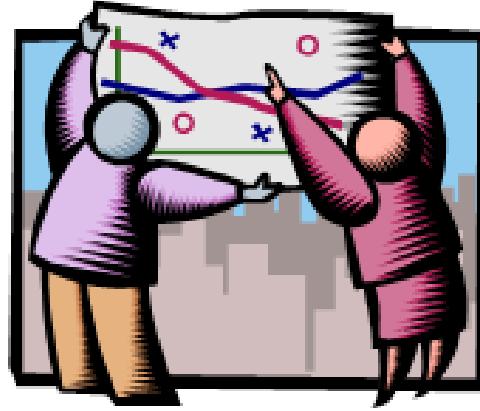
1. Validity check of data

2. Analyze variances

3. Analyze trends

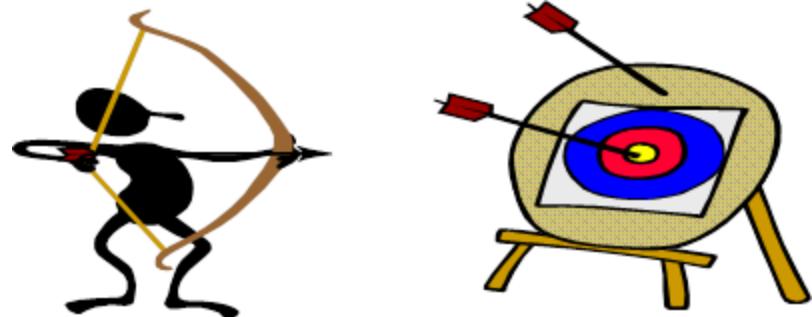
4. Assess realism of contractor's EAC

5. Predict future performance and an IEAC



Estimates at Completion

- **What is the EAC?**
 - $\text{ACWP}_{\text{cum}} + \text{estimate to complete (ETC)} = \text{EAC}$
 - So what is the first piece of information you need to begin thinking about the **ETC**?
 - BCWS or BCWP or ACWP
- **Understanding the common EAC formulas are important as different formulas are selected based on projected contractor performance**
 - Is past contractor performance expected to continue?
 - What in the contractor's operations is expected to change and why?
 - Is the change for the better or worse?



Using the To Complete Performance Index (TCPI)

- Recall: TCPI measures the cost efficiency of performance required to achieve the contractor's EAC or BAC
 - 1.25 means \$1.25 worth of work will be done for every \$1 spent
 - 0.85 means \$.85 worth of work will be done for every \$1 spent
- Use the TCPI to evaluate reasonableness of a contractor's Estimate at Completion (EAC)

$$\text{TCPI}_{\text{EAC}} = (\text{BAC} - \text{BCWP}_{\text{cum}}) / (\text{EAC} - \text{ACWP}_{\text{cum}})$$

$$\text{TCPI}_{\text{EAC}} = \text{work remaining} / \text{ETC}$$



- What is the likelihood that project will complete within the BAC?
 - $\text{TCPI}_{\text{BAC}} = \text{work remaining} / (\text{BAC} - \text{ACWP}_{\text{cum}})$
 - This formula is of no value once ACWP exceeds BAC.



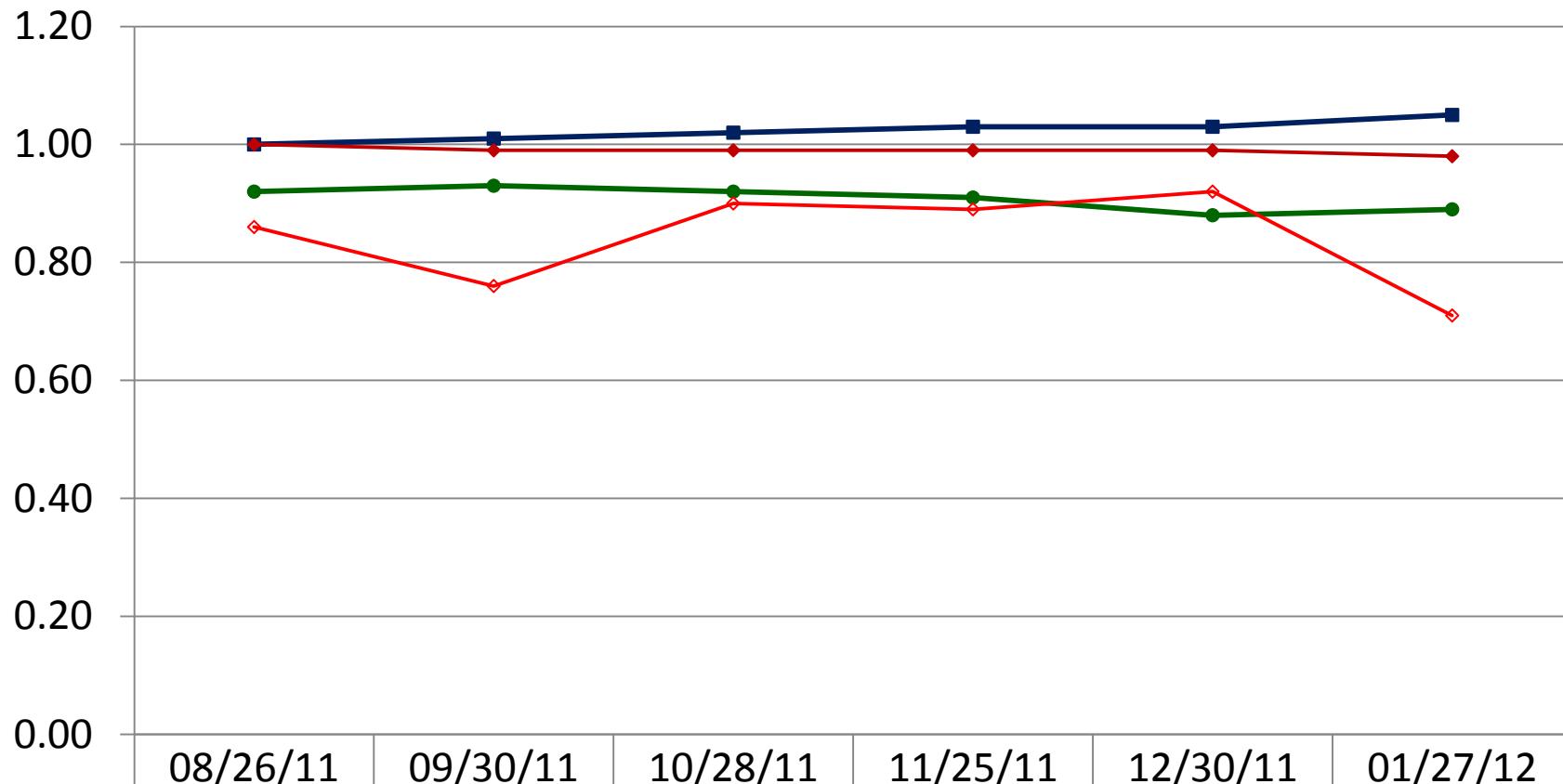
Assessing EAC Realism

- Compare past performance (CPI) and projected future efficiency (TCPI_{EAC})
 - PARS II Reports, Analysis Reports folder
 - Performance Index Trends (WBS Level) to drill down to lower levels views (see below)
 - CPI v. TCPI (PMB Level) for project level views (next slide)
 - Rule of thumb: CPI_{cum} and TCPI_{EAC} should be within 5%
 - » EV Data Validity (WBS Level) report shows if 5% threshold has been exceeded
 - IEAC Analysis (WBS Level)

4	2.3.6.04	Mechanical Equipment	SPI _{cum}	0.70	0.67	0.68	0.72
View SPI/CPI Trend Chart			CPI _{cum}	0.98	0.97	0.97	0.96
View Actual vs. Projected Performance Chart			TCPI To EAC	1.20	1.22	1.22	1.23
View All Indices Trend Chart			TCPI To BAC	1.28	1.29	1.29	1.30



CPI vs TCPI (PMB Level)



	08/26/11	09/30/11	10/28/11	11/25/11	12/30/11	01/27/12
TCPI to EAC	0.92	0.93	0.92	0.91	0.88	0.89
TCPI to BAC	1.00	1.01	1.02	1.03	1.03	1.05
CPi Cum	1.00	0.99	0.99	0.99	0.99	0.98
CPi Current	0.86	0.76	0.90	0.89	0.92	0.71



Report Name “ IEAC Analysis (WBS Level)”

Date Generated: 1/8/2013
 PARS II Project ID:
 DOE Project:
 CPP Data As-Of Date: 11/30/2012

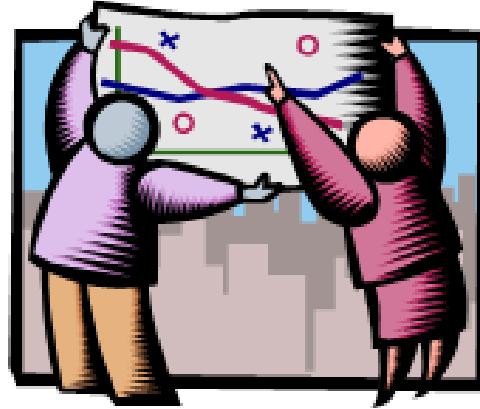


Summary Level

WBS IEAC Analysis

WBS Number	Description	Level	BAC	EAC	BCWS	BCWP	ACWP	IEAC (CPI)	EAC (CPI x SPI)	EAC (3 Per Avg)	SPi	CPI : Pi (3 Per Avg)		
1	Defined	1	1,204,221,436	1,707,298,089	1,086,470,101	994,162,545	1,063,400,525	1,288,088,933	1,308,951,153	1,344,332,752	0.92	0.93	0.75	
2.1	Design	2	243,086,637	247,365,654	243,086,637	248,330,040	247,594,642	247,750,453	247,750,557	237,882,125	1.00	1.01	(0.02)	
2.1.0	Enhanced Conceptual Design (ECD)	3	14,132,837	13,914,807	14,132,837	14,132,837	13,914,807	13,914,807	13,914,807	13,914,807	0	1.00	1.02	0.00
2.1.1	Preliminary Design (PD)	3	18,916,512	18,794,378	18,916,512	18,916,512	18,794,378	18,794,378	18,794,378	18,794,378	0	1.00	1.01	0.00
2.1.2	Final Design	3	14,517,200	14,444,724	14,517,200	14,444,724	14,444,724	14,444,724	14,444,724	14,444,724	0	1.00	1.01	0.00
2.1.3	Enhanced Preliminary Design (EPD)	3	31,305,141	31,182,865	31,305,141	31,305,141	31,182,865	31,182,865	31,182,865	31,182,865	0	1.00	1.00	0.00
2.1.4	Enhanced Final Design (EFD)	3	130,652,122	129,311,630	130,652,122	130,652,122	129,311,630	129,311,630	129,311,630	129,311,630	0	1.00	1.01	0.00
2.1.4.01	Project Management	4	4,153,127	4,083,213	4,153,127	4,153,127	4,083,213	4,083,213	4,083,213	4,083,213	0	1.00	1.02	0.00
2.1.4.02	Business & Administrative Functions										0	1.00	1.02	0.00
2.1.4.03	Environmental Safety, Health And Qu										0	1.00	1.07	0.00
2.1.4.04	Procurement	4	3,426,372	3,357,481							0	1.00	1.02	0.00
2.1.4.05	Construction Management										0	1.00	1.02	0.00
2.1.4.06	Commissioning Management										0	1.00	1.10	0.00
2.1.4.07	Management Plans / Documents										0	1.00	0.37	0.00
2.1.4.08	Technical Plans / Documents										0	1.00	0.70	0.00
2.1.4.09	Process Engineering										0	1.00	0.36	0.00
2.1.4.10	Safety Analysis										0	1.00	0.93	0.00
2.1.4.11	Design Engineering										0	1.00	1.06	0.00
2.1.4.12	Process Building										0	1.00	1.04	0.00
2.1.4.13	Administration Building										0	1.00	0.98	0.00
2.1.4.14	Diesel Generator Unit										0	1.00	1.09	0.00
2.1.4.15	Compressor Building										0	1.00	1.15	0.00
2.1.4.16	Exhaust Stack										0	1.00	1.21	0.00
2.1.4.17	Yard										0	1.00	0.93	0.00
2.1.4.18	Alpha Finishing Facility										0	1.00	1.10	0.00
2.1.4.19	Nuclear Engineering										0	1.00	1.02	0.00
2.1.4.20	Training										0	1.00	1.00	0.00
2.1.4.21	Performance Optimization Functions										0	1.00	1.04	0.00
2.4.5.04.02	Comm Spt - Business & Administra										0	0.00	0.00	0.00
2.4.5.04.03	Comm Spt - Environmental Safety s										0	0.00	0.00	0.00
2.4.5.04.04	Comm Spt - Quality Assurance,Qua										0	0.00	0.00	0.00
2.4.5.04.05	Comm Spt - Procurement LOE										0	0.00	0.00	0.00
2.4.5.04.07	Comm Spt - Assurance										0	0.00	0.00	0.00
	Values		1,204,221,496	1,707,298,089	1,086,470,101	994,162,545	1,063,400,525	1,288,088,933	1,308,951,153	1,344,332,752				
2.4.5.04.08	Comm Spt - Nuclear Safety	5	6,671,015	7,347,063	3,085,263	2,098,573	2,605,763	8,283,304	10,352,738		10,406,875	0.68	0.81	0.59
2.4.5.04.09	Comm Spt - Cognizant System Engineering	5	1,956,603	5,002,410	530,849	596,157	386,553	1,268,679	1,260,825		1,153,196	1.01	1.54	1.76
2.4.5.04.21	Comm Spt - Project Optimization Functions	5	1,666,240	6,312,039	0	0	0	0	0		0	0.00	0.00	0.00
2.4.5.04.30	Comm Spt - Other Direct Costs	5	6,371,335	11,763,350	240,331	240,331	161,513	4,685,038	4,685,038		3,106,533	1.00	1.43	2.23
2.4.5.04.35	COMM SPT - System Operability Test Support	5	11,755,333	0	627,805	627,805	0	0	0		0	1.00	0.00	0.00
2.4.5.05	Engineering Support for Cold Commissioning	4	6,408,524	20,632,835	3,253,123	2,399,181	1,852,415	4,948,041	6,043,877	5,251,390	0.74	1.30	1.18	
2.4.5.05.01	Comm Spt - Eng Spt Quality Assurance Support LOE	5	841,581	15,412,401	0	0	0	0	0		0	0.00	0.00	0.00
2.4.5.05.02	Comm Spt - Eng Spt Testing/Commissioning Engineering	5	1,481,329	3,444,330	546,487	546,487	16,371	44,375	44,375		44,716	1.00	###	32.98
2.4.5.05.03	Comm Spt - Eng Spt Technical Baseline Assurance LOE	5	883,017	0	0	0	0	0	0		0	0.00	0.00	0.00
2.4.5.05.04	Comm Spt - Eng Spt Technical Administration Support LO	5	295,363	0	0	0	0	0	0		0	0.00	0.00	0.00
2.4.5.05.05	Comm Spt - Eng Spt Distributed Control System	5	2,907,235	1,836,044	2,706,642	1,852,634	1,836,044	2,881,108	3,362,601		3,068,360	0.68	1.01	0.86
3.1	M&O Support	2	28,354,417	47,600,000	26,467,272	26,467,272	27,743,346	29,721,476	29,721,476		32,803,353	1.00	0.95	0.37
3.1.01	M&O Support During Design	3	0	0	0	0	0	0	0		0	0.00	0.00	0.00
3.2	DOE Support	2	17,331,787	26,705,000	16,335,527	16,335,527	12,473,231	13,191,853	13,191,853		16,671,817	1.00	1.31	0.22
3.2.1.00	DOE Sw/PF Support PNNL	3	0	0	0	0	0	0	0		0	0.00	0.00	0.00
	Total:		1,204,221,436	1,707,238,083	1,086,470,101	994,162,545	1,063,400,525	1,288,088,933	1,308,951,153	1,344,332,752	0.32	0.33	0.75	

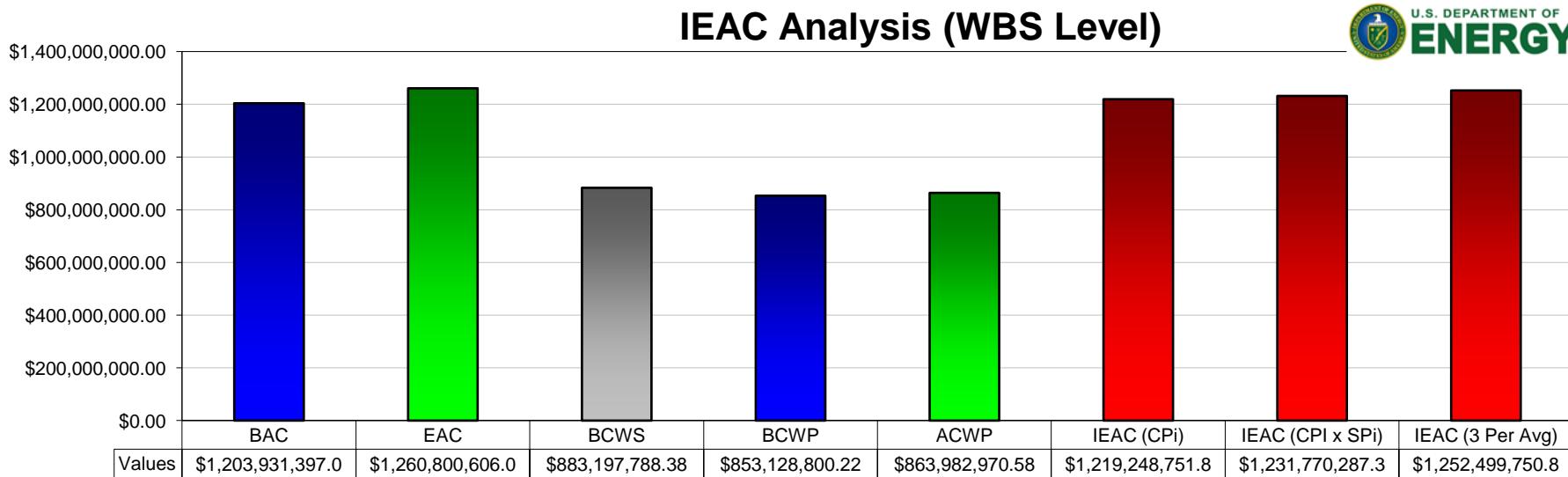
- 1. Validity check of data**
- 2. Analyze variances**
- 3. Analyze trends**
- 4. Assess realism of contractor's EAC**
- 5. Predict future performance and an IEAC**





Developing an IEAC

- There are **five** Independent Estimate at Completion (IEAC) computed in PARS II
 - $EAC_{CPI} = BAC / CPI_{cum} = ACWP_{cum} + BCWR / CPI_{cum} = \text{Estimate at Completion (CPI)}$
 - $EAC_{CPI_3} = ACWP - (BCWR/CPI_3) = \text{Estimate at Completion (CPI 3 Period Ave)}$
 - $EAC_{\text{composite}} = ACWP_{cum} + BCWR / (CPI_{cum} * SPI_{cum}) = \text{Estimate at Completion (composite)}$
 - $EAC_{\text{weighted}} = ACWP_{cum} + BCWR / (0.8CPI_{cum} + 0.2SPI_{cum}) = \text{Est at Completion (weighted)}$
 - $EAC_{SPI} = BAC / SPI_{cum} = ACWP_{cum} + BCWR / SPI_{cum} = \text{Estimate at Completion (SPI)}$
- IEACs are often used to establish a tolerance band





Various Independent EAC Formulas

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Statistical and Independent Forecasts

3 PER AVG	6,467.8	5,777.2	6,719.3	7,971.4	7,171.6	6,603.8	ACWP + (BCWR/CPI ₃)
6 PER AVG	6,329.8	5,800.6	6,539.2	7,663.2	6,883.9	6,833.0	ACWP + (BCWR/CPI ₆)
CUM CPI	6,329.8	5,800.6	6,484.3	7,568.9	6,840.9	6,822.4	BAC / CPI _{cum}
CUR CPI	7,053.4	5,024.3	9,009.5	9,271.7	5,687.4	6,156.9	ACWP + (BCWR/CPI _{CURR})
COST & SCH	5,652.6	5,376.4	5,455.8	6,554.9	6,302.1	6,446.5	ACWP + BCWR/(.x*CPI + .x*SPI)
PERF FACTOR	5,218.0	5,210.0	5,312.0	5,851.0	5,837.0	6,096.8	ACWP + (BCWR/perf factor)
CPI*SPI	6,202.1	5,581.9	5,767.1	7,522.7	6,872.5	6,855.3	ACWP + BCWR/(CPI*SPI)

Forecast models provide differing projections.

Choose your method based on your knowledge of the project.



Various Independent EAC Formulas

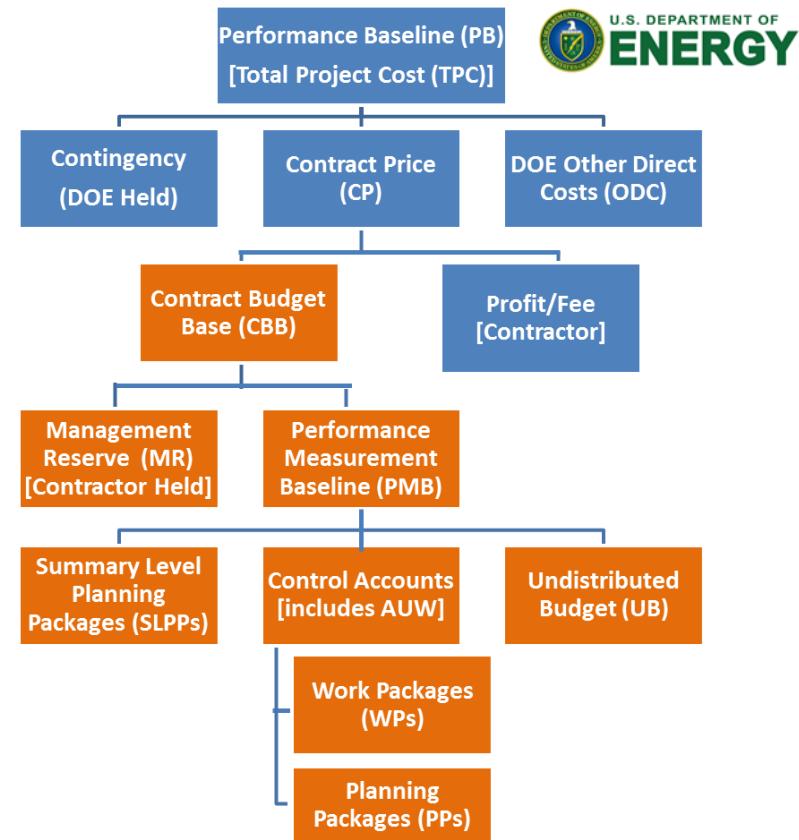
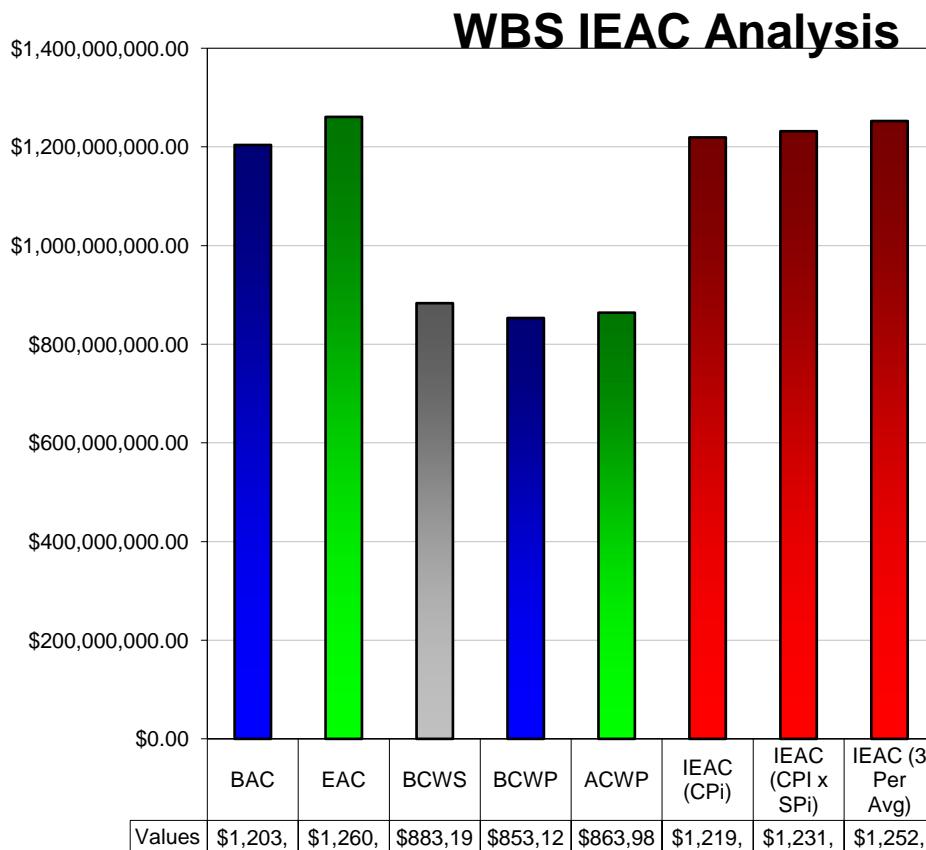
Basic Formula $EAC = ACWP + BCWR/\text{performance factor}$

	EARLY	MID	LATE
MIN	CPI_{cum}	CPI_{cum}	
MOST LIKELY	CPI_3 $.8*CPI + .2*SPI$	CPI_6 CPI_3 $.8*CPI + .2*SPI$	CPI_{12} CPI_3 CPI_6 CPI_{cum}
MAX	$CPI*SPI$ CPI_6*SPI	$CPI*SPI$ CPI_6*SPI	



Compare Contractor's EAC with the Statistical IEACs; Consider Impact to TPC

Given the EAC range, is the contingency sufficient to cover projected overruns without breaching the TPC?





Narrative Assessment Tips

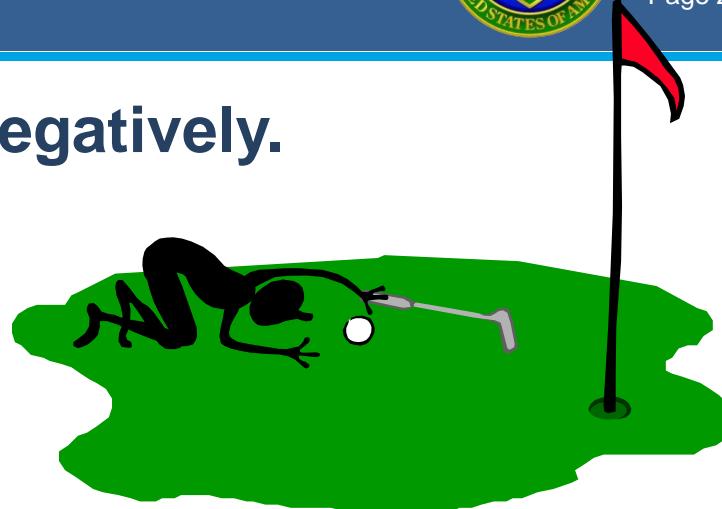
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- Who prepares assessments?
 - Contractor, FPD, PMSO, HQ
- Don't just repeat CPI, SPI, etc.
 - Provide details behind the indices
 - Cost, schedule, and technical performance analysis
 - Report mitigation approaches to current risk areas
- Don't be afraid to make a prediction based on analysis, technical expertise

The sooner the risk is identified, the better the risk can be mitigated.

Narrative Assessment Basic Points

- **Problem:** Efficiency is trending negatively.
- **Cause:**
 - Gather information
 - Schedules, Interviews, observations
 - Determine root cause
- **Impact:** Assess impact to this and other dependent activities or process flow
 - Is Critical Path Impacted?
- **Corrective Actions:** Assess effectiveness of CAs taken
- **Predictions:** Based on your special knowledge.
- **Updates:** Reassess as more information becomes available, and as corrective actions are taken.





Exercise 2 – Test Your EV Knowledge

- 1. DOE Contingency is?**
 - a. Funds used to increase contractually authorized funding
 - b. Budget to cover overruns
 - c. Budget to increase contractual scope
 - d. Used to replenish contractor's MR
 - e. a. and c. above.

- 2. When a control account manager cannot complete the control account BAC amount due to inefficiencies, he/she should:**
 - a. Request contingency
 - b. Complete the work until ACWP equals BAC and stop work
 - c. Forecast a new EAC
 - d. Update his/her resume.

- 3. When a control account is completed (all work has been accomplished):**
 - a. EAC will be greater than the BAC.
 - b. ACWP equals EAC.
 - c. BCWP equals the BAC.
 - d. b. and c. above.

- 4. When is ACWP for material purchases posted against a Control Account?**
 - a. When a purchase order has been place and the quote is firm.
 - b. During the same period as the BCWP is earned.
 - c. During the period when the invoice is paid.
 - d. During the same period as the BCWS is planned.



Exercise 2 – Test Your EV Knowledge

5. Which of the following equations is valid?
 - a. PMB + MR = CBB
 - b. Contingency + MR + PMB = TPC
 - c. MR + PMB + Profit/Fee = CBB
 - d. Contingency + MR + PMB = CBB.
6. Cost variances are caused when the actual costs deviate from which of the following?
 - a. The approved baseline plan or Performance Measurement Baseline (PMB)
 - b. Work accomplished
 - c. The approved PMB plus proposed changes
 - d. Actual performance is not used to determine variances
 - e. b. and c. above
7. A control account was completed 2 months early with an ACWP of \$500,000. The BAC is \$450,000, the BCWS is \$400,000, and the BCWP is \$450,000. The control account was supposed to take 8 months to complete, but took only 6 months. What is the EAC?
 - a. \$450,000
 - b. \$400,000
 - c. \$500,000
 - d. None of the above.
8. The Cost Performance Index (CPI) is:
 - a. An indication of the cost efficiency with which work has been accomplished
 - b. Only determined at the control account level
 - c. Calculated by this formula: ACWP/EAC
 - d. Calculated by this formula: ACWP/BCWS.



Exercise 2 – Test Your EV Knowledge

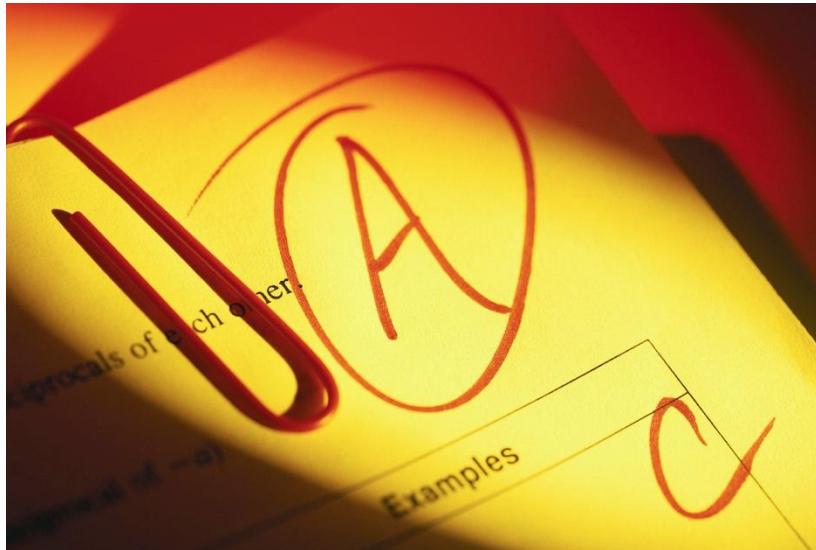
- 9. Reliable, valid contractor performance data should never have:**
 - a. BCWP > BAC
 - b. CPI < 1.0
 - c. CPI > 1.0
 - d. ACWP > EAC
 - e. All of the above.
 - f. a. and d. above.
- 10. Identify the factors that are to be considered in the development of an Estimate to Complete (ETC) and the Estimate at Completion (EAC):**
 - a. Schedule completion date and the associated remaining work including risk and opportunities
 - b. Performance to date and committed costs for remaining materials
 - c. Funding constraints and unfavorable labor and overhead rates
 - d. All of the above.
- 11. A positive cost variance could indicate which of the following?**
 - a. Actual costs are being collected incorrectly.
 - b. Original budget estimates were too high.
 - c. The control account/task is underrunning.
 - d. All of the above.



Exercise 2 – Test Your EV Knowledge

12. What does EAC represent?
 - a. A basis for funding the work
 - b. The work
 - c. The schedule
 - d. The budget for the work.
13. Management Reserve (MR) is:
 - a. For activities within the scope of the contract SOW but outside the scope of any Control Account
 - b. Calculated by subtracting the BAC from the EAC
 - c. Used to cover cost growth
 - d. When scope is added to the SOW
 - e. The difference between the Total Project Cost and Contingency
14. When a control account is finished and has under run by \$100K:
 - a. The \$100K goes back to Management Reserve.
 - b. The \$100K is used by the PM to budget another task.
 - c. The \$100k is reflected as an under run.
 - d. More work scope and budget could be added to the CBB with possibly no increase in funding.
 - e. c. and d. above
15. A CPR reporting element is 65% complete and the CPI to date is 0.75. Calculations show that TCPI is 1.25. What should be concluded from this information?
 - a. Cost performance on the project is erratic.
 - b. The cost/schedule system is erratic.
 - c. The project performance will be much worse in the future.
 - d. The EAC is probably not realistic.

Exercise 2: Discussion





EV Analysis Wrap Up

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FPD, PMSO and APM PARS II

Assessment Roles





Day Two - PARS II Outline

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- FPD, PMSO, APM Assessment Roles
 - FPD Monthly Assessment: 3rd Business Day
 - Explanation of Close Period Process
 - BCP Coordination and Impact on an FPD Assessment
 - PMSO Monthly Assessment: 6th Business Day
 - APM Monthly Assessment: 9th Business Day
- PARS II DepSec Monthly Report
- SSS Reports – Standard and Custom
- Newest Changes in Production
- PARS II Help Desk



Monthly Status - Default Screen

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Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)

Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Eunding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Monthly Status

[Edit](#) | [Save](#) | [Cancel](#) | [Attachments](#) | [Reports](#)

Select Monthly Status Type:

FPD - Monthly Status - FPD

Status Type	Description
FPD	Monthly Status - FPD
Program	Monthly Status - Program
OECM	Monthly Status - OECM
OECM-COMMENTS	Monthly Status - OECM Comments

Is the OA data current?

FPD CPP Data As-Of Date:

Assessment Narrative:

FPD Assessment RYG
Program Assessment RYG
OECM Assessment RYG

Cost Contingency Used	0
Cost Contingency Remaining	0
Schedule Contingency Used (in days)	0
Schedule Contingency Remaining (in days)	0
Profit Fee Used	0
Profit Fee Remaining	0
DOE ODC Used	0
DOE ODC Remaining	0

Updated By
Updated Date

Helpful Hint: Attachments can easily be added from this screen



FPD Monthly Assessment - Close Period

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Status Date: 2/26/2012

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2012 CPP Data As-Of Date: 12/22/2011

Monthly Status

edit | Save | Cancel | Attachments | Reports

Select Monthly Status Type: FPD - Monthly Status - FPD FPD: Wayne Bratton Certification: Level 3

Monthly Status Detail:

Forecast For TPC	129,500,000
Forecast Completion	6/18/2017
Has the CPP data been reviewed?	<input checked="" type="checkbox"/>
Is the OA data current?	<input checked="" type="checkbox"/>
FPD CPP Data As-Of Date	12/25/2011
Assessment Narrative	This is a test narrative to illustrate what occurs once a period is moved forward.
FPD Assessment RYG	Green
Program Assessment RYG	Green
OECM Assessment RYG	Green
Cost Contingency Used	500,000
Cost Contingency Remaining	6,000,000
Schedule Contingency Used (In days)	5
Schedule Contingency Remaining (In days)	40
Profit Fee Used	750,000
Profit Fee Remaining	4,000,000
DOE ODC Used	1,000,000
DOE ODC Remaining	5,000,000
Updated By	CREEMAR
Updated Date	5/29/2012 8:51:15 PM

Status Date: 3/26/2012

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 03/26/2012 CPP Data As-Of Date: 12/22/2011

Monthly Status

edit | Save | Cancel | Attachments | Reports

Select Monthly Status Type: FPD - Monthly Status - FPD FPD: Wayne Bratton Certification: Level 3

Monthly Status Detail:

Forecast For TPC	0
Forecast Completion	
Has the CPP data been reviewed?	<input type="checkbox"/>
Is the OA data current?	<input type="checkbox"/>
FPD CPP Data As-Of Date	
Assessment Narrative	
FPD Assessment RYG	
Program Assessment RYG	
OECM Assessment RYG	
Cost Contingency Used	0
Cost Contingency Remaining	6,000,000
Schedule Contingency Used (In days)	0
Schedule Contingency Remaining (In days)	40
Profit Fee Used	0
Profit Fee Remaining	4,000,000
DOE ODC Used	0
DOE ODC Remaining	5,000,000
Updated By	CREEMAR
Updated Date	5/29/2012 8:51:15 PM

Helpful Hint: The PARS II **Monthly Newsletter** (email) from **I-Manage EAS** coincides with the Close Period process.

SSS Reports; Shared Reports: Project Reports

Assessments by Project - Current and Prior Periods



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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Data Generated: 8/6/2012 OA Status Date: 8/26/2012																				
2	Monthly Status (FPD)																				
3	05-D-405 - Salt Waste Processing Facility (SWPF)																				
4	05-D-405 - Salt Waste Processing Facility (SWPF)																				
Month	Fiscal Year	OA Status Date	Forecast For TPC	Forecast Completion	Has Reviewed CPP	CPP Data As-Of Date	Assessment Narrative	FPD Assessment RYG	Program Assessment RYG	APM Assessment RYG	Cost Contingency Used	Cost Contingency Remaining	Schedule Contingency Used	Schedule Contingency Remaining	DOE ODCs	DOE ODCs Remaining	Profit Fee Used	Profit Fee Remaining	Updated By	Updated Date	
5	Aug 2012	08/26/12	\$1,483,548,586	10/31/15	No	05/25/12	During the month of May, the schedule performance for the total project was 60, and cost	Red	Red	Red		\$114,360,097		226				\$13,032,096			
6	Jul 2012	07/26/12	\$1,483,548,586	10/31/15	Yes	04/27/12	During the month of April, the schedule performance for the total project was 81, and cost	Red	Red	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp 07/09/12		
7	Jun 2012	06/26/12	\$1,483,548,586	10/31/15	Yes	03/30/12	During the month of March, the schedule performance for the total project was 85, and	Red	Red	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp 06/09/12		
8	May 2012	05/26/12	\$1,483,548,000	10/31/15	Yes	03/30/12	During the month of March, the schedule performance for the total project was 85, and	Red	Red	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp 05/09/12		
9	Apr 2012	04/26/12	\$1,333,548,000	10/31/15	Yes	02/24/12	During the month of February, the schedule performance for the total project was .82, and	Red	Red	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp 04/09/12		
10	Mar 2012	03/26/12	\$1,305,000,000	04/24/15	Yes	01/27/12	During the month of January, the schedule performance for the total project was .74, and	Yellow	Yellow	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp 03/09/12		
11	Feb 2012	02/26/12	\$1,305,000,000	12/12/14	Yes	12/30/11	During the month of December, the schedule performance for the total project was .88,	Yellow	Yellow	Yellow		\$114,360,097		226				\$13,032,096	Kimberly Rapp 02/09/12		
12	Jan 2012	01/26/12	\$1,305,000,000	12/09/14	Yes	11/25/11	During the month of November, the schedule performance for the period was .99, and	Yellow	Yellow	Yellow		\$114,360,097		226				\$13,032,096	Kimberly Rapp 01/09/12		
13	Dec 2011	10/26/11	\$1,301,864,000	12/04/14	Yes	10/28/11	During the month of October, the schedule performance for the period was .89, and cost	Yellow	Yellow	Yellow		\$114,360,097		226				\$13,032,096	Nicholas B 12/08/11		
14	Nov 2011	10/26/11	\$1,335,549,000	07/24/14	Yes	09/30/11	During the month of September, the schedule performance for the period was .95,	Yellow	Yellow	Yellow	\$400,000	\$114,360,097		226				\$13,032,096	Kimberly Rapp 11/09/11		
15	Oct 2012	10/26/11	\$1,286,636,000	10/13/14	Yes	08/26/11	The project posted an overall unfavorable Cost Variance (CV) CV = -\$2,559K, Cost	Yellow	Yellow	Yellow		\$114,760,097		226				\$13,032,096	Igor Pedan 10/19/11		
16	Sep 2011	09/26/11	\$1,257,000,000	07/24/14	Yes	07/29/11	The project posted an overall unfavorable Cost Variance (CV) CV = -\$3,321K, Cost	Yellow	Yellow	Yellow		\$114,760,097		226				\$13,032,096	Igor Pedan 09/30/11		
17	Aug 2011	08/26/11	\$1,245,000,000	07/24/14	Yes	06/24/11	During the month of June, the project posted an overall favorable Cost Variance	Yellow	Yellow	Yellow	(\$2,070,097)	\$114,760,097	-2	226	45500000		\$35,767,904	\$13,032,096	Kimberly Rapp 08/17/11		
18	Jul 2011	07/26/11	\$1,227,000,000	07/14/11	Yes	05/27/11	During the month of May, the project posted an overall favorable Cost Variance (CV) CV	Yellow	Yellow	Yellow		\$112,690,000		224				\$48,800,000	Kimberly Rapp 07/06/11		
19	Jun 2011	06/26/11	\$1,227,000	07/24/14	Yes	04/29/11	During the month of April, the project posted an overall favorable Cost Variance (CV)	Yellow	Yellow	Yellow		\$162,690,000		224				\$48,800,000	Kimberly Rapp 06/06/11		
20	May 2011	05/26/11	\$1,227,000	07/14/14	Yes	03/25/11	During the month of March, the project CPI was .92 and the SPI was .94. The project	Yellow	Yellow	Yellow		\$162,690,000		224				\$48,800,000	Kimberly Rapp 05/06/11		
21	Apr 2011	04/26/11	\$1,227,000,000	07/14/14	Yes	02/25/11	During the month of February, a Single Point Adjustment (SPA) was implemented to	Yellow	Yellow	Yellow		\$162,690,000		224				\$48,800,000	Kimberly Rapp 04/11/11		
22	Mar 2011	03/26/11	\$1,227,000,000	07/04/14	Yes	01/28/11	During the month of January, the project performed below planned (SPI=.79) and above	Yellow	Yellow	Yellow		\$162,690,000		224				\$48,800,000	Kimberly Rapp 03/02/11		
23	Feb 2011	02/26/11	\$1,227,000,000	10/23/13	Yes	12/31/10	During the month of December, the project performed below planned (SPI=.81) and above	Yellow	Yellow	Yellow	(\$14,368,290)	\$164,760,000	2	226				\$48,800,000	Kimberly Rapp 12/09/11		
24	Jan 2011	01/26/11	\$1,333,548,000	10/23/15	Yes	12/31/10	During the month of December, the project performed below planned (SPI=.81) and above	Yellow	Yellow	Yellow	\$53,520,000	(\$14,408,290)	76	-152					Kimberly Rapp 01/26/11		
25	Dec 2011	12/26/10	\$1,227,000,000	09/01/13	Yes	10/29/10	During the month of October, the project performed below planned and slightly above	Yellow	Yellow	Yellow		\$50,700,000	(\$32,888,290)	76	-76					Kimberly Rapp 11/30/10	
26	Nov 2011	11/27/10	\$1,227,125,000	09/19/13	Yes	09/24/10	During the month of September, the project performed above planned but at a higher cost	Yellow	Yellow	Yellow		\$42,150,949	(\$42,188,290)	-76						Kimberly Rapp 11/03/10	
27	Oct 2011	10/26/10	\$1,174,000,000	09/03/13	No		During the month of August, the schedule performance for the period was 104, and cost	Green	Yellow	Yellow		\$37,341	(\$37,341)	76	-76						
28	Sep 2010	09/26/10			No		During the month of July, the schedule performance for the period was 106, due to a PCR	Yellow	Yellow	Yellow											
29	May 2010	05/11/10			No		During the month of July, the schedule performance for the period was 106, due to a PCR	Yellow	Yellow	Yellow									Kimberly Rapp 08/30/10		

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Bunding
- ISPPs

CD2 / BCP

BCP: TPC (Approved)	131,000,000
BCP: Change In Cost	6,000,000
BCP: CD-4 Date (Approved)	2/28/2017
BCP: Change In Schedule (In days)	151
BCP: Change In Scope (Increase=Scope Added, Decrease=Scope Removed, None=No Change in Scope)	None
DOE Schedule Contingency (In days)	40
DOE Cost Contingency	6,000,000
Sunk Costs	0
DOE ODCs	5,000,000
Contractor Fee/Profit	4,000,000
Contractor MR	7,000,000
PMB	109,000,000
Calculated TPC	131,000,000

Monthly Status
[Edit](#) | [Save](#) | [Cancel](#) | [Attachments](#) | [Reports](#)

Select Monthly Status Type:

FPD - Monthly Status - FPD

FPO: Wayne Bristol Certification: Level 3

Monthly Status Detail:

Forecast For TPC: 129,500,000

Forecast Completion: 6/18/2017

Has the CPP data been reviewed? Is the OA data current?

FPD CPP Data As-Of Date: 12/25/2011

12/30/2011
11/25/2011
10/28/2011
09/30/2011
08/26/2011
07/29/2011
06/24/2011
04/29/2011
03/25/2011

Important: Forecast For TPC & Forecast Completion, should be the latest best estimate at which the FPD expects the project to reach CD4/TPC, which may or may not be the same as the original "Planned" CD4/TPC.

Assessment Narrative

A brief narrative on the current project status and update from last month's assessment describing recent developments, clarifications, or concerns. Describe issues that need to be addressed at the program and/or the Department level (e.g., risks encountered that will potentially require contingency held by DOE, anything in the project baseline that is not valid or could result in potential delays or cost overruns).

FPD Assessment RYG: Green

Program Assessment RYG

OECM Assessment RYG

Cost Contingency Used: 500,000

Cost Contingency Remaining: 6,000,000

Schedule Contingency Used (In days): 5

Schedule Contingency Remaining (In days): 40

Profit Fee Used: 750,000

Profit Fee Remaining: 4,000,000

DOE ODC Used: 1,000,000

DOE ODC Remaining: 5,000,000

Updated By: CREEMAR

Updated Date: 5/29/2012 6:06:46 PM

Helpful Hint: To see all prior period assessments go to the Project Reports folder and run:
Assessments by Project - Current and Prior Periods Report

Note: When entering the monthly usages, the remaining balance will not recalculate until you hit the Save button.

Business Rule: The month in which APM receives the CD4 memo (regardless of the date on the memo), is the last month the monthly assessments are required to be entered.

FPD Monthly Assessment - CPP & OA Data Review



*** Expected Modules / Fields For Review ***

Has the CPP Data Been Reviewed?

- **CPR Dashboard**
 - Displays the date and overview data for the most recent Contractor EV upload. Previously uploaded data can also be reviewed by changing the date in the dropdown to view past Contractor EV data.
- **Schedule Dashboard**
- **Timephased Dashboard**
- **MR Dashboard**
 - Displays only if provided in the Contractor EV upload.

Is the OA Status Data Current?

- **Project Attributes**
- **Project Contacts**
- **Critical Decisions**
- **KPPs**
- **BCPs**
 - Verify changes are correct: TPC and schedule.

Helpful Hint: To quickly review all OA Status Data go to the Project Reports folder and run: **Project Detail** which includes tabs for all the above data



Contingency, Fee, and ODC Usage

Page 262

- **FPD-Reported Usage Should Align with the Contractor Performance Period Being Assessed**
- **Verify That Remaining Balance Matches Balance in the Contractor Performance Period Being Assessed**
- **Enter Negative Numbers Only If Account Balance Has Increased During Performance Period**
- **Explain Any Usage Amounts Entered in the Narrative**
 - Identified design shortfall (contingency)
 - Completed \$X of work by secondary contractor (ODCs)
 - Recovered prior fee payment (profit/fee)
- **Contact APM Analyst to Resolve Any Remaining Balance Discrepancies**



BCP Impact on FPD Assessment

Page 263

- Often the Field Is Aware of a BCP Before Headquarters
- DO NOT Attempt to Adjust Remaining Balance by Entering the Incorrect Usage Amount in the current Monthly Assessment
 - Continue Reporting Usage of Contingency, Fee, and ODCs as it Occurs
- In the Narrative, Explain the Discrepancy of the Incorrect Remaining Balance and State the Correct Balance
- Once the BCP Approval Is Received by APM and Is Entered in PARS II, the Remaining Balance Will Automatically Reflect the Correct Balance in the Next Reporting Period.
 - If Usage Amounts Are Incorrect, Contact APM To Correct



Entering BCP Information

- **BCP Resets Balances for All Accounts**
- **TPC Components Should Reflect an Accurate Balance As of the Contractor Performance Period Immediately Prior to the BCP Approval**
 - BCP approved on 8/8/2011
 - Contractor Performance Period ended on 7/28/2011
 - Contractor-reported MR Balance + BCP adjustment = BCP Approved MR
 - Contractor-reported PMB + BCP adjustment = BCP Approved PMB, etc.
- **Collaboration between APM, PMSO, FPD and Contractor Is Required To Ensure Accurate Reporting**
 - Contractor data (PMB/MR) may already reflect BCP-approved adjustments
 - BCP approval paperwork is significantly delayed
 - Some cost elements are managed within contractor system (i.e. ODCs)
 - Contractor is not expected to implement BCP
- **If Any Of These Conditions Exist, Explain In the Narratives**



Monthly Assessment - PMSO

**U.S. DEPARTMENT OF ENERGY
PARS II**

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status**
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011
Current Critical Decision: CD3 (BCP)
Current User: CREEMAR Logout

Monthly Status

Edit | Save | Cancel | Attachments | Reports

Select Monthly Status Type: Program - Monthly Status - Program FPD: Wayne Bristol Certification: Level 3

Monthly Status Detail:

Program Assessment RYG	Green
FPD Assessment RYG	Green
OECM Assessment RYG	

Forecast For TPC: 131,000,000
Forecast CD4 Completion: 2/17/2017
Is the OA data current?

PO Status Assessment Narrative
A narrative of the PO analyst's final and overall assessment of the project for the reporting period.

Updated By: CREEMAR
Updated Date: 5/29/2012 6:10:31 PM

Helpful Hint: Attachments can easily be added from this screen

Helpful Hint: The other two (FPD & OECM) Monthly RYG Assessments are informational (view) only .

Note: OA Data includes everything not uploaded by the Contractor. Should corrections need to be made, contact APM.



Monthly Assessment - APM

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U.S. DEPARTMENT OF ENERGY
PARS II

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)

Current User: CREEMAR Logout

Monthly Status

Edit | Save | Cancel | Attachments | Reports

Select Monthly Status Type: OECM - Monthly Status - OECM FPD: Wayne Bristol Certification: Level 3

Monthly Status Detail:

OECM Assessment RYG	Green
FPD Assessment RYG	Green
Program Assessment RYG	Green
Forecast For TPC	129,500,000
Forecast CD4 Completion	6/30/2017
Assessment Narrative	(Large empty text area)
Cost Assessment RYG	Green
Schedule Assessment RYG	Green
Updated By	CREEMAR
Updated Date	5/29/2012

Helpful Hint: The other two (FPD & Program) Monthly RYG Assessments are informational (view) only.

Note: Cost and Schedule RYG Assessments have been added to the reformatted Monthly Report.

Overall Project Assessment = EV Indicators + APM Assessment

Project is expected to meet its Performance Baseline

Project is at-risk of breaching its Performance Baseline

Project is expected to breach its Performance Baseline

EV indicators:
- CPIs
- SPIs
- EACs
- Trends
- Variances
- % Complete
- etc.

APM assessment factors:
- Data validity, availability...
- MIR & Contingency usage
- Reports (i.e., monthly, quarterly,...)
- Reviews (i.e., EIR, IPR,...)
- Communication with the program/project
- Other information (i.e., DNFSB,...)

FPD, PMSO and APM PARS II Assessment

Roles Wrap-UP



- APM, PMSO, FPD Assessment Roles
 - FPD Monthly Assessment: 3rd Business Day
 - PMSO Monthly Assessment: 6th Business Day
 - APM Monthly Assessment: 9th Business Day

PARS II DepSec Monthly Report





PARS II Monthly Reporting Cycle

DS Report Due	Monthly or Quarterly Report	OA Status Date	CPP Data as of Date to review	Minimum CPP Data as of Date	Upload required by	FPD Assessment Due	PO Assessment Due	APM Assessment Due
August 25, 2012	Quarterly	8/26/2012	Jun 2012	5/10/2012	7/31/2012	8/3/2012	8/8/2012	8/13/2012
September 25, 2012	Monthly	9/26/2012	Jul 2012	6/10/2012	8/31/2012	9/6/2012	9/11/2012	9/14/2012
October 25, 2012	Monthly	10/26/2012	Aug 2012	7/10/2012	9/30/2012	10/3/2012	10/9/2012	10/12/2012
November 25, 2012	Quarterly	11/26/2012	Sep 2012	8/10/2012	10/31/2012	11/5/2012	11/8/2012	11/13/2012
December 25, 2012	Monthly	12/26/2012	Oct 2012	9/10/2012	11/30/2012	12/5/2012	12/10/2012	12/13/2012
January 25, 2013	Monthly	1/26/2013	Nov 2012	10/10/2012	12/31/2012	1/4/2013	1/9/2013	1/14/2013
February 25, 2013	Quarterly	2/26/2013	Dec 2012	11/10/2012	1/31/2013	2/5/2013	2/8/2013	2/13/2013
March 25, 2013	Monthly	3/26/2013	Jan 2013	12/10/2012	2/28/2013	3/5/2013	3/8/2013	3/13/2013
April 25, 2013	Monthly	4/26/2013	Feb 2013	1/10/2013	3/31/2013	4/3/2013	4/8/2013	4/11/2013
May 25, 2013	Quarterly	5/26/2013	Mar 2013	2/10/2013	4/30/2013	5/3/2013	5/8/2013	5/11/2013
June 25, 2013	Monthly	6/26/2013	Apr 2013	3/10/2013	5/31/2013	6/5/2013	6/10/2013	6/13/2013
July 25, 2013	Monthly	7/26/2013	May 2013	4/10/2013	6/30/2013	7/3/2013	7/9/2013	7/12/2013



PARS II Monthly Reporting Process - APM

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- Verify That FPD and Program Assessments have been completed
- Verify that all CPP uploads have been entered by contractor and correctly selected on the FPD Assessment screen – after 6th working day
- Verify that all Assessments have been completed – after 9th working day
- Coordinate with Management for timing of DRAFT report
- Run all Validation Reports & Project Dashboard Reports
- APM coordination with Programs
- Make corrections/changes as requested/required
- Schedule approximate date of Monthly Report going final
- Create Draft Memos
- Coordinate for signatures and binding
- Coordinate with ActioNet and PARSII Administrator when Report goes Final



- **System Backup**
- **Run all required Reports for Archiving**
- **Finalize Project Dashboard for External Publication**
- **Coordinate Approval of Email Blast to all PARS II Users**
- **Close Current OA Status Period**
- **Move Minimum CPP Data as of Date**
- **Run Validation Reports to Verify Period Moved Forward Correctly**
- **Send email Blast to all Users**



PARS II Monthly Reporting - Items to Consider

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Items that will affect the process:

- New Project added
- Project Activity Status Change (Cancelled, Completed, Other, etc)
- New CD Level achieved or New BCP
- Mid month uploads of CPP data
- Corrected upload of CPP data
- FPD incorrectly entering usage of Contingency, etc
- FPD making corrections/changes to Assessment after the 3rd working day
- FPD incorrectly adding next months assessment before period has been moved forward
- Coordination issues with APM analysts
- Missing data uploaded or data corrected after 3rd working day
- Overall Assessment color change by an APM analyst
- Any changes that are required after the OA Status Period has already been moved forward
- Missing/incorrect information on Red/Yellow Report

NOTE: System is live for all users, no lock out functionality



Monthly Report Overview

Page 273

- **Reasons for New Report Format**
 - Ability to Quickly Identify Changes from Prior Period Report
 - Overall Assessment Changes
 - New BCPs
 - Reached CD-4
 - New Projects Added
 - Achieved Next CD Level
 - Provide Greater Visibility into Project Performance
 - Demonstrate Performance Trends
- **Report Content**
 - Updated Program Summary
 - High-Level Changes from Prior Period Report
 - Detailed Report for Each Red and Yellow Project



Summary Pages – Program Summary

Report Date: 2/23/2012
OA Status Date: 2/26/2012

February 2012 Report



Project Summary by Program (Current Performance Baseline)

Program	Total Projects		Total Projects Pre CD-2		Total Projects Post CD-2		Total Projects Post CD-2 Green		Total Projects Post CD-2 Yellow		Total Projects Post CD-2 Red		% of Post CD-2 Projects with Acceptable Status		
			No.	\$(M)	No.	\$(M)	No.	\$(M)	No.	\$(M)	No.	\$(M)	No.	\$(M)	
	EERE	6	\$307.9	1	\$15.9	5	\$292.0	5	\$292.0					100%	100%
EM	47	\$55,895.4	19	\$34,510.0	28	\$21,385.4	14	\$6,001.1	3	\$1,439.4	11	\$13,944.9	61%	35%	
FE	1	\$72.8			1	\$72.8	1	\$72.8						100%	100%
NA	27	\$11,641.8	13	\$5,551.8	14	\$6,090.0	10	\$655.9	1	\$4,857.1	3	\$576.9	79%	91%	
NE	8	\$3,422.4	7	\$3,405.0	1	\$17.4	1	\$17.4						100%	100%
SC	43	\$10,763.4	22	\$8,331.4	21	\$2,432.0	21	\$2,432.0						100%	100%
DOE Total	132	\$82,103.7	62	\$51,814.1	70	\$30,289.6	52	\$9,471.2	4	\$6,296.5	14	\$14,521.8	80%	52%	

- **Summary of Program Portfolio Performance**
- **RED/YELLOW/GREEN Allocation Is Based on the APM Assessment of Performance to the DOE Performance Baseline**



Summary Pages – Assessment Change

Page 275

Report Date: 2/23/2012
OA Status Date: 2/26/2012

February 2012 Report

Projects with Changed Overall Project Assessment

Assessment declined from GREEN to RED	R ▼ (G)
Assessment declined from YELLOW to RED	R ▼ (Y)
Assessment declined from GREEN to YELLOW	Y ▼ (G)
Assessment improved from RED to YELLOW	Y ▲ (R)
Assessment improved from YELLOW to GREEN	G ▲ (Y)
Assessment improved from RED to GREEN	G ▲ (R)

Program	PARS II Project ID	DOE Project Number	Project Name	Site	TPC (\$M) At CD-2	Approved TPC (\$M)	APM Forecast TPC (\$M)	CD-4 Date at CD-2	Approved CD-4 Date	APM Forecast CD-4 Date	Project % Complete	Overall Assessment
EM	000417	SR-0030.R1.2	P Reactor Decommissioning	SRS	\$142.2	\$142.2	\$81.0	01/31/12	01/31/12	02/29/12	100%	R ▼ (G)
EM	000419	SR-0030.R1.4	R Reactor Decommissioning	SRS	\$149.2	\$149.2	\$76.5	01/31/12	01/31/12	02/29/12	100%	R ▼ (G)
EM	000898	OR-0042.C1.1	Tank W1A	ORNL	\$47.5	\$47.5	\$47.5	09/30/12	09/30/12	09/30/12	90%	Y ▼ (G)
NA	000392	08-D-701	Nuclear Materials Safeguards and Security Upgrades Project (NMSSUP)	LANL	\$245.2	\$213.1	\$213.1	01/24/13	01/30/13	01/30/13	80%	R ▼ (Y)
NA	000751	08-Y12MIE-1	Oven Consolidation	Y-12	\$22.6	\$22.6	\$28.9	08/20/12	08/20/12	05/31/13	93%	G ▲ (R)

- Projects with a Change in Overall Assessment from Prior Report
- Identifies Improvements and Declines



Summary Pages – Approved BCPs

Page 276

Report Date: 2/23/2012
OA Status Date: 2/26/2012

February 2012 Report

Performance Baseline BCPs Since Last Report

▲	Increase in cost, schedule, or scope approved by BCP
▼	Decrease in cost, schedule, or scope approved by BCP
—	No change in cost, schedule, or scope approved by BCP

Program	PARS II Project ID	DOE Project Number	Project Name	FPD	Approval Date	Approved By	Change in Cost (\$M)	Approved TPC (\$M)	Change in Schedule (days)	Approved CD-4 Date	Change in Scope
EERE	000795	10-EE-05001	Carbon Fiber Technology Facility	David Arakawa	12/21/11	Johnny Moore	▼	-\$1.4	\$28.6	—	No
NA	000750	08-Y12MIE	Microwave Deployment	Teresa M. Robbins	01/31/12	Daniel Hoag	—	\$19.4	▲	335	12/31/12

- New BCP Approvals Received by APM
- BCPs that impact approved TPC, CD4 Date, and/or Project Scope



Summary Pages – Completed Projects

Page 277

Report Date: 2/23/2012
OA Status Date: 2/26/2012

February 2012 Report

Projects Achieved CD-4

▲	Increase from Original Performance Baseline cost, schedule, or scope
▼	Decrease from Original Performance Baseline cost, schedule, or scope
—	No Change in Original Performance Baseline cost, schedule, or scope

Program	PARS II Project ID	DOE Project Number	Project Name	Site	Project Success	Approved By	Approved TPC (\$M) at CD-2	TPC (\$M) on CD-4 Approval Memo	Original Approved CD-4 Date	Date of CD-4 Approval Memo	Scope Complete
SC	000481	MIE-001	LCLS Ultrafast Science Instruments (LUSI)	SLAC	Yes	Harriet Kung	\$60.0	—	\$60.0	08/31/12	▼ 02/02/12 — Yes
SC	000515	SC-25-09-02	Facility for Advanced Accelerator Experimental Tests (FACET)	SLAC	Yes	James Siegrist	\$14.5	—	\$14.5	02/28/12	▼ 01/31/12 — Yes

- **CD-4 Approval Memos Received by APM**
- **Identifies Projects Completed in Current Period**
- **CD-4 Projects Remain on the Monthly Report in the Reporting Period when CD-4 Paperwork Is Received**



Summary Pages – New Projects

Page 278

Report Date: 1/25/2012
OA Status Date: 1/26/2012

January 2012 Report

New Projects Added

Program	PARS II Project ID	DOE Project Number	Project Name	FPD	Site	Current CD	Current CD Approval Date	CD-0 Approval Date	CD-0 TPC Low (\$M)	CD-0 TPC High (\$M)	CD-2 Approval Date	TPC (\$M) at CD-2
SC	000920		Dynamic Compression Sector (DCS) at the Advanced Photon	Frank Gines	ANL	CD0	12/13/11	12/13/11	\$15.0	\$25.0		

- All Active Capital Asset Projects that Were Added in Current Period
- Details Growth in Portfolio Size
- Captures Projects Entered at CD-2/3



Summary Pages – New Milestone Achieved

Page 279

Report Date: 2/23/2012
OA Status Date: 2/26/2012

February 2012 Report

Projects Achieved Next Critical Decision

Program	PARS II Project ID	DOE Project Number	Project Name	FPD	Site	Contractor	CD Change	Approved By	TPC Range (\$M)	Approved TPC (\$M) at CD-2
NA	000920	OPS-12-NNSA-DCS	Dynamic Compression Sector (DCS) at the Advanced Photon Source (ANL)	Frank Gines	ANL		CD0 → CD1	Christopher Deeney	\$15.0	\$30.0
NE	000843		Material Security and Consolidation Project (MSCP)	Mark Arenaz	INL		CD1 → CD3	Richard Provencher	\$11.5	\$23.3

- **Critical Decision Approval Memos Received by APM**
- **Includes All New Critical Decisions Achieved Except for CD-0, CD-4, and Closeout**



Red/Yellow Project Report – Legend

Page 280

Report Date: 1/9/2012
DA Status Date: 1/26/2012
CPP Data As-Of Date: 11/20/2011

Red - Yellow Project Report Legend

Sample Project
Project ID: 000111 | DOE Project No.: 00-XX-000

APM Analyst:	John White	Approved Contingency, Fee, MR, TPC and CD-4 Date are indicative of the amounts approved by the latest Approved Baseline (BCP or CD2).	FPD:	Matthew Weber	Level 2	Contractor:	LANS	Certified																																																																																				
Current APM Assessment	Prior APM Assessment	# of Months At No Assessment	TPC (\$M)	CD-4 Date	Project % Complete	Contractor-reported Cum BCWP to-date divided by contractor-reported PMB (sum of BAC and Undistributed Budget)																																																																																						
Yellow	Yellow	3	Approved: \$213.1	1/30/2013	81.2%																																																																																							
Approved: \$213.1			APM Forecast: \$213.1	1/30/2013																																																																																								
TPC and Completion Date forecast reported by OECM Analyst on OECM Monthly Assessment screen in PARS II			12-Mo. Plan v. Actual/Forecast																																																																																									
<p>6-Month Rolling Average CPI and SPI</p> <p>3-Mo Avg CPI</p> <p>6-Mo Avg SPI</p> <p>Incremental 3-month and 6-month rolling average CPI and SPI based on <u>contractor-reported</u> Incremental Time Phased BCWS, BCWP, and ACWP.</p> <p>CPI = BCWP / ACWP</p> <p>SPI = BCWP / BCWS</p> <p>Rolling average values are calculated as average of last 3 or 6 months of incremental CPI and SPI for each reporting period displayed on the chart.</p>			<p>* values on the chart are representative of amounts cumulative since the first period displayed on the chart.</p> <p>BCWS BCWP ACWP ETC EV Forecast (ETC x 6-Mo Avg CPI)</p> <p>Contractor-reported Incremental Time Phased BCWS, BCWP, ACWP/ETC since the period 6 months prior to current reporting period.</p> <p>ETC (Estimate To-Complete) is contractor-reported forecast of ACWP in future months.</p> <p>EV Forecast (projected BCWP) is calculated by applying average of last 6 months of Incremental CPI (based on contractor-reported Incremental Time Phased BCWS, BCWP, and ACWP) to contractor-reported ETC.</p>																																																																																									
<p>DOE Performance Baseline - Reporting Period January 2012</p> <table border="1"> <thead> <tr> <th colspan="3">COST</th> <th colspan="3">SCHEDULE</th> </tr> <tr> <th colspan="3">DOE Cost Contingency (\$M)</th> <th colspan="3">DOE Schedule Contingency (days)</th> </tr> </thead> <tbody> <tr> <td>Approved</td> <td>Remaining</td> <td>% of TPC To-Go</td> <td>Approved</td> <td>Remaining</td> <td>% of To-Go Duration</td> </tr> <tr> <td>Program-reported</td> <td>FPD-reported</td> <td>see below</td> <td>Program-reported</td> <td>FPD-reported</td> <td>see below</td> </tr> </tbody> </table> <p>Contractor PMB - Performance Period November 2011</p> <table border="1"> <thead> <tr> <th colspan="3">Performance Measurement Baseline (\$M)</th> <th colspan="3">Management Reserve (\$M)</th> <th colspan="3">Contractor Independent Estimates At Complete</th> </tr> <tr> <th>Approved (PMB)</th> <th>Forecast (EAC)</th> <th>To-Go (ETC)</th> <th>Approved</th> <th>Remaining</th> <th>% of ETC</th> <th>TCPi to EAC</th> <th>CPI x SPI</th> <th>3 Mo. Avg CPI</th> </tr> </thead> <tbody> <tr> <td colspan="3">Contractor-reported baseline and forecast data.</td> <td>Program-reported</td> <td>contractor-reported</td> <td>Remaining MR / ETC</td> <td>(BAC - P) / (EAC - A)</td> <td>A+(BAC-P)*CPI*SPI</td> <td>A+(BAC-P)*3m Avg CPI</td> </tr> <tr> <td colspan="3"></td> <td colspan="3"></td> <td colspan="3">Contractor Completion Date Forecast: contractor-reported</td> </tr> </tbody> </table> <p>Select Definitions and Calculations</p> <table border="1"> <tr> <td>TPC To-Go</td> <td colspan="2">Current Approved TPC less contractor-reported Cum ACWP, less FPD-reported Fee Paid, less FPD-reported DOE ODCs Used.</td> </tr> <tr> <td>To-Go Duration</td> <td colspan="2">Number of calendar days to approved project completion date (Current Approved CD-4 Date minus Current CPP Data As of Date).</td> </tr> <tr> <td>Project % Complete</td> <td colspan="2">Contractor-reported Cum BCWP to-date divided by contractor-reported PMB (sum of BAC and Undistributed Budget)</td> </tr> <tr> <td>Cum CPI</td> <td colspan="2">Contractor-reported Cum BCWP divided by Cum ACWP</td> </tr> <tr> <td>Cum SPI</td> <td colspan="2">Contractor-reported Cum BCWP divided by Cum BCWS</td> </tr> <tr> <td>IEAC</td> <td colspan="2">Independent estimates at complete calculated by PARS II based on contractor-reported performance data</td> </tr> <tr> <td>TCPi to EAC</td> <td colspan="2">Remaining Work divided by Remaining Dollars to contractor-reported EAC</td> </tr> <tr> <td>CPI x SPI</td> <td colspan="2">Cum ACWP plus Work Remaining divided by product of Project Cum CPI multiplied by Project Cum SPI</td> </tr> <tr> <td>3 Mo. Avg CPI</td> <td colspan="2">Cum ACWP plus Work Remaining divided by 3-month rolling average CPI for current reporting period</td> </tr> </table> <p>Final reporting period from contractor time phased data where contractor is reporting forecast of work to be completed (ETC > 0).</p>						COST			SCHEDULE			DOE Cost Contingency (\$M)			DOE Schedule Contingency (days)			Approved	Remaining	% of TPC To-Go	Approved	Remaining	% of To-Go Duration	Program-reported	FPD-reported	see below	Program-reported	FPD-reported	see below	Performance Measurement Baseline (\$M)			Management Reserve (\$M)			Contractor Independent Estimates At Complete			Approved (PMB)	Forecast (EAC)	To-Go (ETC)	Approved	Remaining	% of ETC	TCPi to EAC	CPI x SPI	3 Mo. Avg CPI	Contractor-reported baseline and forecast data.			Program-reported	contractor-reported	Remaining MR / ETC	(BAC - P) / (EAC - A)	A+(BAC-P)*CPI*SPI	A+(BAC-P)*3m Avg CPI							Contractor Completion Date Forecast: contractor-reported			TPC To-Go	Current Approved TPC less contractor-reported Cum ACWP, less FPD-reported Fee Paid, less FPD-reported DOE ODCs Used.		To-Go Duration	Number of calendar days to approved project completion date (Current Approved CD-4 Date minus Current CPP Data As of Date).		Project % Complete	Contractor-reported Cum BCWP to-date divided by contractor-reported PMB (sum of BAC and Undistributed Budget)		Cum CPI	Contractor-reported Cum BCWP divided by Cum ACWP		Cum SPI	Contractor-reported Cum BCWP divided by Cum BCWS		IEAC	Independent estimates at complete calculated by PARS II based on contractor-reported performance data		TCPi to EAC	Remaining Work divided by Remaining Dollars to contractor-reported EAC		CPI x SPI	Cum ACWP plus Work Remaining divided by product of Project Cum CPI multiplied by Project Cum SPI		3 Mo. Avg CPI	Cum ACWP plus Work Remaining divided by 3-month rolling average CPI for current reporting period	
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Sample Red/Yellow Project Report

Red - Yellow Project Status Report

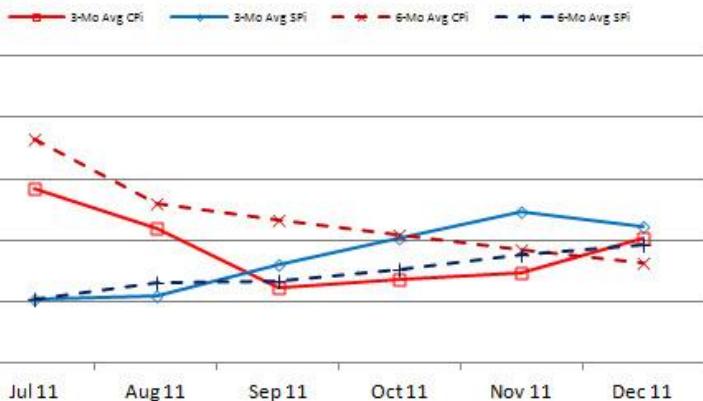
February 2012

Sample Project Name

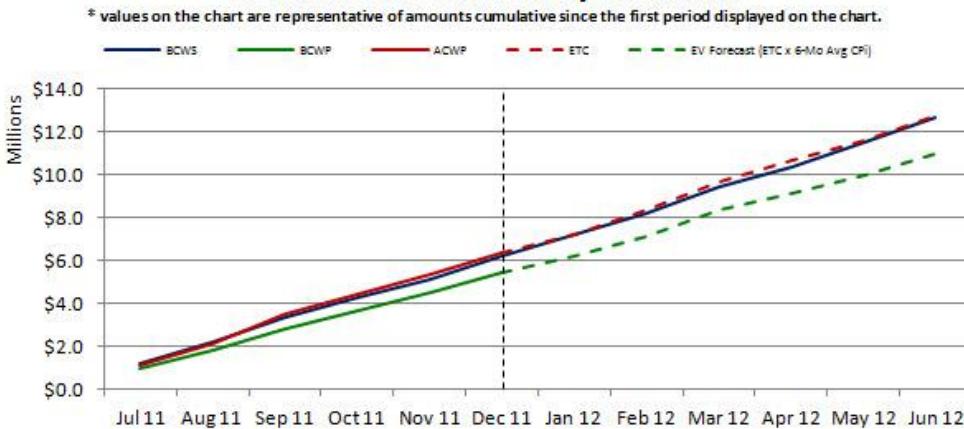
PARS II Project ID: 000123 | DOE Project No.: 123-X-321

APM Analyst:	John White	FPD:	John Smith	Level 1	Contractor:	ABC Corp	Certified
Current APM Assessment	Prior APM Assessment	# of Months At Yellow	TPC (\$M)	CD-4 Date	Project % Complete	Program	Site
Yellow	Yellow	6	Approved: \$31.0 APM Forecast: \$31.0	9/30/2012 9/30/2012	62.4%	NA	SRS

6-Mo. Performance Trends



12-Mo. Plan v. Actual/Forecast



DOE Performance Baseline - Reporting Period February 2012

COST

DOE Cost Contingency (\$M)

Approved	Remaining	% of TPC To-Go
\$6.8	\$2.8	30.0%

SCHEDULE

DOE Schedule Contingency (days)

Approved	Remaining	% of To-Go Duration
42	22	8.0%

Key Performance Indicators

KPI	Current	Prior
Cum CPI	0.92	0.94
Cum SPI	0.99	0.99
Cum Start Date	12/31/10	12/31/10

Contractor PMB - Performance Period December 2011

Performance Measurement Baseline (\$M)

Approved (PMB)	Forecast (EAC)	To-Go (ETC)
\$26.3	\$29.0	\$8.1

Approved	Remaining	% of ETC
\$8.0	\$0.2	2.5%

APM Assessment

Independent Estimates At Complete

TCPI to EAC	CPI x SPI	3 Mo. Avg CPI
0.87	\$28.9	\$29.2

Contractor Completion Date Forecast:
8/31/2012

The assessment remains Yellow due to the ongoing delays. While there is no indication that project will slip beyond the approved CD-4 Date, there is a high risk of project breaching approved TPC because of the experienced delays.



Red/Yellow Project Report Header

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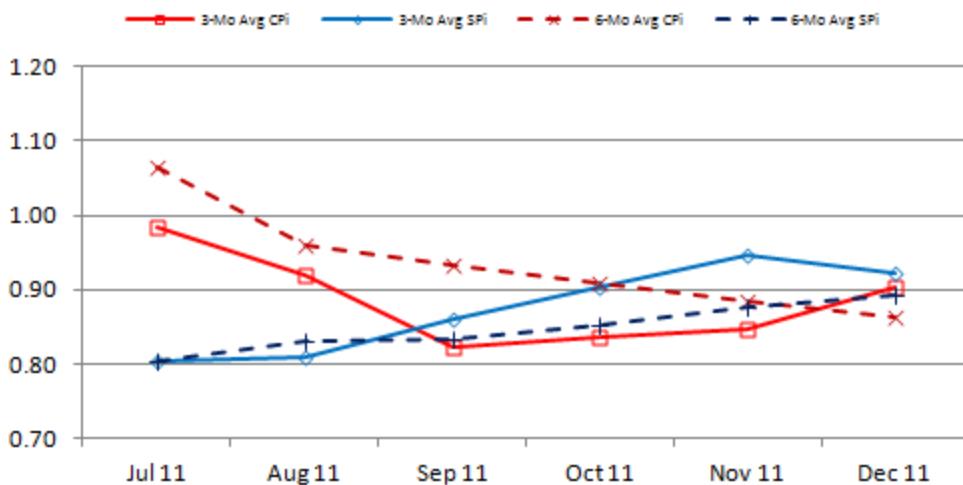
Report Date: 2/20/2012	Red - Yellow Project Status Report						
OA Status Date: 2/26/2012	February 2012						
CPP Data As-Of Date: 12/30/2011							
Sample Project Name							
PARS II Project ID: 000123 DOE Project No.: 123-X-321							
APM Analyst:	John White	FPD:	John Smith	Level 1	Contractor:	ABC Corp	Certified
Current APM Assessment	Prior APM Assessment	# of Months At Yellow	TPC (\$M)	CD-4 Date	Project % Complete	Program	Site
Yellow	Yellow	6	Approved: \$31.0 APM Forecast: \$31.0	9/30/2012 9/30/2012	62.4%	NA	SRS

- **High-Level Project Information**
- **All of the Data Resides in PARS II**
- **Note:**
 - **FPD Certification Level** is highlighted **RED** if current approved project TPC is above the top range of TPC allowed to be managed by the current FPD certification level.
 - **Contractor Certification** is highlighted in **RED** if contractor EVMS is Not Certified
 - **Project % Complete** is calculated by PARS II from contractor-reported data
 - $\% \text{ Complete} = \text{BCWP}_{\text{cum}} / \text{PMB}$
 - $\text{PMB} = \text{BAC} + \text{UB}$



6 Month Performance Trends

6-Mo. Performance Trends

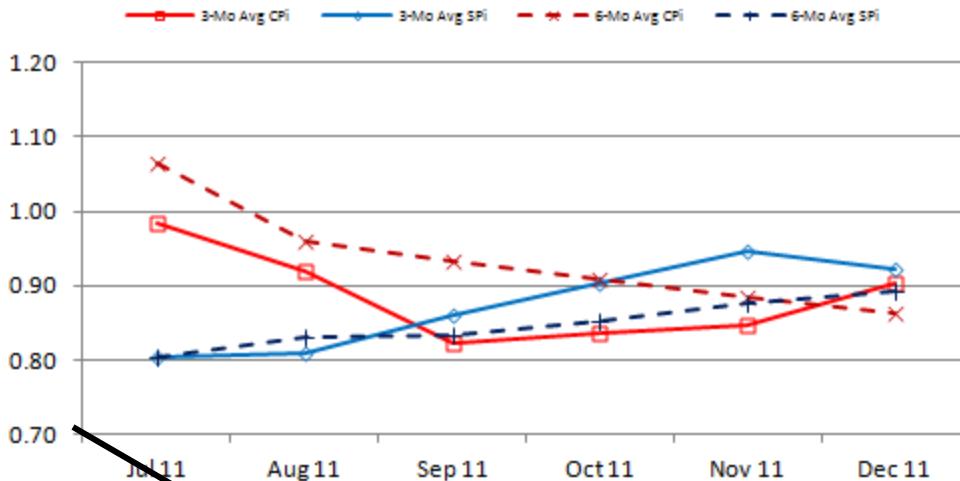


- Provides 3 and 6 Month Rolling Average CPI and SPI Trends
- Based on Incremental CPI and SPI



6 Month Performance Trends

6-Mo. Performance Trends



- Provides 3 and 6 Month Rolling Average CPI and SPI Trends
- Based on Incremental CPI and SPI
- Calculated from Contractor Timephased SPA Data

Report Date: 3/7/2012
PARS II Project ID: 000123
DOE Project: 123-X-321 - Sample Project
CPP Data As-Of Date: 1/31/2012



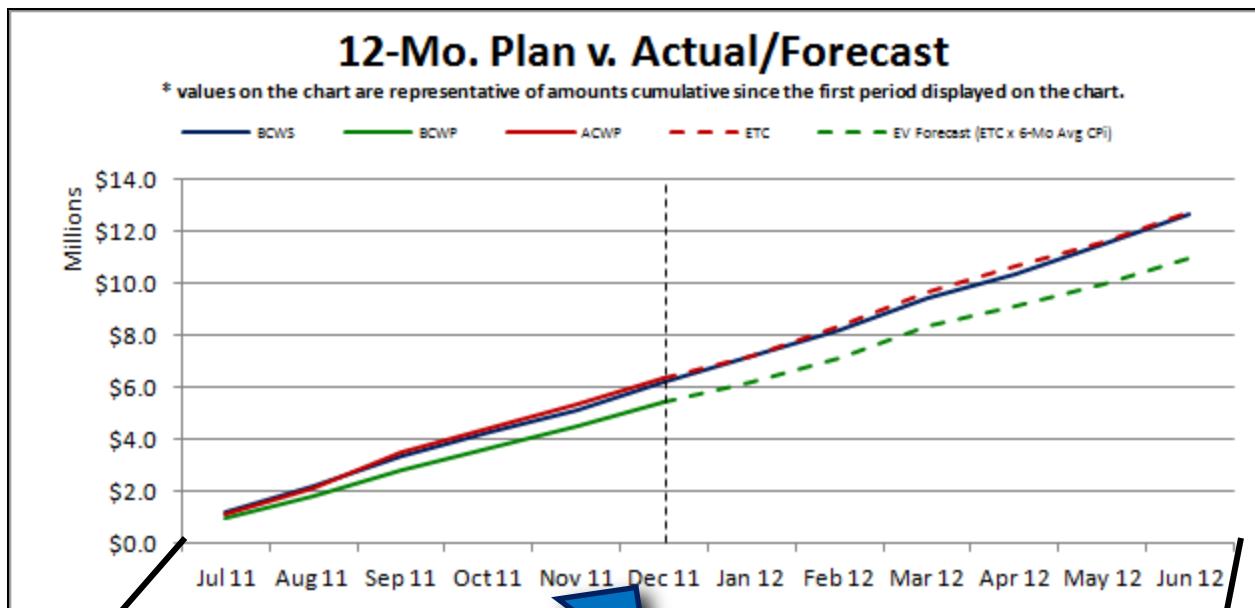
Red/Yellow Project Report Detail 1
6 Month Trend Chart Detail

WBS Number	TYPE	09/30/10	10/24/10	11/21/10	12/26/10	01/23/11	02/20/11	03/27/11	04/24/11	05/22/11	06/29/11	07/24/11
01	Inc BCWS	1,818,211	1,264,241	1,412,690	1,211,711	1,121,623	1,233,587	976,761	1,112,061	930,497	840,511	1,073,404
	Inc BCWP	3,251,313	1,184,250	1,101,180	1,021,396	894,756	949,269	840,912	1,059,416	833,692	832,170	946,250
	Inc ACWP	842,984	1,291,451	1,060,112	978,390	854,466	1,106,149	982,551	1,398,658	931,223	935,858	1,025,855
	Inc CPI	3.86	0.92	1.04	1.04	1.05	0.86	0.86	0.76	0.90	0.89	0.92
	Inc SPI	1.79	0.94	0.78	0.84	0.86	0.77	0.86	0.95	0.90	0.99	0.88
	6mo. CPI						1.46	0.96	0.93	0.91	0.88	0.86
	6mo. SPI						0.99	0.83	0.83	0.85	0.88	0.89
	3mo. CPI			1.94	1.00	1.04	0.98	0.92	0.82	0.84	0.85	0.90
	3mo. SPI			1.17	0.85	0.81	0.80	0.81	0.86	0.90	0.95	0.92



12 Month Plan vs. Actual/Forecast

- 12 Month Performance Snapshot
- Based on Contractor Timephased SPA and ETC Data



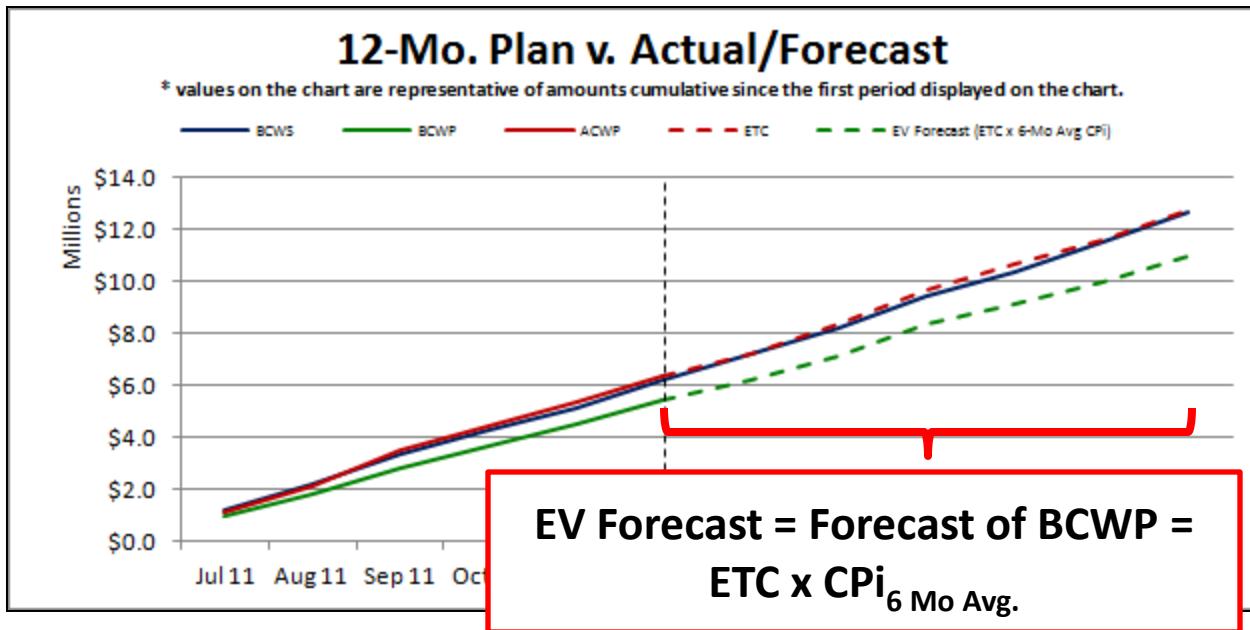
Report Date: 3/7/2012
PARS II Project ID: 000123
DOE Project: 123-X-321 - Sample Project
CPP Data As-Of Date: 12/31/2011



Red/Yellow Project Report Detail 2
12 Month Plan v. Actual Chart Detail

WBS Number	Type	07/31/11*	08/31/11	09/30/11	10/31/11	11/30/11	12/31/11	01/31/12	02/29/12	03/31/12	04/30/12	05/31/12	06/30/12
01	Inc BCWS	1,233,587	976,761	1,112,061	930,497	840,976	1,073,404	1,008,185	1,042,617	1,198,819	917,547	1,167,833	1,156,796
	Inc BCWP	949,269	840,912	1,059,416	833,692	832,170	946,250						
	Inc ACWP	1,106,149	982,551	1,398,658	931,223	935,858	1,025,855						
	Inc ETC							826,496	1,116,137	1,361,747	969,263	946,659	1,171,168
	Cum BCWS Since 07/31/11	1,233,587	2,210,347	3,322,408	4,252,905	5,093,881	6,167,284	7,175,469	8,218,087	9,416,905	10,334,453	11,502,286	12,659,082
	Cum BCWP Since 07/31/11	949,269	1,790,181	2,849,537	3,683,289	4,515,453	5,461,709						
	Cum ACWP Since 07/31/11	1,106,149	2,088,699	3,487,358	4,418,581	5,354,438	6,380,294						
	Cum ETC Since 07/31/11						6,380,294	7,206,789	8,322,927	9,684,674	10,653,937	11,600,596	12,771,765

12 Month Plan vs. Actual/Forecast



- **EV Forecast Expects ETC to Turn into ACWP in Future Periods**
- **Current Period 6-Month Average CPI Is Used for Calculation**
 - 6-month Average CPI for current period can be found in the data from 6 Month Performance Trend Chart



DOE Performance Baseline

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DOE Performance Baseline - Reporting Period February 2012					
COST			SCHEDULE		
DOE Cost Contingency (\$M)			DOE Schedule Contingency (days)		
Approved	Remaining	% of TPC To-Go	Approved	Remaining	% of To-Go Duration
\$6.8	\$2.8	30.0%	42	22	8.0%

- **Cost and Schedule Color Assessment by OECM Analyst**
 - Cannot be worse than Overall Assessment
 - Cost and Schedule Assessment can be different
- **Approved: Amount Approved by Current Baseline (CD-2 or BCP)**
- **Remaining: Product of FPD Usage Reporting**
 - Remaining = Approved – Used Since Baseline



DOE Performance Baseline – Cost

DOE Performance Baseline - Reporting Period February 2012									
COST			SCHEDULE						
DOE Cost Contingency (\$M)			DOE Schedule Contingency (days)						
Approved	Remaining	% of TPC To-Go	Approved	Remaining	% of To-Go Duration				
\$6.8	\$2.8	30.0%	42	22	8.0%				

Red/Yellow Project Report Detail 4										
TPC To-Go Calculation										
PARS II Project ID	Current Baseline	Current Baseline Date Approved	Approved Fee/Profit at CD-2	Fee/Profit Remaining	Fee/Profit Used since CD-2	Approved DOE ODCs since CD-2	DOE ODCs Remaining	DOE ODCs Used since CD-2	Sunk Costs at CD-2	Contractor Cum ACWP as of 07/24/11
000660	CD-2	03/25/10	750,000		750,000					20,912,873

TPC Used by DOE			
Fee Paid	ODCs Used	Sunk Costs	Total
750,000			750,000

TPC Used by Contractor		
Cumulative ACWP	Total	
20,912,873	20,912,873	

Total TPC Used			
DOE Used	PLUS	Contractor Used	Total
750,000		20,912,873	21,662,873

Current Approved TPC (CD-2)	31,000,000
Total TPC Used:	21,662,873
TPC To-Go:	9,337,127

- Calculations Used**

- % of TPC To-Go = Contingency_{remaining} / TPC To-Go = (2,800,000 / 9,337,127)
- TPC To-Go = TPC_{approved} – (FEE_{paid} + ODC_{used} + Sunk Cost + ACWP_{cum})



DOE Performance Baseline – Schedule

DOE Performance Baseline - Reporting Period February 2012					
COST			SCHEDULE		
DOE Cost Contingency (\$M)			DOE Schedule Contingency (days)		
Approved	Remaining	% of TPC To-Go	Approved	Remaining	% of To-Go Duration
\$6.8	\$2.8	30.0%	42	22	8.0%

Report Date: 2/20/2012	Red - Yellow Project Status Report						
OA Status Date: 2/25/2012							
CPP Data As-Of Date: 12/30/2011							
Sample Project Name							
PARS II Project ID: 000123 DOE Project No.: 123-X-321							
OECM Analyst:	John White	FPD:	John Smith	Level 1	Contractor:	ABC Corp	Certified
Current OECM Assessment	Prior OECM Assessment	# of Months At Yellow	TPC (\$M)	CD-4 Date	Project % Complete	Program	Site
Yellow	Yellow	6	Approved: \$31.0	9/30/2012	62.4%	NA	SRS
			OECM Forecast: \$31.0	9/30/2012			

- Calculations Used:**
 - % of To-Go Duration = Contingency_{remaining} / To-Go Duration
 - To-Go Duration = Approved CD4 Date – CPP Date = 9/30/2012 – 12/30/2011



Key Performance Indicators – CPI & SPI

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- **Cumulative Cost and Schedule Performance Indices**
- **Current Reporting Period Compared to Previous Reporting Period**
- **Uses Sum of Incremental BCWS, BCWP, and ACWP since the Date Indicated as Cum Start Date**
- **Cum Start Date Currently Indicates Latest Approved Baseline**
 - (CD-2 or BCP)
- **Calculated from Contractor Timephased Data**
- **Displays Total Project CPI and SPI if Cum Start Date Is Not Set or Timephased Data Not Available**

Key Performance Indicators		
KPI	Current	Prior
Cum CPI	0.92	0.94
Cum SPI	0.99	0.99
Cum Start Date	12/31/10	12/31/10

Contractor Performance Measurement Baseline



Contractor PMB - Performance Period December 2011								
Performance Measurement Baseline (\$M)			Management Reserve (\$M)			Independent Estimates At Complete		
Approved (PMB)	Forecast (EAC)	To-Go (ETC)	Approved	Remaining	% of ETC	TCPI to EAC	CPI x SPI	3 Mo. Avg CPI
\$26.3	\$29.0	\$8.1	\$8.0	\$0.2	2.5%	0.87	\$28.9	\$29.2
Contractor Completion Date Forecast:						8/31/2012		

- **Approved MR = Amount Approved by Current Baseline (CD-2 or BCP)**
- **Approved PMB = Current BAC + UB Amounts Reported by Contractor in CPP Upload**
- **Calculations Used:**
 - TCPI to EAC = $(BAC - BCWP_{cum}) / (EAC - ACWP_{cum})$
 - MR as % of ETC = $MR_{remaining} / ETC$
 - Independent Estimate At Complete (IEAC)
 - Using Industry Standard Formulas
 - $IEAC_{CPI \times SPI} = ACWP_{cum} + (BCWR / (CPI_{cum} \times SPI_{cum}))$
 - $IEAC_{3 \text{ Mo Avg. CPI}} = ACWP_{cum} + (BCWR / CPI_{3\text{-mo Avg.}})$
- **All Other Elements Are Reported by Contractor in CPP Upload**

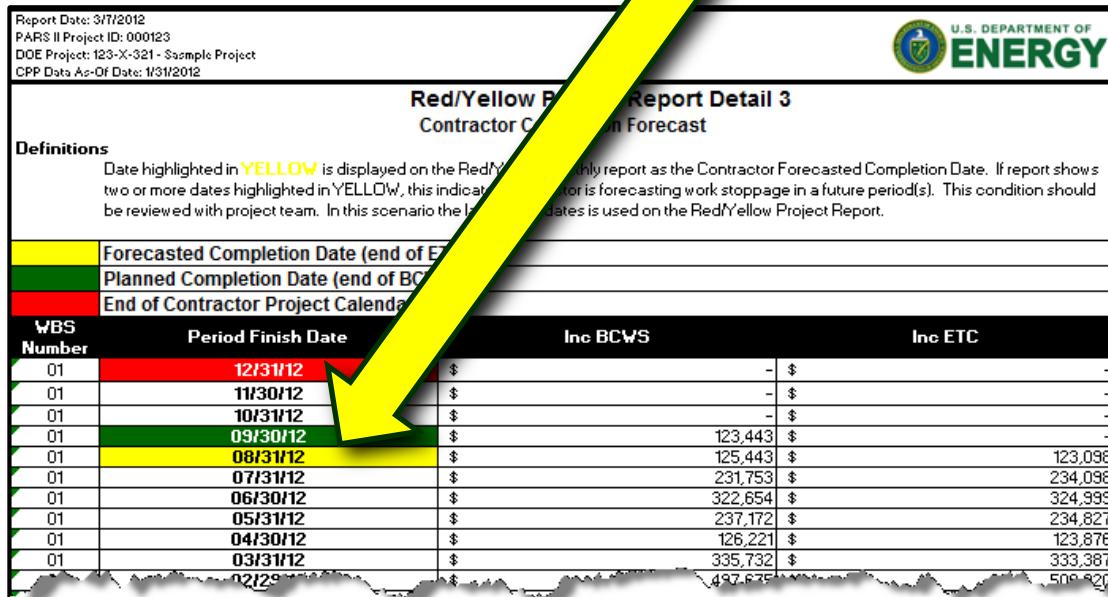
Contractor Performance Measurement

Baseline



Contractor PMB - Performance Period December 2011								
Performance Measurement Baseline (\$M)			Management Reserve (\$M)			Independent Estimates At Complete		
Approved (PMB)	Forecast (EAC)	To-Go (ETC)	Approved	Remaining	% of ETC	TCPI to EAC	CPI x SPI	3 Mo. Avg CPI
\$26.3	\$29.0	\$8.1	\$8.0	\$0.2	2.5%	0.87	\$28.9	\$29.2
Contractor Completion Date Forecast:							8/31/2012	

- Contractor Completion Date Forecast**
 - Based on contractor-reported time phased Estimate To Complete (ETC)
 - Last Period with ETC > 0
- Identifies Scheduled Completion**
 - Last Period with
 - BCWS > 0





APM Assessment

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APM Assessment

The assessment remains Yellow due to the ongoing vessel delays. While not definitive, there are indications that the delivery of the first six large ASME vessels may slip from late Mar 2012 to early Apr, and the remaining four vessels will arrive in late Apr/early May rather than early Apr.

Neither the current monthly nor the cumulative EV cost and schedule data are good indicators of project performance, because the project's performance baseline is no longer aligned with the construction execution schedule. The construction schedule has undergone extensive changes in order to mitigate the impacts of the vessel delays. The Federal and Contractor project staffs have agreed not to incorporate the mitigation efforts and re-sequencing of work into the performance baseline until there is a high level of confidence in the large ASME vessel delivery dates. The IPT is developing a plan to address the schedule impacts of the vessel delays, and the Contractor is preparing a bottoms-up cost estimate to quantify the associated cost impacts. The new baseline, which will incorporate this schedule and cost information, will provide a much more meaningful basis on which to gauge performance.

Construction work is approximately 55% complete. The project has approximately \$8M in remaining Management Reserve and \$114M in remaining DOE Contingency with \$350M in to-go construction and commissioning costs (BCWS). However, the FPD's current estimate at completion is \$1,305M, which leaves only \$34M in uncommitted DOE Contingency. The project probably does not have sufficient dollar reserves to weather any further significant schedule delays. It is also essential that construction productivity, which has been adversely affected by the re-sequencing activities, improve significantly once the vessels have been installed.

- **Detailed APM Narrative on the Project**
- **Provides APM Perspective on Project Performance**
- **Explains Data Anomalies**
- **Identifies Major Milestones**



PARS II Monthly Report Wrap-Up

Page 294

- Reasons for New Report Format
 - Ability to Quickly Identify Changes from Prior Period Report
 - Provide Gr... project Performance
 - Demonst...
- Report Content
 - Updated Project Status
 - High-Level Changes from Prior Period Report
 - Detailed Report for Each Red and Yellow Projects

PARS II SSS Reporting

Custom Reporting





Reporting Overview

Page 296

- **Information Tab**
- **Shared Reports**
- **My Reports**
- **Configuration Query**
- **Data Sources**
- **Reports Button By Module**
- **Request A Custom Report**
- **SSS Reports Error Message**
- **Contractors' Access to SSS Reports**



SSS Reports - Information Tab

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U.S. DEPARTMENT OF ENERGY PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

Information Tab

Report Title: Project Attributes (Portfolio)

Report Subtitle:

Report Description:

General Information	
Report Title	Project Attributes
Report Subtitle (If Applicable)	N/A
Report Control Number	RPT1003579
Report Category	Project Reports
Dekler Default Folder Path	N/A
Customer	Shared Reports/Project Reports
Folder Path (If Different)	
Brief Description	This report lists all data elements available in Project Attributes screen of PARS II for all projects.
Reading Report	Report provides data elements for informational purposes only and serves as validation tool to ensure all projects assigned to an individual running this report are properly identified by appropriate project attributes.

Technical Information	
Data Query/Queries	Project Overview – The data elements in this data source have been custom-defined based on the specific columns in the report.
Filter(s)	Only projects assigned to SC-IT program office are not displayed on the report.
	All data elements are reported as they are currently defined in the system for each project.

Cost Performance

DDR

Enterprise Reports (Portfolio)

- Active CD-4 Projects
- Assessments - Current Period Detail (Portfolio)
- Attachments List - All Active Projects
- CD Approval Dates & Approved By
- CD-2 Planned Dates
- CD/BCP All Fields (Portfolio)
- CD/BCP Approval Dates
- Capital Asset Project Forecast
- Contact Assignments - All Projects
- FPD Certification Level by Program/
- FPD List w/ Certification
- Post CD-2 Active Projects
- Pre CD-3 Projects Planned Dates
- Program Structure
- Project Attributes (Portfolio) **(Highlighted)**
- Project Descriptions
- Project List
- Projects On Hold
- Projects on Hold Post CD-2

EVMS Certification

Metrics



SSS Reports - Analysis

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OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011 Current Critical Decision: CD3 (BCP)
Current User: CREEMAR Logout

SSS Reports

+ Add | Paste

Shared Reports

- Analysis Reports **(This folder is highlighted with a yellow oval)**
 - + Baseline Volatility - Past and Near-Term (PMB)
 - + CPI vs. TCPI (PMB Level)
 - + EV Data Validity (WBS Level)
 - + EV Project Summary (6-Mo; PMB Level)
 - + Funding Status (Monthly at Project Level)
 - + IEAC Analysis (WBS Level)
 - + MR Balance v. CV, VAC, & EAC Trends
 - + Management Reserve (MR) Log
 - + Performance Analysis (WBS Level)
 - + Performance Index Trends (WBS Level)
 - + Retroactive Change Indicator (6-Mo, PMB Level)
 - + Schedule Missing Logic (Activity Level)
 - + Schedule Relationship Types (Activity Level)
 - + Variance Analysis Cumulative (WBS Level)
- + APM DepSec Monthly Reports
- + APM Planning
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
- + Reports For Testing

Note: This is the newest folder created for EV Analysis.

Report Title: Baseline Volatility - Past and Near-Term (PMB Level)
Report Subtitle: V-2012-12-04
Report Description: Demonstration of changes made to the time-phased baseline (baseline volatility) over a most recent 6 month period as well as near-term 6 month period using contractor time-phased

Update Report File:

Created by: PEDANIG
Modified by: N/A
Last viewed by: PRATT on 1/4/2013 1:42:03 PM



SSS Reports - APM DepSec Monthly

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

Current Critical Decision: CD4
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

SSS Reports

Add | Paste

Shared Reports

- + Analysis Reports
- APM DepSec Monthly Reports**
- Verification Reports (Portfolio)
 - + Assessments - Current Period Detail (Portfolio)
 - + Assessments Completion Status (Portfolio)
 - + CPP Upload Status Report
 - + Project Dashboard
 - + Project Dashboard - Prior Period
 - + Project Summary by Program
 - + Project Summary for Memos
- Verification Reports (Project)
 - + APM Red/Yellow Detail 1 - 6 Month Trend
 - + APM Red/Yellow Detail 2 - 12 Month Plan v
 - + APM Red/Yellow Detail 3 - Contractor Comp
 - + APM Red/Yellow Detail 4 - TPC To-Go
 - + APM Red/Yellow Project Report
 - + Assessments by Project - Current & Prior P
 - + Project Quick View Mgmt Report
 - + Project Quick View Report
- + APM Month End
- + APM Monthly Status Report
- + APM Quarterly Status Report
- + APM Red/Yellow Project Report
- + APM Red/Yellow Project Report (Portfolio)

Folder Name: APM DepSec Monthly Reports
Folder Description:

Import Report File:



SSS Reports - Cost Performance



OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD3A
Current User: CREEMAR Logout

SSS Reports

Add | Paste

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- + **Cost Performance**
- Cost Performance Reports - (CPR)
 - + CPR Format 1
 - + CPR Format 2
 - + CPR Format 5
- OBS
 - + OBS CPR Schedule Integration Report
 - + OBS Cumulative Analysis Chart
 - + OBS Cumulative Variance Analysis
 - + OBS IEAC Analysis
 - + OBS PM Summary
 - + OBS SV% vs. CV% Quad Chart
 - + Performance Index Trends (All OBS Number)
- Program - Project
 - + EV Project Summary (6-Mo; PMB Level)
 - + Management Reserve (MR) Log
 - + Project CPI vs. TCPI and ACI
 - + Project Favorable vs. Unfavorable Cost Var
 - + Project Favorable vs. Unfavorable Schedule
 - + Project Monthly Funding Status
 - + Project SPI vs. CPI Trend
 - + Project SV vs. CV Trend

COST PERFORMANCE REPORTS

Reports in this Folder are based on the Contractor Project Performance (CPP) data uploaded by the Contractor. The data is required to be uploaded on or before the last working day of the month following the performance period. There are several Data Sources populated by the CPP Upload used to create the Cost Performance and Analysis Reports and Graphs.

They are as follows:

- Performance Data by WBS
- Performance Data by OBS
- Timephased Performance by WBS
- Timephased Performance by OBS



SSS Reports - DDR (Dynamic Drilldown Reports)

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OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date:

Current Critical Decision: CD3A
Current User: CREEMAR Logout

SSS Reports

Add | Paste

DDR (Dynamic Drilldown Reports)

- OBS DDR
 - + OBS IEAC Analysis
 - + OBS SPA Cost (Monthly)
 - + OBS SPA Cost (Yearly)
 - + OBS SPA Cost Schedule (Monthly)
 - + OBS SPA Cost Schedule (Yearly)
 - + OBS SPA Hours (Monthly)
 - + OBS SPA Hours (Yearly)
 - + OBS SPI vs. CPI Trend
 - + OBS SV vs. CV Trend
 - + OBS Summary Report
 - + Performance Index Trends (Current Selected)
- WBS DDR
 - + Performance Index Trends (Current Selected)
 - + WBS IEAC Analysis
 - + WBS SPA Cost (Monthly)
 - + WBS SPA Cost (Yearly)
 - + WBS SPA Cost Schedule (Monthly)
 - + WBS SPA Cost Schedule (Yearly)
 - + WBS SPA Hours (Monthly)
 - + WBS SPA Hours (Yearly)
 - + WBS SPI vs. CPI Trend
 - + WBS SV vs. CV Trend
 - + WBS Summary Report

Helpful Hint:
• Dynamic Drilldown Reports (DDR) should be accessed and run directly from the Project Performance Dashboards.
• When run from SSS Reports, they will display data for OBS Level 1 or WBS Level 1.
• Reports in this Folder are based on the Contractor Project Performance (CPP) data uploaded by the Contractor.

SSS Reports - Enterprise (Portfolio) and EVMS



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U.S. DEPARTMENT OF ENERGY
PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 03/26/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: CD3A

Current User: CREEMAR Logout

SSS Reports

Add | Paste

Enterprise Reports (Portfolio)

- Active CD-4 Projects
- Assessments - Current Period Detail (Portfolio)
- Attachments List - All Active Projects
- CD Approval Dates & Approved By
- CD-2 Planned Dates
- CD/BCP All Fields (Portfolio)
- CD/BCP Approval Dates
- Capital Asset Project Forecast
- Contact Assignments - All Projects
- FPD Certification Level by Program/Project
- FPD List w/ Certification
- Post CD-2 Active Projects
- Pre CD-3 Projects Planned Dates
- Program Structure
- Project Attributes (Portfolio)
- Project Descriptions
- Project List
- Projects On Hold
- Projects on Hold Post CD-2

EVMS Certification

- EVMS Certification by Contractor
- EVMS Certification by Site
- EVMS Certifications At CD-3
- EVMS Certifications Pre CD-3

Folder Name: Enterprise Reports (Portfolio)
Folder Description:
Report File: Browse... Upload

Helpful Hint: Enterprise Reports are portfolio based for all projects you have access.

Note: Program offices that have View access to all projects will need to filter by Program or new reports will need to be created.



SSS Reports - Metrics

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

Current Critical Decision: CD4
Current User: CREEMAR Logout

SSS Reports

Add | Paste

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics** (highlighted with a yellow oval)
- + ICE & EIR Planning - Pre CD-2
- + ICE Planning - Pre CD-3
- + ICE or ICR Planning - CD-0
- + Monthly Assessments for Metrics
- + PMCDP FPD Stats
- + PMCDP - Assigned FPDs
- + Project Reports
- + Reports For Testing
- + Schedule
- + Security
- + EM
- + NNSA
- + SC
- + Archived Prior Version Reports
- + My Reports
- + New Folder

METRICS REPORTS

The reports in the Metrics Folder are configured to support various metric analysis including the Corrective Action Plan (CAP).

Note: Additional reports will be added, as they are finalized.



SSS Reports - Project

U.S. DEPARTMENT OF ENERGY
PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

See next Slide for Report Detail

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 08/20/2012 CPP Data As Of Date: 10/31/2011

Current Critical Decision: CD4

Current User: CREEMAR Logout

SSS Reports

Add | Paste

Shared Reports

- Analysis Reports
- APM DepSec Monthly Reports
- Cost Performance
- DDR
- Enterprise Reports (Portfolio)
- EVMS Certification
- Metrics
- Project Reports

Assessments by Project - Current & Prior Periods

- BCP
- Critical Decision
- KPP
- Performance Baseline
- Project Attachments
- Project Attributes
- Project Contacts
- Project Detail
- Project Overview
- Project Quick View Mgmt Report
- Project Quick View Report
- Project Summary

Reports For Testing

Schedule

Security

FM

Helpful Hint: If a Project is not selected, then there will be no data available for the Project Reports.

PROJECT REPORTS

- The reports in Project Reports Folder are configured to provide information on the currently selected Project.
- The folder is configured for users who are interested in a specific project and need to report on several areas of interest.

Helpful Hint: This report provides a history of all assessments on an individual project. The report includes three tabs listing assessments from FPD, Program, and APM (formerly OECM) and all of the data elements from respective PARS II Monthly Status Screens.
All DOE Reporting periods since 10/2010 are available (or from the date a new project was entered into PARS II).

SSS Reports - Project

Project Detail



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A	B	C	D	E	F	G	H
1 Date Generated: 8/6/2012 PARS II Project ID: 000389 DOE Project: 05-D-405 - Salt Waste Processing Facility (SWPF) OA Status Date: 8/26/2012	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
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161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176
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7047	7048	7049	7040	7041	7042	7043	7044
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7043	7044</						



SSS Reports - Reports For Testing

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U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

Current Critical Decision: CD4
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

SSS Reports

Add | Paste

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
 - Reports For Testing**
 - + Schedule
 - Security
 - EM
 - NNSA
 - SC
 - + Archived Prior Version Reports
- + My Reports
- + New Folder

Helpful Hint: All new reports are initially put in the Reports for Testing folder.



SSS Reports - Schedule

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

Helpful Hint:
If the contractor is not uploading schedule data via the CPP Upload process, these reports will not be available.

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011 Current Critical Decision: CD4
Current User: CREEMAR Logout

SSS Reports

Add | Paste

- + Analysis Reports
- + APM DepSec Monthly Reports
- + APM Planning
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
- + Reports For Testing
- + Schedule** (highlighted with a yellow oval)
- + ANOVA Analysis
- + Activity Comparison
- + Activity Criticality and Float Analysis
- + Activity Detail Report
- + Activity Metrics
- + Activity Relationship Type Analysis
- + Activity Shadowing
- + Baseline to Current By Count
- + Critical Activity
- + Critical Activity ETI Analysis
- + Cumulative Activity Start and Finish Count
- + Elapse Time Index (ETI) Analysis
- + Schedule Missing Logic (Activity Level)
- + Schedule Slip Report

SCHEDULE REPORTS

- The reports in Schedule Folder are configured to provide information on a currently selected Project in PARS II.
- The source of the data in the schedule reports is the monthly CPP Data Upload.

Baseline Volatility - Past and Near-Term (PMB Level)

Office of Management
Office of Acquisition and Project Management
V-2012-12-04

Directions

Outline

- Matrix view of contractor incremental BCWS for a 12 month period (past six months and next six months) over the last 12 months
- Identify key baseline volatility measures to make educated decisions and assess contractor baseline control practices
- Use on projects that report detailed time-phased EV data into PARS II

Purpose

The purpose of the report is to demonstrate changes made to the time-phased performance measurement (or budget) baseline over a most recent 6 month period as well as near-term 6 month period using contractor time-phased BCWS.

Directions for Use

Report is split into two sections - past 6 months and near-term 6 months with a visible divider between the two that indicates Current Performance Period. A delta of five percent (5%) in any of the past 6 months Baseline Volatility calculations is considered an early warning indication that the project's time-phasing and control of budget is volatile and that a significant departure from the original plan has occurred. The near-term 6 months calculations indicate how volatile the near term baseline is over time.

- Baseline Volatility is an early warning indication that the project's time-phasing and control of budget is volatile and that a significant departure from the original plan has occurred.
- Substantial changes to the baseline time phasing indicate the contractor has inadequate plans in place and the performance metrics may be unreliable.
- Change is inevitable but the near term plan should be firm.
- Change to current period is considered a retroactive change once the period begins and should not happen. The current period should be a freeze period for baseline changes and changes within a current period can be an indicator of problems with the cycle time of the contractor's revisions processes.
- Report is designed no to display zero (0) values in the % Change cells. Therefore, blank cells indicate a true zero (0) percent (no change in values), while 0% indicates there is insignificant difference (< 0.5%) between compared values.

Legend

- Performance and data period combinations that are not included in any of the volatility calculations and analysis
- Performance and data period combinations that are included in the volatility calculations and analysis
- Incremental BCWS values that are reported for the reporting period in the reporting period. Data is only used in Current/Prior changes analysis and is not included in Min/Max or First/Last analysis.
- Report is designed no to display 0 values in the % Change cells. Therefore, blank cells indicate a true 0% (no change in values), while 0% indicates there is insignificant difference (< 0.5%) between compared values.



SSS Reports - EM, NNSA and SC

**U.S. DEPARTMENT OF ENERGY
PARS II**

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

Current Critical Decision: CD4
Current User: CREAMAR Logout

SSS Reports

Add | Paste

- + **Miscellaneous**
 - + **Project Reports**
 - + Reports For Testing
 - + Schedule
 - + Security
 - **EM**
 - + EM - EV Performance Report
 - + EM - Project Milestone Detail
 - + EM - Summary Project Data
 - + EM IPABS Data Export
 - + EM IPABS O&A Data Export
 - + EM Monthly Status Report
 - + EM Projects Assessment Data
 - + Project Quick View Mgmt Report
 - **NNSA**
 - + NNSA - EV Performance Report
 - + NNSA - Project Milestone Detail
 - + NNSA - Summary Project Data
 - + NNSA Monthly Status Report
 - + Project Quick View Mgmt Report
 - **SC**
 - + Office of Science - Summary Project Data
 - + Archived Prior Version Reports
- **My Reports**
- + **New Folder**

The EM, NNSA and SC Folders contain reports specifically request by each Program.

Business Rule: If a site would like specific reports in their own folder, we can add this under the program folder



SSS Reports - Archived Prior Version

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U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

Current Critical Decision: CD4
Current User: CREEMAR Logout

SSS Reports

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- + Cost Performance
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
- + Reports For Testing
- + Schedule
- + Security
- + EM
- + NNSA
- + SC
- Archived Prior Version Report
 - + 2A Project Summary Detail - Prior Period
 - + 3A Red- Yellow Project Status Report
 - + 4B Projects Post-CD-2
 - + 4C Projects Pre-CD-2
 - + CFO Report
 - + CPP Upload Status w/ CPI and SPI
 - + MR Balance v. Cum CV 12-mo Trend
 - + OECM Monthly Status Report
 - + OECM Quarterly Status Report
 - + Retroactive Change Indicator

Helpful Hint: Any old version of a report (Ex: retired or major updates) will be moved to this folder.



My Reports



OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project

Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: Closeout (BCP)

Current User: CREEMAR [Logout](#)

SSS Reports

Add | Paste

- **Shared Reports**
 - + Analysis Reports
 - + APM DepSec Monthly Reports
 - + Cost Performance
 - + DDR
 - + Enterprise Reports (Portfolio)
 - + EVMS Certification
 - + Metrics
 - + Project Reports
 - Reports For Testing
 - + Schedule
 - Security
 - + EM
 - + NNSA
 - + SC
 - + Archived Prior Version Reports
- + **My Reports**
- + New Folder

Helpful Hint: Any report copied from Shared Reports to My Reports, does not get updated when Shared Reports are changed.



Copy / Paste Reports

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)
Current User: CREEMAR Logout

SSS Reports

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- Cost Performance
 - = Cost Performance Reports - (CPR)
 - 1 CPR_Format_1
 - CPR_Format_2
 - CPR_Format_5
 - + OBS
 - + Program - Project
 - + Timephased Reports
 - + WBS
- + DDR
- + Enterprise Reports (Portfolio)
- + EVMS Certification
- + Metrics
- + Project Reports
 - Reports For Testing
- + Schedule
- + Security
- + EM
- + NNSA
- + SC
- + Archived Prior Version Reports

My Reports

- + My Folder
 - 5 CPR_Format_1
- + New Folder

Report Title: CPR_Format_1 (highlighted by yellow oval)

Report Subtitle:

Report Description:

Update Report File:

Created by: N/A

Modified by: N/A

Last viewed by: BIELEJO on 5/29/2012 1:07:01 PM

Actions: Add Folder, Add Report, Remove, Paste, Up, Down, Save

Numbered Steps:

1. Select / Highlight Report
2. Copy Button
3. Select Folder from My Reports
4. Paste Button
5. Verify Report



Configuration Query

U.S. DEPARTMENT OF ENERGY PARS II KCA

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 12/30/2011

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

SSS Reports

Add Remove Copy Paste Configure Query Save

My Reports

- New Folder (circled)
- 2A Project Summary Detail - Prior Period
 - DATA
 - DATA_PO
 - DATA_STATFPD
- 3A Red- Yellow Project Status Report
- 4B Projects Post-CD-2

Query Name: DATA
Query Description:

Select a Datasource from the dropdown list below to configure a query.
Data Source: Project Summary by Program

SSS Query Configuration

Field Selection Filter by Selection

Item	Field	Caption	Sort	Sort Order	Display	Summarize
1	Program	Program	Ascending	1	<input checked="" type="checkbox"/>	Group by
2	Project ID	PARS II Project ID	Ascending	2	<input checked="" type="checkbox"/>	Group by
3	CD2 Approved Date	CD2 Approved Date			<input checked="" type="checkbox"/>	Group by
4	Total Cost Pre CD-2	TC Pre CD-2			<input checked="" type="checkbox"/>	Sum
5	Total Cost Pre CD-2 No	TC Pre CD-2 No			<input checked="" type="checkbox"/>	Sum
6	Total Cost Post CD-2	TC Post CD-2			<input checked="" type="checkbox"/>	Sum
7	Total Cost Post CD-2 No	TC Post CD-2 No			<input checked="" type="checkbox"/>	Sum
8	Total Cost Post CD-2 Green	TC Post CD-2 Green			<input checked="" type="checkbox"/>	Sum
9	Total Cost Post CD-2 Green No	TC Post CD-2 Green No			<input checked="" type="checkbox"/>	Sum

Field Selection

SSS Query Configuration

Field Selection Filter by Selection

Item	Field	Criteria	Value	Logic
1	Program Name	does not equal		And
2	Project Category Code 1	equals	Active	And
3	Project Type Code 3	does not equal	SC-IT	And
4	OA Status Order	equals	1	

Filter By Selection



SSS Reporting - Data Sources

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U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

Helpful Hint:

- Data Sources, as designed by the COTS vendor, are not based on screens but rather the commonality of data. The individual Data Sources used on a report can be confusing as data that appears on a screen may be contained within multiple Data Sources.
- The same Data Source may be used multiple times when creating a report based on required fields and filter criteria.
- The tying of this information often requires advanced Excel skills.
- Data sources have also been created specifically to solve the timeout issues on large reports.

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/26/2012 CPP Data As-Of Date: 01/22/2012

Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

SSS Reports	
OA Datasources	
Data Source	Description
CAP Metric #1 and #2	Specially Designed Data Source for OEM Metrics and Monthly Reports
Critical Decision	Critical Decision (CD) Data By Project
Project Assignments	Data Source Identifies the Users Access Rights for Project Assignments
Project Attachments	Data Source That List All Project Attachments By Project
Project BCP	Baseline Change Proposal (BCP) Data By Project
Project Contact	Contacts And Certifications Data By Project
Project KPP	Key Performance Parameter (KPP) Data By Project
Project Monthly Status - FPD	FPD Monthly Status Data By Project
Project Monthly Status - OEMC	OEMC Monthly Status Data By Project
Project Monthly Status - Program	Program Monthly Status Data By Project
Project Narrative	Similar To Project Attachments Data Source, Only Narrative Data
Project Overview	Provides Overall Project Status Data By Project
Project Performance Baseline	Combined Cost Values Of TPC, Funding, And CPP Data By Project
Project Summary by Program	Specially Designed Data Source For ART 2A Report Summarized By Program
Project Timephased Funding	Timephased Funding Data By Project
Project/Program Definition	Project And Program Definition. The Same Data Elements Are Also Applied To All Other OA Data Sources
CPP Data Datasources	
Data Source	Description
Activity Predecessor Successor Detail	Activity Predecessor Successor Data from CPP Schedule Data
Activity Relationship	Activity Relationship Data from CPP Schedule Data
Contract Level Information	CPR Header Information Data by Project
Performance Data by OBS	Contractor Project Performance (CPP) Data by OBS
Performance Data by WBS	Contractor Project Performance (CPP) Data by WBS
Performance Future Data by OBS	Timephased CPP Data with Prior Periods by OBS
Performance Future Data by WBS	Timephased CPP Data with Prior Periods by WBS
Schedule Count Distribution by Activity	Activity Schedule Count Distribution Data from CPP Schedule Data
Schedule Data by Activity	Activity Schedule Data from CPP Schedule Data
Timephased Cost and Schedule by OBS	Timephased Schedule and Cost CPP Data Combined by OBS
Timephased Cost and Schedule by WBS	Timephased Schedule and Cost CPP Data Combined by WBS
Timephased Performance by OBS	Timephased CPP Data by OBS
Timephased Performance by WBS	Timephased CPP Data by WBS
WBS/OBS Matrix Data	WBS/OBS Matrix by Activity from CPP Schedule Data



Reports Button per Module

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The image displays two screenshots of a software interface showing the "Reports" button functionality across different modules.

Top Screenshot (Projects Module): Shows the "Projects" tab selected. The top navigation bar includes "Find", "Add", "Edit", "Remove", "View", "Attachments", and a "Reports" button, which is circled in red. A tooltip or callout points to this button with the text "SSS Reports". A modal window titled "SSS Reports" is open, listing report categories under "Projects Reports": Shared Reports (APM DepSec Monthly Reports, Enterprise Reports (Portfolio), Project Reports, Verification Reports (Project)), and a separate section for APM Red/Yellow Project Report, Project Quick View Mgmt Report, and Project Quick View Report. A "Close" button is at the bottom right of the modal.

Bottom Screenshot (Critical Decisions Module): Shows the "Critical Decisions" tab selected. The top navigation bar includes "Edit", "Save", "Cancel", "KPP", "Attachments", and a "Reports" button, which is also circled in red. A tooltip or callout points to this button with the text "SSS Reports". A modal window titled "SSS Reports" is open, listing report categories under "Critical Decisions Reports": Shared Reports (APM DepSec Monthly Reports, Archived Prior Version Reports, EM, Enterprise Reports (Portfolio), EVMS Certification, Metrics, NNSA, Project Reports, SC, Timephased Reports, Verification Reports (Project)), and a separate section for APM Monthly Status Report, APM Quarterly Status Report, and APM Red/Yellow Project Report. A "Close" button is at the bottom right of the modal.



Reports Button per Module

The screenshot shows a software interface for project management, specifically focusing on reporting. At the top, there are three tabs: "CPR Dashboard", "Schedule Dashboard", and "Timephased Dashboard". Each tab has a header bar with various icons and dropdown menus. A "Drilldown Reports" button is present in each header bar, highlighted with a yellow oval.

The "Timephased Dashboard" tab is currently active. Below it, a large window displays a hierarchical list of "Dynamic Drilldown Reports" under the "WBS DDR" category. The list includes:

- Dynamic Drilldown Reports
- Shared Reports
 - WBS DDR
 - WBS IEAC Analysis
 - WBS Performance Index Trends
 - WBS SPA Cost (Monthly)
 - WBS SPA Cost (Yearly)
 - WBS SPA Cost Schedule (Monthly)
 - WBS SPA Cost Schedule (Yearly)
 - WBS SPA Hours (Monthly)
 - WBS SPA Hours (Yearly)
 - WBS SPI vs. CPI Trend
 - WBS SV vs. CV Trend
 - WBS Summary Report



Request a Custom Report

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- **What is the purpose of the report**
- **What fields/information should be displayed on the report**
 - CD2 screen, FPD Assessment, etc.
 - CD4: WHICH ONE?
- **What fields/information to be calculated on the report**
- **(Proposed) Report Title**
- **Report period**
 - Status Date, Current or Prior Period
- **Who are the Users of the report**
- **Is this a new report, or a modification to an existing report**

Note: All Custom Report requests should be coordinated with your Program.



SSS Reports - Error Message

U.S. DEPARTMENT OF ENERGY PARS II

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

Selected Project: No Project Selected

Status Date: 03/26/2012 CPP Data As-Of Date: 03/26/2012

SSS Reports

iProgram

No Data for Report

No data was found for the report selected. The report template can be opened for editing, but the data shown will reflect the last time the report was saved, not the results of the current query.

Edit Cancel

Metrics
Monthly Reports
Project Reports
Reports For Testing
Schedule
Security
EM
NNSA
SC
My Reports
New Folder
New Folder Too
Cathe
Cathie's Remote Folder

Created by: N/A
Modified by: N/A
Last modified by: DUCHAST on 3/2/2012 1:18:51 PM

CPR Format 1

Browse... Upload

Helpful Hint: If you see the error message "No Data for Report", first verify that you do have a project selected. If the system has timed out, return to Oversight & Assessment and reselect your project,

Helpful Hint: If the project selected does not have data for the requested report, the above "No Data for report" error message will present.
EX: KPP's not entered on a CD1 project



PARS II Production Enhancements - Contractors' Access to SSS Reports

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/25/2011 CPP Data As-Of Date: 12/15/2011
Current Critical Decision: CD3 (BCP)
Current User: TRNCONT05 Logout

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
SSS Reports
HELP

As of PARS II Production Release 8.0.20120308, Contractors have been granted access to reports via the SSS Reports module.

SSS Reports All monetary values are in whole dollars.

Shared Reports

- + Analysis Reports
- + APM DepSec Monthly Reports
- + Cost Performance
- + DDR
 - Enterprise Reports (Portfolio)
 - EVMS Certification
 - Metrics
- + Project Reports
- + Reports For Testing
- + Schedule
 - Security
 - EM
 - NNSA
 - SC
- Archived Prior Version Reports

+ My Reports

Add | Paste

Select a Datasource from the dropdown list below to configure a query.

Data Source: Select Data Source...

- Account Log
- Activity Predecessor Successor Detail
- Activity Relationship
- Group - CA
- Group - Everyone
- Performance Data by OBS
- Performance Data by WBS
- Performance Future Data by OBS
- Performance Future Data by WBS
- Schedule Count Distribution by Activity
- Schedule Data by Activity
- Timephased Cost and Schedule by OBS
- Timephased Cost and Schedule by WBS
- Timephased Performance By OBS
- Timephased Performance By WBS
- WBS/OBS Matrix Data

Helpful Hint: The Group-Everyone and Group - CA Data Sources do not contain any data and are used for access rights only for SSS Reports.

Note: 14 Data Sources contain Contractor Project Performance (CPP) data uploaded by the Contractor.

PARS II Production Enhancements - Contractors' Access to SSS Reports



The screenshot shows the PARS II software interface. At the top, it displays the selected project as "000396 - 09-D-404 - Test Capabilities Revitalization (Phase II)" and the status date as "03/26/2012". It also shows the current critical decision as "CD3 (BCP)" and the current user as "TRNCONT05" with a "Logout" link.

The main window has a tab labeled "SSS Reports". A "Warning" dialog box is open, stating: "This report cannot be imported because it requires access rights you do not have." There is an "OK" button at the bottom of the dialog.

To the right of the dialog, there is a file upload interface. It includes fields for "New Folder:" and "Browse...", and a prominent "Upload" button, which is highlighted with a yellow oval.

On the left side of the interface, there is a sidebar with links for "OVERSIGHT & ASSESSMENT", "PROJECT PERFORMANCE", "ALL REPORTS", and "SSS Reports". Below this, a "HELP" link is visible.

Helpful Hint: Selecting "OK" will return the User to the SSS Reports Module.

Helpful Hint: If a User attempts to import a report that he/she does not have the appropriate security rights, the upload process will not complete and a Warning message will appear.



PARS II Production Enhancements - Contractors' Access to SSS Reports

- Shared Reports**
 - Cost Performance
 - Cost Performance Reports - (CPR)
 - + CPR Format 1
 - + CPR Format 2
 - + CPR Format 5
 - OBS
 - + OBS CPR Schedule Integration Report
 - + OBS Cumulative Analysis Chart
 - + OBS Cumulative Variance Analysis
 - + OBS IEAC Analysis
 - + OBS PM Summary
 - + OBS Performance Index Trends
 - + OBS SV% vs. CV% Quad Chart
 - Program - Project
 - + Management Reserve (MR) Log
 - + Project CPI vs. TCPI and ACI
 - + Project Favorable vs. Unfavorable Cost Variance
 - + Project Favorable vs. Unfavorable Schedule
 - + Project SPI vs. CPI Trend
 - + Project SV vs. CV Trend
 - + Project Summary
 - Timephased Reports
 - + Actual and Forecast Comparison
 - + Budgeted Cost Comparison
 - + Lifecycle CPI/SPI Trends
 - + Performance Comparison
 - WBS
 - + Performance Analysis (WBS Level)
 - + Performance Index Trends (WBS Level)
 - + Variance Analysis Cumulative (WBS Level)
 - + WBS CPR Schedule Integration Report
 - + WBS Cumulative Analysis Chart
 - + WBS IEAC Analysis
 - + WBS PM Summary
 - + WBS SV% vs. CV% Quad Chart
- OBS DDR
 - + OBS IEAC Analysis
 - + OBS SPA Cost (Monthly)
 - + OBS SPA Cost (Yearly)
 - + OBS SPA Cost Schedule (Monthly)
 - + OBS SPA Cost Schedule (Yearly)
 - + OBS SPA Hours (Monthly)
 - + OBS SPA Hours (Yearly)
 - + OBS SPI vs. CPI Trend
 - + OBS SV vs. CV Trend
 - + OBS Summary Report
 - + Performance Index Trends (Current Selected OBS)
- WBS DDR
 - + Performance Index Trends (Current Selected WBS)
 - + WBS IEAC Analysis
 - + WBS SPA Cost (Monthly)
 - + WBS SPA Cost (Yearly)
 - + WBS SPA Cost Schedule (Monthly)
 - + WBS SPA Cost Schedule (Yearly)
 - + WBS SPA Hours (Monthly)
 - + WBS SPA Hours (Yearly)
 - + WBS SPI vs. CPI Trend
 - + WBS SV vs. CV Trend
 - + WBS Summary Report
- Project Reports
 - + Project Summary
- APM DepSec Monthly Reports
 - + Verification Reports (Portfolio)
 - + Verification Reports (Project)
 - + APM Monthly Status Report
 - + APM Quarterly Status Report
 - + APM Red/Yellow Project Report
 - + APM Red/Yellow Project Report (Portfolio)
- Schedule
 - + ANOVA Analysis
 - + Activity Comparison
 - + Activity Criticality and Float Analysis
 - + Activity Detail Report
 - + Activity Metrics
 - + Activity Relationship Type Analysis
 - + Activity Shadowing
 - + Baseline to Current By Count
 - + Critical Activity
 - + Critical Activity ETI Analysis
 - + Cumulative Activity Start and Finish Count
 - + Elapse Time Index (ETI) Analysis
 - + Schedule Missing Logic (Activity Level)
 - + Schedule Slip Report
- Analysis Reports
 - + Baseline Volatility - Past and Near-Term (Funding Status)
 - + CPI vs. TCPI (PMB Level)
 - + EV Data Validity (WBS Level)
 - + EV Project Summary (6-Mo; PMB Level)
 - + Funding Status (Monthly at Project Level)
 - + IEAC Analysis (WBS Level)
 - + MR Balance v. CV, VAC, & EAC Trends
 - + Management Reserve (MR) Log
 - + Performance Analysis (WBS Level)
 - + Performance Index Trends (WBS Level)
 - + Retroactive Change Indicator (6-Mo, PMB Level)
 - + Schedule Missing Logic (Activity Level)
 - + Schedule Relationship Types (Activity Level)
 - + Variance Analysis Cumulative (WBS Level)



PARS II Production Enhancements - Contractors' Access to SSS Reports

Note: The Reports button on the Project List screen does not return any reports for Contractors as the available reports do not utilize CPP data.

Drilldown Reports

Drilldown Reports

Drilldown Reports

Dynamic Drilldown Reports

- Shared Reports
 - WBS DDR
 - WBS IEAC Analysis
 - WBS Performance Index Trends
 - WBS SPA Cost (Monthly)
 - WBS SPA Cost (Yearly)
 - WBS SPA Cost Schedule (Monthly)
 - WBS SPA Cost Schedule (Yearly)
 - WBS SPA Hours (Monthly)
 - WBS SPA Hours (Yearly)
 - WBS SPI vs. CPI Trend
 - WBS SV vs. CV Trend
 - WBS Summary Report
 - OBS DDR
 - OBS IEAC Analysis
 - OBS Performance Index Trends
 - OBS SPA Cost (Monthly)
 - OBS SPA Cost (Yearly)
 - OBS SPA Cost Schedule (Monthly)
 - OBS SPA Cost Schedule (Yearly)
 - OBS SPA Hours (Monthly)
 - OBS SPA Hours (Yearly)
 - OBS SPI vs. CPI Trend
 - OBS SV vs. CV Trend
 - OBS Summary Report



PARS II SSS Reports Wrap-Up

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- Information Tab
 - Shared Folders
 - My Reports
 - Contracts
 - Data
 - Reports
 - How to View a Report
 - SSS Report Usage
 - Contractors' Access to SSS Reports
- 

PARS II Wrap-Up





PARS II Production Enhancements

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- **Project Attributes**
 - New Tabs
- **Budget / Funding**
 - AE Mod Profiles
 - CD2 Profile
- **View/Edit Rights Per Project**
 - Program View Access
 - Change from Edit to View rights for completed projects
- **Report Security**
 - Contractor's now have access to all EV Reports for their project portfolio
- **Timephasing of OA Data**
- **Numerous anomaly corrections**
 - Updated Date / Updated By
 - “Planned” Planned Dates carry-over from BCPs to CDs
- **Search screen enhancement for Project Organization (Level 2)**



Help Module - User Guide



Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/23/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)
Current User: TRNCONT05 Logout

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
HELP
About
User Guide

User Guide

All monetary values are in whole dollars.

Click to view the User's Guide Information

http://energy.gov/sites/prod/files/maprod/documents/PARS_II_User_Guide.p...

File Edit Go To Favorites Help

Favorites Earned Value Management ... PARS II TEST STEVE SNOT PARS2 Admin

http://energy.gov/sites/prod/fil... Page Safety Tools ?

U.S. Department of Energy

PARS II

Project Assessment and Reporting System

User Guide

Done 100% 12/18/2011 8:00 AM/6:00 PM Unknown Zone

The screenshot shows the PARS II User Guide page. At the top, there is a navigation bar with links for File, Edit, Go To, Favorites, and Help. Below the navigation bar, there are favorite links for 'Earned Value Management ...', 'PARS II TEST STEVE SNOT', and 'PARS2 Admin'. The main content area features the U.S. Department of Energy logo, the 'PARS II' title, and the subtitle 'Project Assessment and Reporting System'. Below this, the word 'User Guide' is prominently displayed. A large image in the center shows a construction site with workers and heavy machinery, overlaid with a screenshot of the PARS II software interface, which includes a table of project data and a map. At the bottom of the page, there is a progress bar indicating '100%' completion, the date '12/18/2011', the time '8:00 AM/6:00 PM', and a status message 'Unknown Zone'.

As of PARS II Production Release 8.0.20120308, clicking on the link will display the User Guide from the PARS II web site in either another tab or another window, depending on how the browser is configured.



PARS II Help Desk

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The Helpdesk does not have the authority to change OA data within PARS II. Requests/Questions submitted are forwarded to APM.

- Password Reset
- CPP Upload Issues
- Workstation Configuration
- Project Find/Search

The more information that you provide, the faster the issue can be resolved.

- The hours of operation for the PARS II Helpdesk are 8am-5PM, M-F.
- Email - I-Manage.Eas@hq.doe.gov
- 301-903-2500 (option 4, then option 5)
- 866-834-6246 (option 4, then option 5)



PARS II Information and Documentation

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- **PARS II User Guide**
 - http://energy.gov/sites/prod/files/maprod/documents/PARS_II_User_Guide.pdf
- **PARS II SOP (Standard Operating Procedures)**
 - http://energy.gov/sites/prod/files/PARS_II_SOP_Version_1.1_2011_08_11.pdf
- **PARS II Change Request Form**
 - http://energy.gov/sites/prod/files/maprod/documents/PARS_II_Change_Request_Form.pdf
- **PARS II Training Schedule**
 - http://energy.gov/sites/prod/files/PARS_II_Training_Schedule_1.pdf
- **PARS II Training Course Registration**
 - <http://energy.gov/management/pars-ii-course-registration>

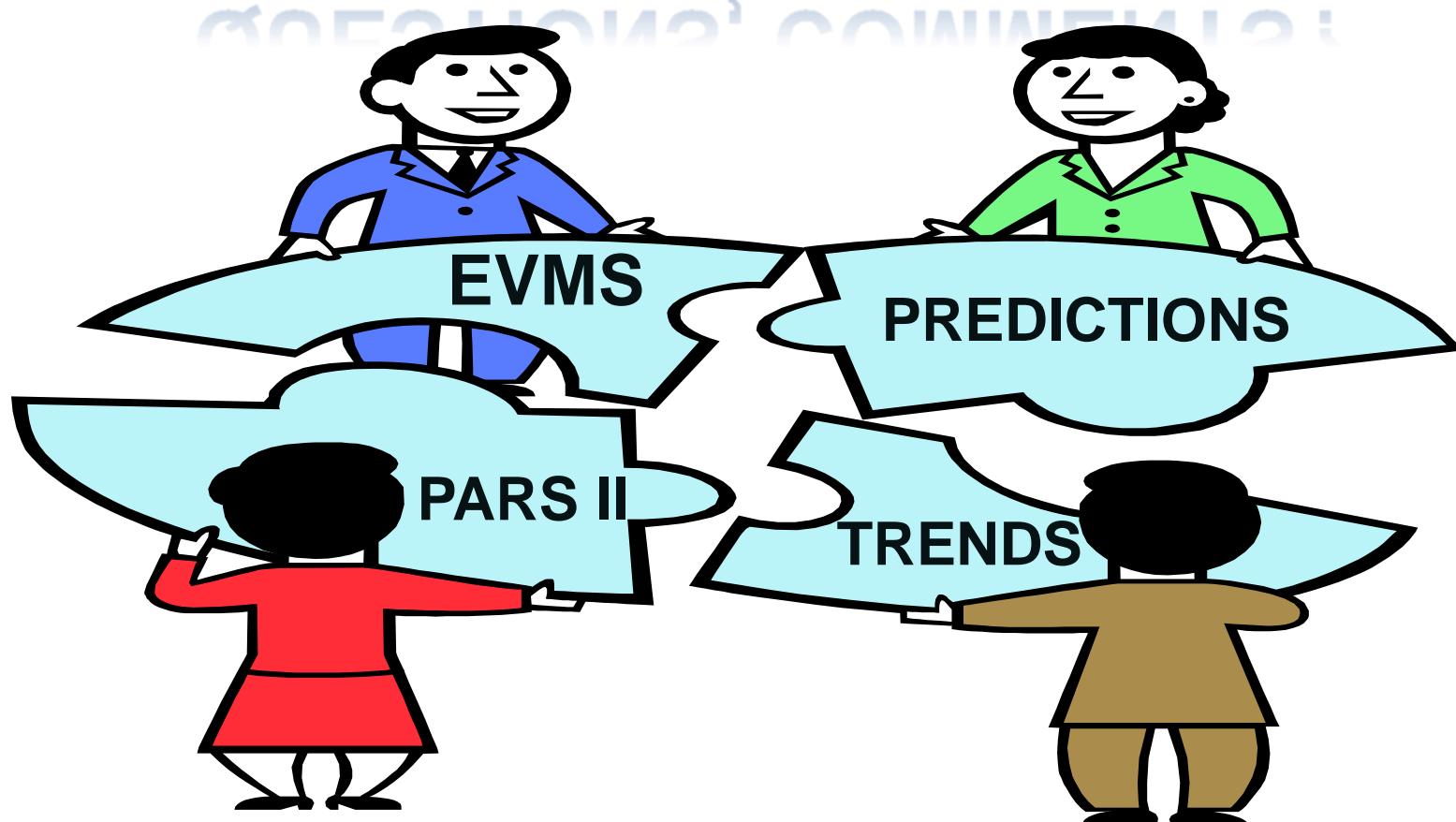


PARS II Questions

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- **PARS II Overview**
 - **Navigating PARS II**
 - **PARS II Reporting**
 - **PARS II Roles and Responsibilities**
 - **PARS II Reports and Analytics**
 - **Standard and Custom Reports in PARS II**
- 

QUESTIONS, COMMENTS?





Appendix

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- **Acronyms**
- **DOE EVMS Gold Card**
- **ANSI /EIA-748 Guidelines - Business & Management Processes**
- **DOE EVMS Risk Assessment Matrix and Instructions**
- **Conducting An EVMS Data Trace**
 - Organization
 - Scheduling
 - Management & Analysis
 - Budgeting
 - Change Management
 - Material Management
 - Subcontract Management



Acronyms

AC	Actual Cost	DCMA	Defense Contract Management Agency
ACI	Actual Cost Index	DDR	Dynamic Drilldown Report
Act Dur	Actual Duration	DFPD	Deputy Federal Project Director
ACWP	Actual Cost of Work Performed	DNFSB	Defense Nuclear Facilities Safety Board
AE	Acquisition Executive	DoD	Department of Defense
AFDATE	Actual Finish Date	DOE	Department Of Energy
ANSI	American National Stds Institute	EAC	Estimate At Completion
APM	Office of Acquisition and Project Management (MA60)	ECP	Engineering Change Proposal
ARRA	American Recovery and Reinvestment Act	ECWR	Estimated Cost of Work Remaining
ASDATE	Actual Start Date	EERE	Office of Energy Efficiency and Renewable Energy
AUW	Authorized Unpriced Work	EFCOG	Energy Facilities Contractors Operating Group
BAC	Budget At Complete	EFDATE	Early Finish Date
BCP	Baseline Change Proposal	EIA	Electronic Industries Alliance
BCWP	Budgeted Cost for Work Performed	EIR	External Independent Review
BCWR	Budgeted Cost of Work Remaining	EIS	Environmental Impact Statement
BCWS	Budgeted Cost for Work Scheduled	EM	Office of Environmental Management
BOM	Bill of Material	EMAAB	Environmental Management Acquisition Advisory Board
B-Finish	Baseline Finish Date	EM-C	Office of Environmental Management - clean up
B-Org Dur	Baseline Original Duration	EM-L	Office of Environmental Management - line item
B-Start	Baseline Start Date	EPA	Environmental Protection Agency
CA	Control Account	ESAAB	Energy Systems Acquisition Advisory Board
CA	Corrective Action	ESDATE	Early Start Date
CAD	Computer-aided Design	ESSOP	EVMS Surveillance Standard Operating Procedure
CAM	Control Account Manager	ETC	Estimate To Complete
CAP	Corrective Action Plan	ETI	Elapsed Time Index
CAR	Corrective Action Request	EV	Earned Value
CBB	Contract Budget Base	EVM	Earned Value Management
CBR	Congressional Budget Request	EVMS	Earned Value Management System
CD	Critical Decision	FAQ	Frequently Asked Questions
CFA	Civilian Federal Agency	FAR	Federal Acquisition Regulations
CIO	Continuous Improvement Opportunity	FE	Office of Fossil Energy
CM	Corrective Measure	FPD	Federal Project Director
CO	Contracting Officer	FPM	Federal Program Manager
CP	Contract Price	FS	Finish-Start
CPI	Cost Performance Index	FY	Fiscal Year
CPP	Contractor Project Performance	GAO	Government Accountability Office
CPR	Cost Performance Review	GFE	Government Furnished Equipment
Cum	Cumulative	GFM	Government Furnished Material
CV	Cost Variance	GL	Guideline
CWBS	Contract Work Breakdown Structure	HQ	Headquarters
D&D	Decontamination & Decommissioning	ICE	Independent Cost Estimate



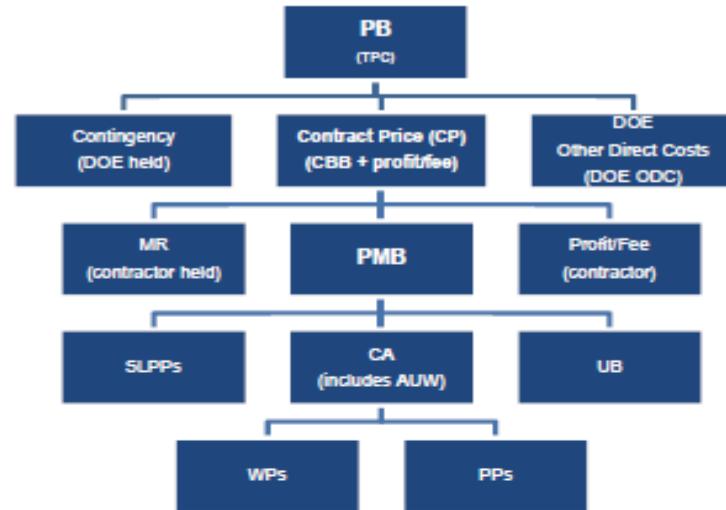
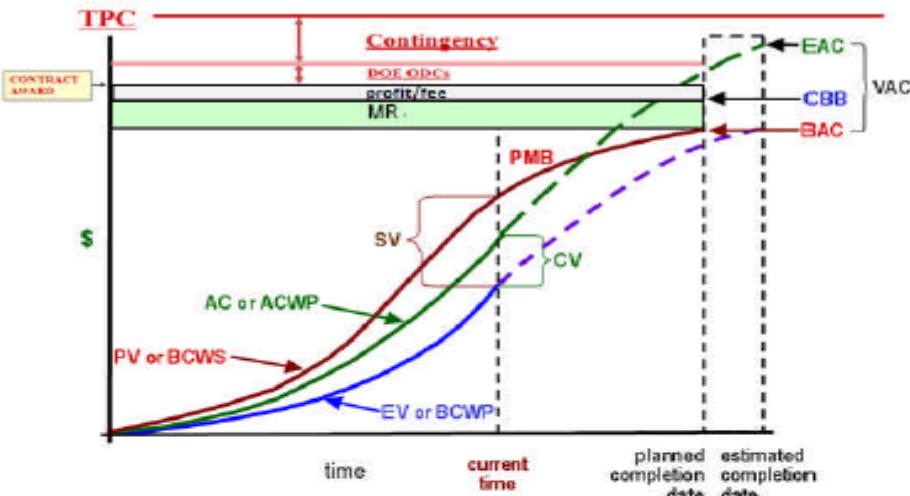
Acronyms

ICR	Independent Cost Review	PDRI	Project Definition Rating Index
ID	Identification	PED	Project Engineering and Design
IDIQ	Indefinite-Delivery Indefinite-Quantity	PM	Project Management
IEAC	Independent Estimate At Complete	PMB	Performance Measurement Baseline
IMS	Integrated Master Schedule	PMSO	Project Management Support Office
Inc	Incremental	PO	Program Office
IPL	Integrated Priority List	POC	Point of Contact
IPR	Independent Project Review	PP	Planning Package
IPT	Integrated Project Team	PV	Planned Value
KPP	Key Performance Parameter	RAM	Responsibility Assignment Matrix
LCC	Life Cycle Cost	RCA	Root Cause Analysis
LFDATE	Late Finish Date	REA	Reasonable Equitable Adjustment
LOE	Level of Effort	Rem Dur	Remaining Duration
LRE	Latest Revised Estimate	RFC	Review for Cause
LSDATE	Late Start Date	ROD	Record Of Decision
LM	Office of Legacy Management	ROP	Rest of Project
MA	Office Of Management	RW	Office of Civilian Radioactive Waste Management
MIS	Management Information Systems	RYG	Red Yellow Green
MOD	Contract Modification(s)	SAE	Secretarial Acquisition Executive
MR	Management Reserve	SC	Office of Science
N/A	Not Applicable	SLPP	Summary Level Planning Package
NA	National Nuclear Security Administration	SOP	Standard Operating Procedures
NDIA	National Defense Industry Association	SOW	Statement of Work
NE	Office of Nuclear Energy	SPA	Schedule, Performance, Actuals
NEPA	National Environmental Policy Act	SPI	Schedule Performance Index
NR	Not Reporting	SSOM	Standard Surveillance Operating Manual
OA	Oversight and Assessment (or O&A)	SSS	Sort, Select and Summarize
OBS	Organization Breakdown Structure	SV	Schedule Variance
ODC	Other Direct Costs	TEC	Total Estimated Cost
OECM	Office Of Engineering And Construction Management	TCPI	To Complete Performance Index
OMB	Office of Management and Budget	TPC	Total Project Cost
OPC	Other Project Cost	TRA	Technical Readiness Assessment
Org Dur	Original Duration	UB	Undistributed Budget
ORR	Operational Readiness Review	UNCI	Unclassified Controlled Nuclear Information
OTB	Over Target Baseline	VAC	Variance At Complete
OUO	Official Use Only	VAR	Variance Analysis Report
PARS II	Project Assessment And Reporting System II	WAPA	Western Area Power Administration
PB	Performance Baseline	WBS	Work Breakdown Structure
PBS	Program Baseline Summary	WP	Work Package
PDS	Project Data Sheet	WR	Work Remaining



DOE EVMS Gold Card

DOE EVMS GOLD CARD Rev.5



PERFORMANCE BASELINE COMPONENTS

(Performance Baseline must clearly document scope/KPPs, TPC and CD-4 date)

AUW	= Authorized Unpriced Work (contractually approved, but not yet negotiated)
CA	= Control Account (includes AUW) = WPs + PPs
CBB	= Contract Budget Base = PMB + MR
CP	= Contract Price = CBB + profit/fee
MR	= Management Reserve is held by contractor (Contingency is held by DOE)
PB	= Performance Baseline (TPC) = CP + Contingency + DOE ODC
PMB	= Performance Measurement Baseline = CAs + UB + SLPPs
PP	= Planning Package (far-term activities within a CA)
SLPP	= Summary Level Planning Package
UB	= Undistributed Budget (activities not yet distributed to CA)
WP	= Work Package (near-term, detail-planned activities within a CA)

EVMS BASIC COMPONENTS*

AC	= ACWP	= Actual Cost of Work Performed
EV	= BCWP	= Budgeted Cost of Work Performed
PV	= BCWS	= Budgeted Cost of Work Scheduled
BAC	= Σ BCWS	= Sum of Budgeted Cost of Work Scheduled

* For analysis purposes, AC, EV and PV calculations may be based on various time periods, e.g., monthly, cumulative, last 3 months from CD-2 or BCP or internal replan.

VARIANCES*

CV	= EV - AC	= BCWP - ACWP	= Cost Variance
SV	= EV - PV	= BCWP - BCWS	= Schedule Variance
CV%	= (EV - AC) / EV	= (BCWP - ACWP) / BCWP	= Cost Variance (%)
SV%	= (EV - PV) / PV	= (BCWP - BCWS) / BCWS	= Schedule Variance (%)
VAC	= BAC - EAC		= Variance at Completion
VAC%	= VAC / BAC		

OVERALL STATUS

% scheduled	= PV_{cum} / BAC	= $BCWS_{cum}$ / BAC
% complete	= EV_{cum} / BAC	= $BCWP_{cum}$ / BAC
% budget spent	= AC_{cum} / BAC	= $ACWP_{cum}$ / BAC
Work Remaining (WR)	= BAC - EV_{cum}	= BAC - $BCWP_{cum}$

PERFORMANCE INDICES*

CPI	= EV / AC	= BCWP / ACWP	= Cost Performance Index
SPI	= EV / PV	= BCWP / BCWS	= Schedule Performance Index
TCPI _{BAC}	= WR / (BAC - ACWP _{cum})	= BAC-based To Complete Performance Index	
TCPI _{EAC}	= WR / (EAC - ACWP _{cum})	= EAC-based To Complete Performance Index	

COMPLETION ESTIMATES

EAC	= BAC / CPI _{cum}	= Estimate at Completion (general)
EAC _{CP}	= AC _{cum} + WR / CPI _{cum}	= Estimate at Completion (CPI)
EAC _{composite}	= AC _{cum} + WR / (CPI _{cum} * SPI _{cum})	= Estimate at Completion (composite)
ETC	= EAC - AC _{cum}	= Estimated to Complete



ANSI /EIA-748 Guidelines and Organization Process Alignment

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ANSI/EIA-748 Guidelines							BUSINESS AND MANAGEMENT PROCESSES		
	ORGANIZING	SCHEDULING	WORK AUTHORIZATION	ACCOUNTING	INDIRECT MANAGEMENT	MANAGEMENT & ANALYSIS	CHANGE MANAGEMENT	MATERIAL MANAGEMENT	SUBCONTRACT MANAGEMENT
ORGANIZATION									
2-1a	Define authorized work	X							
2-1b	Identify Program/Organization Structure	X							X
2-1c	Organization integration of EVMS subsystems with WBS and OBS	X							
2-1d	Identify organization/function for overhead						X		
2-1e	Integrate WBS & OBS; create control accounts	X							
PLANNING, SCHEDULING & BUDGETING									
2-2a	Sequential scheduling of work	X							
2-2b	Identify interim measures of progress, i.e., milestones, products, etc.		X						
2-2c	Establish time-phased budget		X						
2-2d	Identify significant cost elements within authorized budgets	X	X				X	X	
2-2e	Identify discrete work packages	X	X				X	X	
2-2f	All work package budgets & planning packages sum to control acct		X						
2-2g	Identify and control LOB budgets		X						
2-2h	Establish overhead budgets by organization element		X						
2-2i	Identify management reserve and undistributed budget		X						
2-2j	Reconcile program target cost goal with sum of all internal budgets	X							
ACCOUNTING CONSIDERATIONS									
2-3a	Record direct costs from accounting system	X							
2-3b	Summarize direct costs into WBS without allocation		X						
2-3c	Summarize direct costs into OBS without allocation		X						
2-3d	Record indirect costs		X						
2-3e	Identify unit costs, equivalent units, costs or lot costs		X						
2-3f	Accurate material cost accumulation by control accounts; EV measurement at right time; full accountability of material		X						
ANALYSIS AND MANAGEMENT REPORTS									
2-4a	Control account monthly summary, identification of CV and SV	X	X	X	X	X	X	X	X
2-4b	Explain significant variances		X			X	X	X	X
2-4c	Identify and explain indirect cost variances				X				
2-4d	Summarize data elements and variances thru WBS/OBS for mgmt				X				
2-4e	Implement management actions as result of EVM analysis	X			X				
2-4f	Review EAC based on performance data; calculate VAC	X		X	X	X	X	X	X
REVISIONS AND DATA MAINTENANCE									
2-5a	Incorporate authorized changes in timely manner							X	
2-5b	Reconcile budgets with prior budgets						X	X	
2-5c	Control retrospective changes						X	X	
2-5d	Prevent all but authorized budget changes						X	X	
2-5e	Document changes to PMB						X	X	



Exercise 1: EVMS Risk Matrix, pg 2 of 7

DOE EVMS RISK ASSESSMENT MATRIX

EVMS RISK MATRIX (rev 05/15/2012)		DATE:		ANALYST:	
CONTRACTOR:		PMSO:		PROJECT:	
RISK	HIGH	MEDIUM	LOW	RISK LEVEL	
PROJECT PHASE	PRIOR to CD-3: Organizing, Scheduling, Work/Budget Authorization		EARLY to MID CD-3: Accounting, Material Mgmt, Change Incorporation	LATE CD-3: Managerial Analysis, Change Incorporation	
PM EVM EXPERIENCE	< 2 YRS Organizing, Scheduling, Managerial Analysis		2 – 5 YRS Scheduling, Managerial Analysis	> 5 YRS Managerial Analysis	
CONTRACT BUDGET BASE VALUE	≥ \$100M Work/Budget Authorization, Accounting, Managerial Analysis		\$50M ≤ \$100M Work/Budget Authorization	\$20M < \$50M Scheduling	
PRIME WORK REMAINING %	> 50% Managerial Analysis, Change Incorporation		10 - 50% Managerial Analysis, Change Incorporation	< 10% Accounting, Material Mgmt	
SUBCONTRACTOR WORK REMAINING %	> 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis		10 – 50% Work/Budget Auth, Scheduling, Subcontract Mgmt, Managerial Analysis	< 10% Accounting, Subcontract Management	
MATERIAL REMAINING %	>30% Work/Budget Auth, Scheduling, Accounting, Material Management		15 – 30% Accounting, Material Management	< 15% Material Management	
MANAGEMENT RESERVE REMAINING %	< 5% BCWR Work/Budget Authorization, Change Incorporation		5 – 10% BCWR Work/Budget Authorization, Change Incorporation	> 10% BCWR Change Incorporation	
BASELINE RESETS	2 OR MORE Work/Budget Authorization, Change Incorporation, Scheduling		1 Work/Budget Authorization, Organizing	NONE Organizing	
SV%, CV%, OR VAC%	> 10% Accounting, Indirect Mgmt, Managerial Analysis		5 - 10% Indirect Management, Managerial Analysis	< 5% Managerial Analysis	
MISSING SCHEDULE LOGIC	>15% Scheduling, Managerial Analysis		5 – 15% Scheduling	< 5% Scheduling, Work/Budget Authorization	
BASELINE VOLATILITY	> 15% Change Incorporation, Accounting		5 - 15% Change Incorporation, Accounting	< 5% Managerial Analysis	
CURRENT PERIOD CHANGES	>0% Change Incorporation		0% (NEGLIGIBLE) Change Incorporation	BLANK NA	
DATA VALIDITY	CONTINUAL CONCERNS Managerial Analysis		PERIODIC CONCERNS Managerial Analysis	NO CONCERNS NA	
ONGOING SYSTEMS ISSUES	MULTIPLE UNRESOLVED Affected Processes:		SINGLE UNRESOLVED Affected Processes:	NONE NA	
TIME SINCE LAST REVIEW	>12 MO. All Process Groups		6 -12 MO. Processes Not Yet Reviewed	< 6 MO. Follow All Above	



Exercise 1: EVMS Risk Matrix, pg 3 of 7

INSTRUCTIONS FOR EVMS RISK ASSESSMENT MATRIX

COMPLETE ALL AREAS IN BLUE.

PROJECT PHASE: Determine current phase of the project: Prior to CD-3, Early to Mid CD-3, Late CD-3 (less than 6 months to CD-4). See PARS II Project Overview Report.

PM EVM EXPERIENCE: How many years of EVM experience does the Contractor's Program Manager have?

CBB VALUE: What is the value of the CBB (Performance Measurement Baseline plus Management Reserve) for the project? See PARS II Project Overview Report.

PRIME AND SUBCONTRACTOR WORK REMAINING PERCENTAGE: If the CPR data in PARSII is not segregated by 'prime' vs 'subcontractor', then obtain the data from the contractor to determine value of prime vs subcontractor work remaining.

If the data reported in the PARS II uses a WBS structure that allows visibility into prime vs subcontractor effort, then from the BAC and BCWPcum for each (prime, subcontractor), calculate the BCWR using the following formula: Budgeted cost of work remaining, $BCWR = BAC - BCWPcum$

Lastly, calculate % of BCWR for each as compared to the total effort remaining. (Subcontractor % plus prime % equals 100%).

MATERIAL REMAINING %: Of total original material budget, what is the percentage of remaining material budget? $(Material\ BAC - Material\ BCWPcum) / Material\ BAC$

Information is available from the contractor's EVMS, either from a) a contractor provided report with a code to designate material cost, or b) by obtaining \ the entire CPR by element of cost. Note: The contractor should always be able to produce this (GL 9) and we have access to this data per DOE O 413.3B and FAR 52.2.

MANAGEMENT RESERVE REMAINING %: Calculate MR remaining as a percentage of budgeted cost of work remaining (BCWR). $MR / (BAC - BCWPcum)$

BASELINE RESETS: Determine the number of times the baseline has been reset since inception, i.e. variances were eliminated by rebaselining actions. Use the number of external BCPs and single point adjustments (internal BCPs).

SV%, CV%, AND VAC%. Calculate the cum SV%, CV%, and VAC% based on the most recent CPR data and select highest. For high dollar projects, using the 6 or 12 month cum may be more indicative of risk. See PARS II Project Summary Report.

MISSING SCHEDULE LOGIC: Use Schedule Missing Logic (Activity Level) report from PARS II to determine % of missing logic

BASELINE VOLATILITY: Use the Baseline Volatility - Past and Near-Term (PMB Level) report from PARS II (based on end of period Format 3 baseline plan for next 6 periods) to determine % average percent change of PMB over a six month period (based on last 12 months of data). (choose greater of absolute values of min/max and first/last).

CURRENT PERIOD CHANGES: Use the Baseline Volatility – Past and Near-Term (PMB Level) report from PARS II to determine the extent of current period changes over the past 6 months. Choose the largest monthly value from the past six months.

DATA VALIDITY: Using the PARS II EV Data Validity (WBS Level) report, review the monthly reports to determine if the validity concerns are (1) continual, periodic, or negligible, and (2) explainable or caused by process issues.

ONGOING SYSTEM ISSUES: Looking at the open EVM-related CARs from previous reviews, how many systemic issues are still unresolved – Multiple, Single, or none? Consider the number of unresolved CARs escalated, if system compliance in jeopardy, or if system compliance has been revoked.

Type affected processes into the pink block spelled exactly as they are in this list: Organizing, Scheduling, Work/Budget Authorization, Accounting, Indirect Management, Management and Analysis, Change Incorporation, Material Management, Subcontractor Management.

TIME SINCE LAST REVIEW: How long has it been since this project was last reviewed under System-Level Surveillance? DOE O 413.3B requires at least every 24 months. If it has been more than 12 months or is a new contract never reviewed, rate this element as high risk and consider this program/contract for review for all process groups when prioritizing projects for the Annual EVMS System Schedule. Likewise, if it has been 6 to 12 months since last reviewed, then rate this element as moderate risk and consider all processes not yet reviewed as moderate risk.



Conducting An EVMS Data Trace

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- One of the objectives of a surveillance review is to ensure traceability throughout the system.
- The following slides provide some examples of traces that should be conducted for selected work packages or activities associated with work scope, authorization and responsibilities. The guideline(s) that may relate to the trace are provided in parentheses.
- This list is intended as a guide only and is not all-inclusive.
- If any inconsistencies or anomalies are apparent, they are to be addressed in Corrective Action Requests as appropriate.
- When conducting traces, you should document your evidence and attach examples where possible.

Conducting An EVMS Data Trace - Organization



ORGANIZATION

Guideline	Data Trace Method
1	Determine which control account contains the trace item by reviewing the Contract Work Breakdown Structure (CWBS) and CWBS dictionary. Ensure that the CWBS and CWBS dictionary adequately define the contractual effort to be accomplished within this control account. Annotate the CWBS and CWBS dictionary pages to indicate the contract line item and end item elements that relate to this control account.
2, 4	Review the Responsibility Assignment Matrix (RAM) to locate the control account that contains the trace item. Ensure that this control account is assigned to a responsible organization element that is consistent with the effort to be accomplished. Annotate the RAM to indicate that the control account was developed at the intersection of the CWBS to the organizational structure and that the CWBS was extended down to the control account level.
3, 22, 26, 27	Review the work authorization documents for the control account that contain the trace item. Verify that the organization assigned in the RAM, is the responsible organization in the work authorization documents. Ensure that the work authorization documents are approved and signed by the responsible functional managers designated in the RAM. Ensure that the work authorization and CWBS definitions of the effort to be accomplished within the control account are consistent. Provide the control account work authorization documents as exhibits.
1	Select sample from Statement of Work (SOW) and verify its inclusion in the WBS dictionary and vice versa.



Conducting An EVMS Data Trace - Scheduling

SCHEDULING	
Guideline	Data Trace Method
6	Review control account/work package schedules. Ensure that the scheduled dates on the authorization document for the control account are the same as the dates on the detailed plans.
6, 7	Confirm that the schedule contains all contractual activities.
6	Accomplish a vertical schedule trace which shows the flow from these schedules through the intermediate schedules to the master schedules.
6	Accomplish a horizontal trace which shows that the appropriate control accounts and work packages are logically linked (use network schedules if available).
7, 23	If appropriate, confirm the identification of work progress and forecast of completion dates. Check that the CAM's status (as shown on the status turn-around document) has been reflected on the revised schedule.

Conducting An EVMS Data Trace - Management and Analysis



MANAGEMENT and ANALYSIS	
Guideline	Data Trace Method
16, 22	Ensure that earned value is being claimed in the same manner in which it was planned. For example, if an earned value technique of 0-100% is used, there should be no interim BCWP claimed.
27	Ensure that any EAC reported reflects information to date. Check that cumulative variances are either explained and a corrective action plan is in place or the variance is reflected in the EAC.
27	Check EAC amounts for completed control accounts or work packages and ensure that the ACWP does not exceed the EAC (should be equal).
23, 26	<p>Review variance analysis reports to ensure the following</p> <ul style="list-style-type: none">• Reasons are adequately explained (i.e. it does not simply say that there was a variance)• Impact is identified, how it affects other control accounts and whether it affects the program overall• Corrective action or recovery plan is identified and implemented• Analysis is approved at a higher level than it is prepared



Conducting An EVMS Data Trace - Budgeting

BUDGETING

Guideline	Data Trace Method
8, 10	Review the Control Account Planning sheets for the control account that contains the items. Confirm that these plans reflect the way in which work is to be done, that there is an appropriate number of work packages versus planning packages, and that the planning packages are neither too general nor too large in scope, value, and duration.
9, 10, 11	Review control account documentation and internal reports as they pertain to the trace items. Ensure that the sum of the planning package budgets plus the work package budgets equals the control-account budget. Ensure that the planning packages have their own budget values and that there are adequate procedures for converting a planning package into a work package.
8	Review control account planning sheets and other performance measurement reports for the control account that contains the trace item. Determine how BCWS was time-phased and established. Determine if these budgets were established in a manner which is consistent with the method used for material accounting (if applicable).
15, 29	Review the budget information in the Work Authorization documents, the RAM, and the internal performance measurement reports to ensure that they are reconcilable. Then check that the amounts on internal Cost Performance Report are consistent with the external report being forwarded to the Government.
9	Select a sample of control account plans and ensure that budget is broken down by significant cost elements (labor, material, ODC etcetera) as appropriate.
12	Review LOE content of control account budgets to ensure it is only applied where appropriate. If possible obtain a summary of LOE accounts from the contractor.
14	Obtain MR and UB logs and trace from entry in logs to location of transfer. Also reconcile with CPR amounts.



Conducting An EVMS Data Trace - Change Management

CHANGE MANAGEMENT	
Guideline	Data Trace Method
14, 28, 29, 32	Review change request documents to ensure that traceability exists between the control account(s), change requests, MR, UB as appropriate (including current budget trace to original budget).
28, 30	Approval dates on change request documentation should be in advance of the period of the proposed change. This needs to be in accordance with whatever the system description says about “freeze periods” for changes, e.g. current period.
28	Check the cycle time to incorporate changes into control account plans from submittal, approval to incorporation. Timeliness is important because for open work packages, changes are to be incorporated into the baseline for future activities only (i.e. beyond the current period.) Changing BCWS in the current period is inappropriate.

Conducting An EVMS Data Trace - Material Management



MATERIAL MANAGEMENT	
Guideline	Data Trace Method
16, 22	Select a material item for each type of material and trace its flow through the procurement cycle. This should include the bill of materials, purchase orders, billing, issuing from inventory types of documentation. Ensure that material items are being tracked from control account authorization to completion.
9	Review how budgets including scrap and attrition values were established. Check to see that BCWP is being claimed in the same manner in which it was planned.
27	Review how the material budgets are time-phased to ensure it is consistent with the requirements of the system description and how the work is being performed
22, 23	Review internal reports that identify initial material quantities and then review documents provided to CAM to assess actual usage etc. Check variance analysis reports to determine whether price and usage variances are separated for managerial analysis.
9	If applicable, locate the trace item in the bill of material (BOM) and/or purchase order. Check for consistency and determine how total budget values were established.
12	Establish the value of the material and how much is being claimed as LOE. Generally only low-value material should be claimed as LOE.
27	Ensure that commitment values for material and actual material costs are incorporated into the EAC in a timely manner.

Conducting An EVMS Data Trace - Subcontract Management



SUBCONTRACT MANAGEMENT	
Guideline	Data Trace Method
2	Ensure that the responsibility for subcontract management is identified
9, 10, 12	BCWS should be based upon identifiable milestones where possible and the use of LOE is minimized. Check to see how the subcontracted effort is planned and what earned value technique is attributed to measure performance.
6, 23	Ensure subcontractor schedules are vertically and horizontally integrated with prime's schedules.
9, 10	Check the process for tracking material issued from the prime to the subcontractor for work.
16, 22	Check for proper incorporation of subcontractor's data into the prime's system.
23	Verify the subcontractor's baseline and ensure that contract changes are incorporated in a timely manner.
27	Ensure that EAC includes subcontractor updates for actual costs, material values etc.