

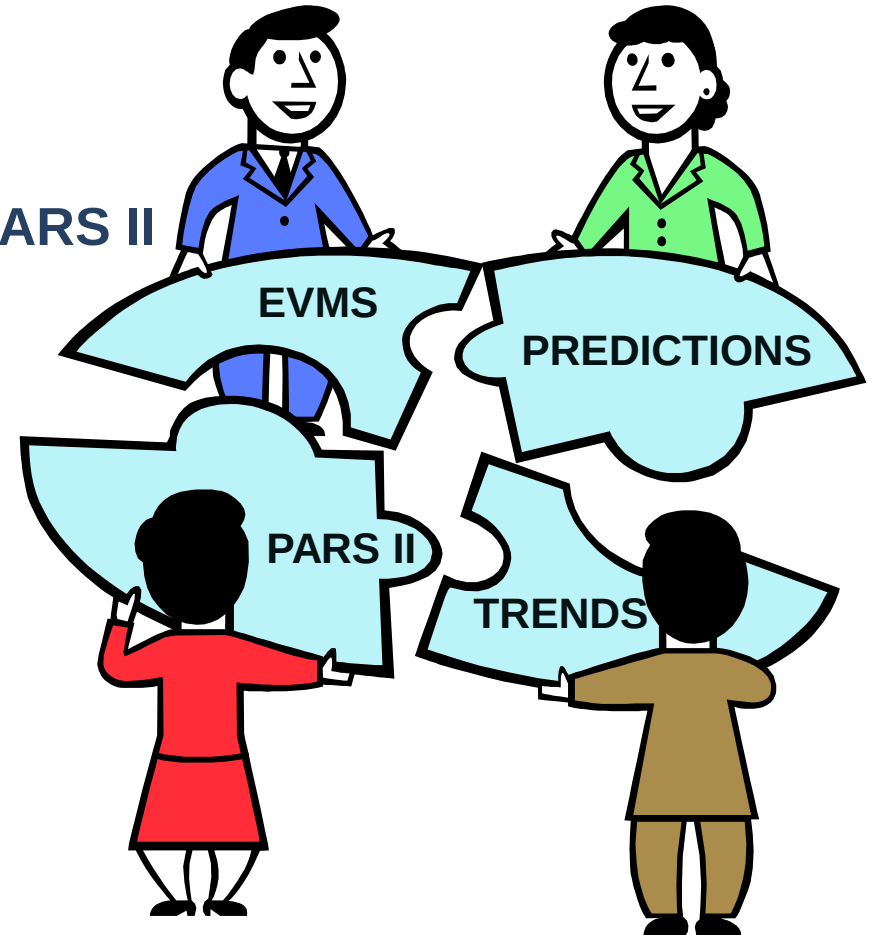
Enhancing Earned Value (EV) Analysis Using Project Assessment & Reporting System (PARS II)



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

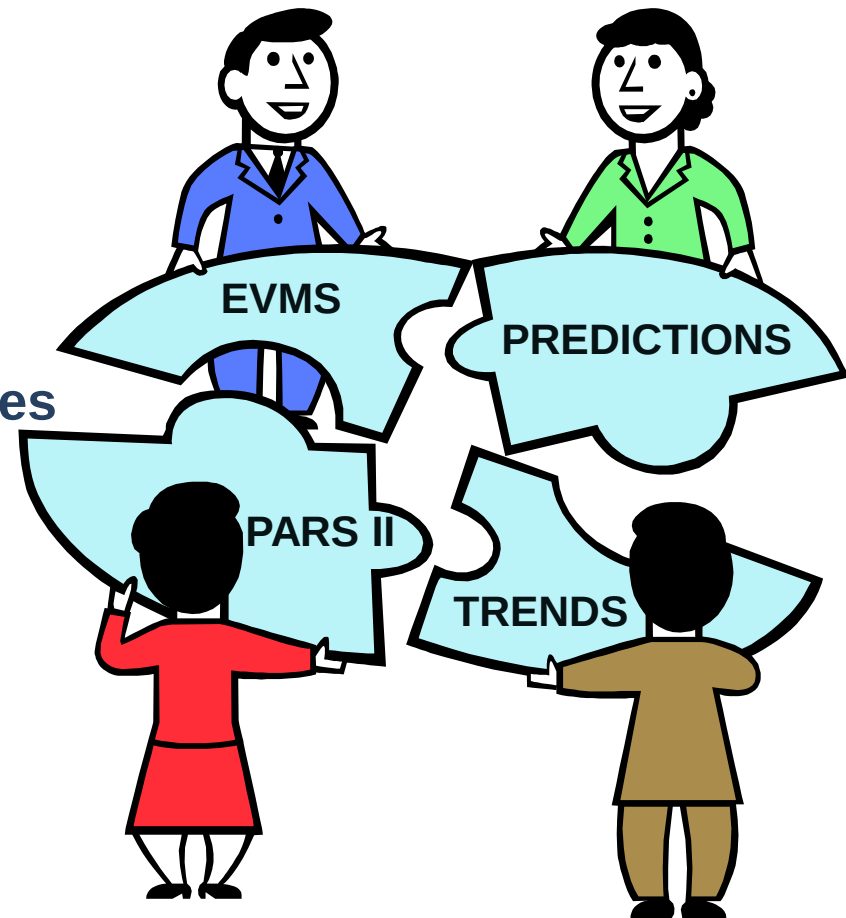


Agenda – Day 2



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- 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



- **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?

- **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

<http://energy.gov/management/office-management/operational-management/project-management/policy-and-guidance>

PARS II Overview





- **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**



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

ENERGY.GOV
Office of Management

SERVICES OPERATIONAL MANAGEMENT PARS II Functions

SEARCH

About Us OFFICES

PROJECT ASSESSMENT

Welcome to PARS II

PARS II is the Department's official IT System management system; everyone from the...

The PARS II software application is used to track the progress of major construction...

Questions or comments about PARS II?

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 Training](#) - to see the training schedule and course description.
- [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...

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 Format](#)
- [Report Digital Signature Acceptance](#)
- [EV Data Migration Template](#)
- [Change Request Form](#)

Contractor Documents

- [PARS II CPM Upload Requirements](#)

[PARS II Extension Utility](#) — [Design Specifications](#) — [Release Notes](#)

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

Request for PARS II Account / Project Access



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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:

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

- **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

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: 01/22/2012
Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Logout

Project Security

Security Level By: Project | Check All | Uncheck 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.

Project Access:
☒ All Users
☐ Restricted

User Rights:
References: ☐
Read/Write: ☐
Grant: ☐
Revoke: ☐

Navigation Menu:
OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
ADMINISTRATION
Period Administration
Program Definition
Project Types
Project Categories
User/Group Definition
Warning Configuration
Project Security
Contacts
Contact Certifications
HELP

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.



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

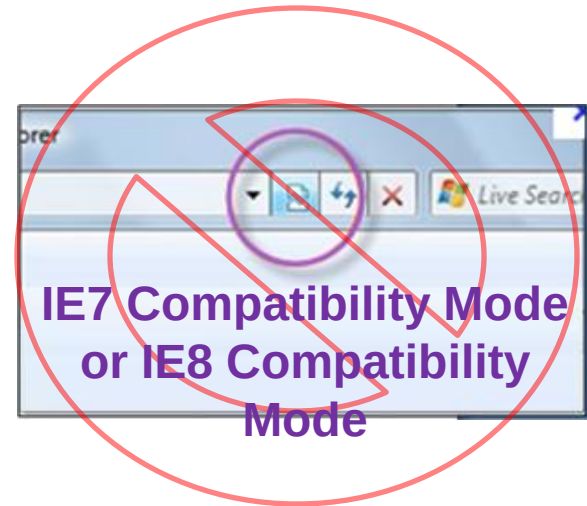
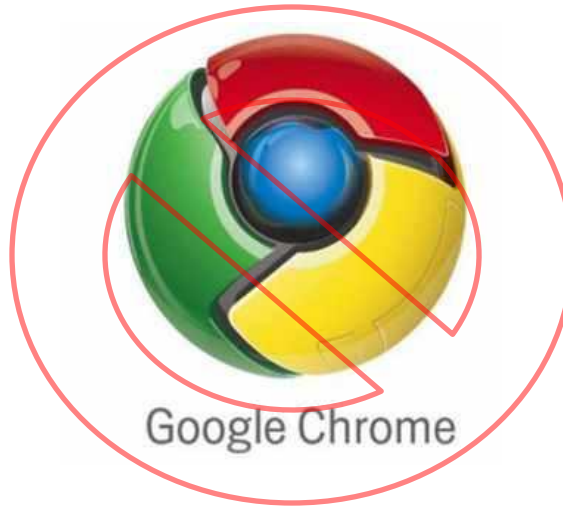
- Internet Explorer 7 (native mode)
- Internet Explorer 8 (native mode)
- Internet Explorer 9 (native mode or compatibility mode)
- Microsoft Excel 32-bit for 2003, 2007 and 2010 are supported spreadsheet applications

- 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



U.S. DEPARTMENT OF ENERGY
PARS II
OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
SSS Reports
ADMINISTRATION
HELP

Selected Project: 000390
Status Date: 01/26/2013

Security Warning: Some active content has been disabled. Options...

Microsoft Office Security Options
Security Alert - 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.
File Path: C:\...Temp\SSS\Baseline Volatility - Past and Near-Term (PMB Level).xls
Signed by: Dekker, Ltd.
Certificate expiration: 8/12/2013
Certificate issued by: VeriSign Class 3 Code Signing 2009-2 CA
Help protect me from unknown content (recommended)
Enable this content
Trust all documents from this publisher

Note: Dekker, Ltd must be accepted as a Trusted Publisher in order for Macro Security to properly function.

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.

Report Date: 11/9/2012
PARS II Project ID: 000390
DOE Project: 01-D-416 - Waste Treatment and Immobilization Plant (WTP)
COP Data As-Of Date: 10/14/2012

Status Date	May-12	Jun-12	Jul-12	Sep-12
Nov-11	\$98,610,936			
Dec-11	\$92,143,157			
Jan-12				
Feb-12				
Mar-12				
Apr-12				
May-12	\$71,778,212			
Jun-12				
Jul-12				
Aug-12				
Sep-12				
Oct-12				
Min	\$67,734,852			
Max	\$92,143,157	\$101,131,622	\$87,971,301	\$68,515,834
% Change	36%	38%	39%	10%

Average % Change last 6 months: 43%

	First	Last	% Change
First	\$98,610,936	\$101,131,622	
Last	\$71,778,212	\$78,891,250	
% Change	-19%	-22%	-23%

Average % Change last 6 months: -10%

	Prior	Current	% Change
Prior	\$71,778,212	\$78,891,250	
Current	\$71,778,212	\$78,891,250	
% Change	0%	0%	0%

Average % Change last 6 months: -33%

Average % Change next 6 months: -26%

Shared Reports
Analysis Reports
Baseline
CPI vs.
EV Data
EV Project
Funding
IEAC Analysis
MR Balance
Management
Performance
Performance
Retroactive
Schedule
Schedule
Variance
APM DepSec Monthly Reports
APM Planning
Cost Performance
DDR
Enterprise Reports (Portfolio)
EVMS Certification
Metrics
Project Reports
Reports For Testing



SSS Reports - Excel Macro Setting Error



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

Current Critical Decision: CD3 (BCP)

Status Date: 01/26/2013

CPP Data As-Of Date: 10/14/2012

Current User: CREEMAR Logout

SSS Reports

All monetary values are in whole

(SSS)APM Red_Yellow Project Report (Portfolio)

+ Add - Remove | Copy Paste | 63 Views

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

APM Analyst:

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.

WBS Number	WBS Description	Level	IBCVM	IBCVM	IACVM	BCVM	BCVP	ACVP	Cum C	Cum S
	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>



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 requirements 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 access.
- 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 Action field. After processing/loading, 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 not 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 for unauthorized access. 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.

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



O&A - Projects

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

Current Critical Decision: CD2 (BCP)
Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

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HELP

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:

PARS Project ID	DOE Project Number	Project Acronym	Project Name	CD Date
000726	101961		Plutonium Facility-41 Building Demolition	09/25
000737	17-XX-DD-XXX	SM-43	Demolition of Building South Mess (SM)-43	01/15
000739	PTX-ASC	ASC	Pentax Administrative Support Complex (ASC)	09/16
000741	PTX-PREP	PREP	Pentax 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: Current Critical Decision of the project and if a BCP has been entered.

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



Project Attributes

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:
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
CDD Date: 2/24/2012
CDD 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 Activity Status: Active

Project on Hold: No

Project of Special Interest: No

Site Code: LANL

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

Role Contact Name Certificate

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

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:

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

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

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.

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.

Cancel Find Contact

Role: AE

Contact: Daniel Hitchcock

Date Assigned: 2/9/2012

Date Unassigned:

Order: 0

Key Contact Role: ☒



O&A – Critical Decisions

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 Current Critical Decision: CD2
Current User: CREEMAR Logout

Critical Decisions

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

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HELP

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:
CD2-Approve Performance Baseline FPD: 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 OECM: 2/24/2012

CD2: Approval Notes:

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 ODCs: 4,000,000

Orig. Contractor Fee/Profit: 3,000,000

Orig. Contractor MR: 6,000,000

FMB: 107,000,000

Calculated TPC: 125,000,000

Updated By: CREEMAR

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

Critical Decision Description

Critical Decision	Description
CD0	Approve Mission Need
CD1	Approve Alternative Selection and Cost Range
CD2	Approve Performance Baseline
CD3A	Approve Procurement of Long Lead Items or Early
CD3	Approve Start of Construction
CD4	Approve Start of Operations or Project Completion
Closeout	

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



O&A Module - BCPs

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

BCPs

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

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HELP

Actions: Add Edit Remove Save Cancel KPP Attachments Reports

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

BCP Detail:

BCP Title	01
BCP Change Directed	☐
Request Submission Date	
BCP Date Approved	3/21/2012
BCP Approved By	John Smith
BCP Date Received By OECM	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 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

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



O&A Module - AE Modification

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/Funding
- KPPs
- All Attachments
- Project Overview

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

BCPs

+ Add 1 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

2

3 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

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

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

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

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

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.

Attachments

Select Monthly Status Type:

FPD - Monthly Status - FPD

FPD: Wayne Bristol Certification: Level 3

Add/Edit Narrative, Hyperlink or Document

Document

Title:

Description:

Version:

Document No.:

CODE	DESCRIPTION
MR Transaction Log	Mandatory
Variance Analysis Narrative	Mandatory

WARNING: Do not upload project information. Please contact OIA Nuclear Information.

Document: Browse...



O&A Module – Monthly Status – Program

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: 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

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Helpful Hint: Informational (view) Only

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



O&A Module – Monthly Status – APM

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

Monthly Status

Edit | Save | Cancel | Attachments | Reports

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

Monthly Status Detail:

OECD 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	
Cost Assessment RYG	Green
Schedule Assessment RYG	Green
Updated By	CREEMAR
Updated Date	5/29/2012

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Helpful Hint: Informational (view) Only

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



O&A Module – Budget / Funding



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

Current Critical Decision: Closeout (BCP)

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

Current User: CREEMAR 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

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: 12/18/2011

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)

U.S. DEPARTMENT OF ENERGY
PARS II KPP

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

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

Actions: 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 pretreatme		
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 pretreatme		

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

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

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

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 OECM	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

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



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

Current Critical Decision: Closeout (BCP)

Status Date: 02/26/2012

CPP Data As-Of Date: 12/30/2011

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 RS II Project ID: 000925 DOE Project No: RS-CAP-2012 Project Name: Solid Waste Processing Facility (SWPF) Project Type: Facility Construction Location: N/A Project Status: Active On Hold: No Special Interest: No Program: EM Site: Savannah River Site (SRS)																																					
Points of Contact Federal Project I Phillip T. Long (P.L.) Level 4 (888) 644-8372, long.phil@hq.doe.gov Program POC Craig W. Long (888) 586-3553, craig.wlong@hq.doe.gov APH Manager Rick Elliott (888) 287-1528, Rick.Elliott@hq.doe.gov Construction PINTG ESS Division, Certified Personnel/Construction & Technology Group, Inc.																																					
Critical Decisions Current CD: CD3 Current BCP: BCP-01 B3 Approved By: Jeffery Kasper B1 Approved By: Jeffery Kasper TPC [Approved]: \$1,333,000,000 Date [Approved]: Oct 2015																																					
Planned Dates - Approved Dates <table border="1"> <thead> <tr> <th>CD#</th> <th>Planned Date</th> <th>Approved Date</th> </tr> </thead> <tbody> <tr> <td>CD1</td> <td>N/A</td> <td>Jan 2011</td> </tr> <tr> <td>CD2</td> <td>N/A</td> <td>Aug 2014</td> </tr> <tr> <td>CD3</td> <td>N/A</td> <td>Sep 2017</td> </tr> <tr> <td>CD4</td> <td>N/A</td> <td>Jan 2015</td> </tr> <tr> <td>CD5</td> <td>Sep 2017</td> <td>Sep 2017</td> </tr> <tr> <td>CD6</td> <td>Oct 2015</td> <td>Sep 2017</td> </tr> <tr> <td>CD7</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>		CD#	Planned Date	Approved Date	CD1	N/A	Jan 2011	CD2	N/A	Aug 2014	CD3	N/A	Sep 2017	CD4	N/A	Jan 2015	CD5	Sep 2017	Sep 2017	CD6	Oct 2015	Sep 2017	CD7	N/A	N/A												
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CD5	Sep 2017	Sep 2017																																			
CD6	Oct 2015	Sep 2017																																			
CD7	N/A	N/A																																			
Current Assessment - POST CD-2 Current DOE Assessment Period: May 2012 TPC Assessment: Red Range from Prior: No Forecasted TPC: \$1,483,540,000 Forecasted CD4: Oct 2015 BPH Assessment: Red # of Months at Red: 1 Forecasted TPC: \$1,450,000,000 Forecasted CD4: Oct 2015																																					
Performance Baseline - POST CD-2 <table border="1"> <thead> <tr> <th></th> <th>Low</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>CD1 TPC Range:</td> <td>\$375,000,000</td> <td>\$400,000,000</td> </tr> <tr> <td>Original CD2 TPC:</td> <td>\$300,000,000</td> <td></td> </tr> <tr> <td>Forecasted TPC:</td> <td>\$1,333,000,000</td> <td></td> </tr> <tr> <td>Forecasted TPC:</td> <td>\$1,483,540,000</td> <td></td> </tr> <tr> <td>Actual CD4 TPC:</td> <td></td> <td></td> </tr> <tr> <td>Original CD4:</td> <td>Nov 2015</td> <td></td> </tr> <tr> <td>Forecasted CD4:</td> <td>Oct 2015</td> <td></td> </tr> <tr> <td>Forecasted CD4:</td> <td>Oct 2015</td> <td></td> </tr> <tr> <td>Forecasted CD4:</td> <td>Oct 2015</td> <td></td> </tr> <tr> <td>Forecasted Date:</td> <td></td> <td></td> </tr> <tr> <td>Source [KPP#]:</td> <td colspan="2">1 KPP#1: 1000000000 See PROJECT KPP# for</td> </tr> </tbody> </table>			Low	High	CD1 TPC Range:	\$375,000,000	\$400,000,000	Original CD2 TPC:	\$300,000,000		Forecasted TPC:	\$1,333,000,000		Forecasted TPC:	\$1,483,540,000		Actual CD4 TPC:			Original CD4:	Nov 2015		Forecasted CD4:	Oct 2015		Forecasted CD4:	Oct 2015		Forecasted CD4:	Oct 2015		Forecasted Date:			Source [KPP#]:	1 KPP#1: 1000000000 See PROJECT KPP# for	
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Source [KPP#]:	1 KPP#1: 1000000000 See PROJECT KPP# for																																				
Performance Snapshot - POST CD-2 Performance Period: April 2012 On CD# DOE's Performance Data: 10/17/2012 Cum CD# 1.35 = SP# 1.34 Complete: 75%																																					
<table border="1"> <thead> <tr> <th></th> <th>At BCP-01</th> <th>Remaining</th> </tr> </thead> <tbody> <tr> <td>Original [CD#]:</td> <td>\$135,000,000</td> <td>\$135,000,000</td> </tr> <tr> <td>Original [CD#]:</td> <td>428 Days</td> <td>228 Days</td> </tr> <tr> <td>DOE CD#:</td> <td>\$45,500,000</td> <td>\$1</td> </tr> <tr> <td>Forecasted TPC:</td> <td>\$1,483,540,000</td> <td>\$1,483,540,000</td> </tr> <tr> <td>Actual CD4:</td> <td>\$135,000,000</td> <td>\$1,483,540,000</td> </tr> </tbody> </table>			At BCP-01	Remaining	Original [CD#]:	\$135,000,000	\$135,000,000	Original [CD#]:	428 Days	228 Days	DOE CD#:	\$45,500,000	\$1	Forecasted TPC:	\$1,483,540,000	\$1,483,540,000	Actual CD4:	\$135,000,000	\$1,483,540,000																		
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	\$1,250,000,000	\$1,250,000,000	\$1,250,000,000																																		



Project Overview - Top Half



Report Date: 5/30/2012

Project: 000389 - Salt Waste Processing Facility (SWPF)

QA 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

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



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

Current Critical Decision: CD4 (BCP)

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

Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

Project Data Upload

CPR Dashboard

Schedule Dashboard

Timephased Dashboard

MR Dashboard

CPR Entry

ALL REPORTS

ADMINISTRATION

HELP

Submit | Save | Cancel | Attachments | Reports | Delete Period Data | Clear Data

Project: 12/30/2011 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	21,468,073	18,924,998	20,517,103	-2,543,075 (Y)	-1,592,105 (G)	883,197,788	853,128,800	883,982,971	-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	-2,543,075 (Y)	-1,592,105 (G)	883,197,788	853,128,800	883,982,971	-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	-2,543,075 (Y)	-1,592,105 (G)	883,197,788	853,128,800	883,982,971	-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

		Start Date Slips (Days)				End Date Slips (Days)				ETI
Project	Description	< 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

			2011	2012												2013					
WBS Number	Description	Element	Prior	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	ROP	Total
1	Undefined	S	804,059,049	22,241,215	18,609,937	16,819,515	21,468,073	20,163,699	20,852,350	23,976,371	18,350,942	23,356,668	23,135,919	15,362,551	19,141,145	14,027,093	11,897,174	15,689,997	12,028,888	102,750,810	1,203,931,397
		P	779,698,228	21,188,329	16,673,840	16,643,406	18,924,998														853,128,800
		A	778,151,089	27,973,165	18,624,458	18,717,155	20,517,103														883,982,971
		EAC	778,151,089	27,973,165	18,624,458	18,717,155	20,517,103	16,529,916	22,322,749	27,234,946	19,385,259	18,933,182	23,423,368	17,136,360	21,262,412	15,169,111	18,499,263	23,385,742	14,171,324	159,364,003	1,260,800,606

MR Dashboard

(Slide 100 provides further detail)



Page 38



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

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

Helpful Hint: Click on the Green checkmark to view 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



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

Current Critical Decision: CD4 (BCP)

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

Current User: CREEMAR Logout

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

Project Data Upload

CPR Dashboard

Schedule Dashboard

Timephased Dashboard

MR Dashboard

CPR Entry

ALL REPORTS

ADMINISTRATION

HELP

Submit Save Cancel Attachments Reports Delete Period Data Clear Data

5	Process	Data Type	Format	File	Status
	Overwrite	EV CPR	ANSIX12	Browse...	
	None	Complete Project	Access	1_Copy of Copy of SRS_Parsons_SWFF_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			MR / UB	
			Incremental			Cumulative	
Number	Description	Parent	BCWS	BCWP	ACWP	BCWS	BCWP
1	Ground-Based Dark Energy Experim		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



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: TRNCONT05 Logout

Project Data Upload

Submit | Save | Cancel | Attachments | Reports | Project Performance Related Data | Other Data

Process	Data Type	Format	File	Status
Overwrite	EV CPR	ANSX12	Browse...	
None	Complete Project	Access	2_1_NewLUSIMar2011.mdb	Errors

Status Date: 4/24/2012
Baseline Name:
Submitted By: TRNCONT05 Submitted Date: 5/29/2012

EV_CPR_Format1 - Dekker PMIS Data Extractor

ProjectN StatusDate WBSNU WBSPar WBSDesc CCUMBCWS CCUMBCWP CCUMACWF CBAC CETC

ProjectN	StatusDate	WBSNU	WBSPar	WBSDesc	CCUMBCWS	CCUMBCWP	CCUMACWF	CBAC	CETC
PAR0311	3/31/2011	1	1	LUSI PROJECT MA	0	0	0	0	
PAR0311	3/31/2011	1.1	1.1	PROJECT					
PAR0311	3/31/2011	1.01	1.1	ES&H					
PAR0311	3/31/2011	1.02	1.1	Project Ma					
PAR0311	3/31/2011	1.03	1.1	Technical					
PAR0311	3/31/2011	1.2	1	X-RAY PUN					
PAR0311	3/31/2011	1.2.01	1.2	XPP Syste					
PAR0311	3/31/2011	1.2.01A	1.2	XPP Syste					
PAR0311	3/31/2011	1.2.02	1.2	XPP X-ray					
PAR0311	3/31/2011	1.2.03	1.2	XPP Laser					
PAR0311	3/31/2011	1.2.04	1.2	XPP Detec					
PAR0311	3/31/2011	1.2.05	1.2	XPP Samp					
PAR0311	3/31/2011	1.2.06	1.2	XPP Facili					
PAR0311	3/31/2011	1.2.07	1.2	XPP Vacu					
PAR0311	3/31/2011	1.2.08	1.2	XPP Instal					
PAR0311	3/31/2011	1.3	1	COHERENT					
PAR0311	3/31/2011	1.3.01	1.3	CXI Syste					
Total									

Import Log - Microsoft Internet Explorer provided by DOECOE

https://pars2test.doe.gov/iProgram/rptError.e

File Edit View Favorites Tools Help

★ Favorites ★ ActionNet Webmail ★ PARS2DEV ★ DOE ★ TEST PARSII ★ Production PARS II ★ OECM

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

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

SSS Reports

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
SSS Reports
ADMINISTRATION
HELP

Acronym: Sort, Select and Summarize (SSS)

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: Browse... Upload

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

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
- Baseline Volatility - Past and Near-Term (PMB Level)
- 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: PRATTV on 1/4/2013 1:42:03 PM



All Reports - Reports Button

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:

Projects

Find | Add | Edit | Remove | View | Attachments | **Reports**

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

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

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

Close

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.

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

- ALL REPORTS**

ADMINISTRATION

HELP

PARS Project ID	DOE Project Number	CD0 Date
000918		
000919		
000920		
000922		
000923		
000924		

CD0 Date
12/14/11
12/15/11
01/04/12
02/26/12
02/26/12
02/26/12
02/26/12
02/26/12



- **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

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2012 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:
BPA - Bonneville Power Administration
EERE - Office of Energy Efficiency & Renewable Energy
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 Reliability
RW - Office of Civilian Radioactive Waste Management
SC - Office of Science
SEPA - Southeastern Power Administration
SWPA - Southwestern Power Administration
WAPA - Western Area Power Administration

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

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/Funding
- KPPs
- Project Overview
- All Attachments

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

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:

PARS Project ID	DOE Project Number	Project Acronym	Project Name	CD0 Date
000600	MIE-03-SC-CNM	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

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:
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

Program Name: PARS Project ID: Project Acronym: Project Name: DOE Project Number:
Company Name: Contact First Name: Contact Last Name:

Project Types

Project Type
Nuclear/Non-Nuclear
Program
CPP Upload Requirements
Budget Program
N/A
N/A
N/A
N/A

Project Categories

Project Activity Status
Project on Hold
Project of Special Interest
N/A
Site Code
Success Metric
PORT
TRA
IP

Boolean Search

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

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

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.



Projects - Formatting / Sorting Options



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

Current Critical Decision: Closeout (BCP)

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

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.

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	CPP Data As-Of Date
000841			100K Area Remediation	07/26/2011	12/25/2011
000482	06-SC-01	12 GeV	12 GeV Continuous Electron Beam Accelerator Facility (CEBAF) Upgrade	03/31/2004	12/31/2011
000863			12 GeV Initiatives	06/01/2011	
000599	05-D-401		12-64 Production Bays Upgrade	02/26/2002	
000916	OR-0042.NEW.R2.7		4500 Gaseous Reconfiguration and Stabilization Project Buy Back	11/30/2011	
000677	RL-0041.R1.3		Accelerated Remediation and Disposal	01/01/1997	12/18/2011

Changes Width of Cell

Sorting Options

Expanded View

PARS Project ID	DOE Project Number	Project Acronym	Project Name	CD0 Date	CPP Data As-Of Date	Status Date	Updated By	Updated Date
000925	RS-CAP-2012	CAP	Capital Asset Project	02/24/2012		02/26/2012		2/24/2012 9:44:10 AM

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



Navigating PARS II





- **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

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

Capital Projects

+ Add 3 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: 1
NA - National Nuclear Security Administration

Select a Level 2 Program Organization: 2
121.1 - Defense Science Division
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-26 - Assistant Deputy Administrator for Fissile M
NA-265 - MOX Integrated Project Division (SRA-708-
NA-266 - 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

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

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

Adding a New Capital Project

Save Cancel

Level 3 Capital Project

Parent Program: NA > NA

Capital Program Name: 4 Capital Asset Project
Description: Second Version of Capital Asset Project

PARS Project ID	Project Name	TPC	CD4 Date	FPM	Certification
Totals					

PY: NTS: OPER: LOC:



Creating a Capital Asset Project

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:
Current Critical Decision: Closeout (BCP)
Current User: CREEMAR Log out

Projects

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

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.

Select Level 1 - Program Office

- BPA - Bonneville Power Administration
- EERE - Office of Energy Efficiency & Renewable Energy
- 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 Reliability
- RW - Office of Civilian Radioactive Waste Management
- SC - Office of Science
- SEPA - Southeastern Power Administration
- SWPA - Southwestern Power Administration
- WAPA - Western Area Power Administration

Select Level 2 - Program Organization

- Select One -
- 121.1 - Defense Science Division
- 122.3 - Stockpile Technology and Special Materials Division
- 172.2 - Construction Management Division
- NA - National Nuclear Security Administration**
- NA-121 - Office of Research & Development for Nuclear Energy
- NA-123 - Office of Inertial Confinement Fusion and Nuclear Energy
- NA-23 - ADA for Nuclear Risk Reduction
- NA-26 - Assistant Deputy Administrator for Fissile Material Management
- NA-265 - MOX Integrated Project Division (SRA-708)
- NA-266 - WSB Integrated Project Division (SRS-730)
- NA-52 - Office of Infrastructure and Facilities Management
- NA-56 - Office of Environmental Projects & Operations
- NA-70 - Associate Administrator for Defense Nuclear Operations

Select Level 3 - Capital Asset Project

- Select One -
- BL Plant Services Building - BL Plant Services Building
- BL Waste Shipping Facility - BL Waste Shipping Facility
- Building PF-41 Demolition - Building PF-41 Demolition
- Capital Asset Project - Capital Asset Project
- Continuous Air Monitoring (FICAM) - Continuous Air Monitoring
- Demolition of Building South Mesa (SM)-43 - Demolition of Building South Mesa (SM)-43
- Device Assembly Facility (DAF) - Device Assembly Facility
- Device Assembly Facility (DAF) Lead-in Piping - Device Assembly Facility (DAF) Lead-in Piping
- Dynamic Compression Sector (DCS) at the Adv. ECF M-290 Receiving/Discharge Station, NRF - Dynamic Compression Sector (DCS) at the Adv. ECF M-290 Receiving/Discharge Station, NRF
- Electrical Infrastructure Upgrade - Electrical Infrastructure Upgrade
- Electrical Reliability and Distribution - Electrical Reliability and Distribution
- Electrical Infrastructure Upgrades - Electrical Infrastructure Upgrades
- Electrical Infrastructure Upgrades at LANL and LLNL - Electrical Infrastructure Upgrades at LANL and LLNL
- Emergency Operations Center - Emergency Operations Center
- Fire Suppression Lead-ins - Fire Suppression Lead-ins
- HE Science and Engineering Facility - HE Science and Engineering Facility
- High Explosive (HE) Science Technology and Engineering - High Explosive (HE) Science Technology and Engineering
- High Explosive Staging Facility - High Explosive Staging Facility
- KL Support Services Facility - KL Support Services Facility
- KS Radiological Work and Storage Building - KS Radiological Work and Storage Building
- KS Watchstation IDE Facility - KS Watchstation IDE Facility
- Lithium Production Facility - Lithium Production Facility
- Materials Research and Technology Complex, Beams - Materials Research and Technology Complex, Beams
- Microwave Deployment - Microwave Deployment
- NNSA Albuquerque Complex Project - National Nuclear Security Administration Albuquerque Complex Project
- NRF Production Support Complex - NRF Production Support Complex
- Operating System Development & Integration - Operating System Development & Integration
- Oven Consolidation - Oven Consolidation

Project ID	Program Office	Program Organization	Program	CD Date
000389	05-D-405	SWPF	Salt Water	
000390	01-D-416	WTP	Waste	
000392	08-D-701	NMSSUP II	Nuclear	
000393	07-D-253	HSM	Heatin	
000394	08-D-802	HEPF	High E	

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



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

ODD Date: 2/24/2012

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 Categories	Role	Contact Name	Certification
Project Type: 1 - Facility Construction	Project Activity Status: Active	FPD Name	Wayne Bristol	Level 3
Nuclear/Non-Nuclear: 2 - Non-Nuclear	Project Held: No	FPM		
Program: NA	Project of Special Interest: No	OECM Analyst	John White	
OPF Upload Requirements:	Site Code: LANL	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
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	

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	6/28/2010
CD0 Approved By	John Smith
CD0 Date Received By OEM	7/2/2010

Helpful Hint: If the Acquisition Executive (AE) is not in the pull down list, contact the PARSII Administrator or email the PARSII Help Desk.

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	4/30/2016 
CD0: CD-4 Date High	6/30/2016 
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	4/30/2011	
CD2	3/1/2012	
CD3A		
CD3	5/31/2012	
CD4	9/30/2016	
Closeout		

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.

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

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



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

Current Critical Decision: CD1

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

Current User: CREEMAR Logout

Critical Decisions

KPP: Not required at CD0 or CD1.

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:

CD1-Approve Alternative Selection and Cost Range

FPD: Wayne Bristol Certification: Level 3

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

Critical Decision Detail:

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

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

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	

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.

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Critical Decisions

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

Select Critical Decision:

CD2-Approve Performance Baseline

FPD: 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 OECM 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
CD3 5/31/2012
CD4 2/28/2017
Closeout

Note: KPPs (Key Performance Parameters) are required at CD2, BCP and CD4.

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.

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.

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 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-2, Performance Baseline for Project Y)

The following Performance Baseline information must be clearly listed. [DOE O 413.3B, Appendix A, 4.c.(1)] 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 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 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 OECM project analyst, and OECM 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 from 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 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 OMB/GAO.



CD2 Attachment

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:

CD2-Approve Performance Baseline

+ Add | Edit | Remove | View | Close | Reports

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

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

Add/Edit Narrative, Hyperlink or Document

Document | Save | Cancel

Title:

Description:

Version:

Document No.:

WARNING:

Do not upload project information data.

Please contact the CD Information) data.

CODE

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...



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 No:

WARNING:
Do not upload project attachments or enter narratives that contain classified or sensitive information.
Please contact the O&C Analyst if you have questions about sending sensitive data, such as OUC (Official Use Only) or UCN (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).

+ Add | Edit | Remove | View | Close | Reports

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

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

KPPs

+ Add | Edit | View | Remove | Clear Filter | Attachments | Reports

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

Adding a New KPP

Save Cancel

CD or BCP: CD2-Approve Performance

KPP No

KPP Planned Scope

KPP Delivered Scope

KPP Validated Yes/No

Date Updated

Updated By

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.

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



KPP Module - CD2 and BCP KPPs

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

KPPs

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

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KPP No	CD or BCP	KPP Planned Scope	KPP Delivered Scope	KPP Validated Yes/No
03	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		

Narrative Describing KPP 03 at BCP-01.

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		

Current Critical Decision: CD3A

Current User: CREEMAR **Logout**

OVERSIGHT & ASSESSMENT

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

Current User: CREEMAR [Logout](#)

 Edit | Save | Cancel | KPP | Attachments | Reports

CD3-Approve Start of Construction

FPD: Wayne Bristol Certification: Level 3

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

Planned Date	5/31/2012
CD3 Date Approved	7/1/2012
CD3 Approved By	John Smith
CD3 Date Received By OEM	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 RCP)	131,000,000
---	-------------

Latest Approved CD-4 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

- 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.

The Latest Approved TPC and Latest Approved CD4 Date values auto-populate from the latest approved CD2 or BCP.

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

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 Add

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 Cancel

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 Attachments

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 Reports

Select BCP:

BCP-01

▼

FPD: Wayne Bristol Certification: Level 3

BCP Detail:

BCP Title

01

BCP Change Directed

☐

Request Submission Date

BCP Date Approved

3/21/2012

BCP Approved By

John Smith

BCP Date Received By OEM

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 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

CD3

5/31/2012

CD4

2/28/2017

Closeout

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

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

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.

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.



BCP Template (Baseline Change Proposal)

TEMPLATE FOR APPROVAL OF PERFORMANCE BASELINE BCP

During preparation of BCP 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); 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. [DOEO 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*	This 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). [DOEO 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. [DOEO 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., PMSO/PPD).

A table documenting the Performance Baseline components that equate to the TPC (example table following). The project team, program office, assigned OECM project analyst, and OECM 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 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	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 OMB/GAO.



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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: CD4 (BCP)

Current User: CREEMAR Logout

Edit | Save | Cancel | KPP | Attachments | Reports

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

Critical Decision Detail:

Planned Date2/28/2017

CD4 Date Approved3/2/2017

CD4 Approved ByJohn Smith

CD4 Date Received By OECM3/3/2017

CD4 Approval Notes

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

TPC131,000,000

TPC At CD-4131,000,000

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 ByCREEMAR

Updated Date2/27/2012 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.

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



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 KPP

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

Edit | Save | **1** | **KPP** | Attachments | Reports

KPPs

2 + Add | Edit | View | Remove | Clear Filter | Attachments | Reports

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

3 Adding a New KPP

Save Cancel

CD or BCP: CD4-Approve Start of Oper

KPP No

KPP Planned Scope

KPP Delivered Scope

KPP Validated Yes/No

Date updated

Updated by

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 Module - CD4 KPP Validation



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)

(Non-empty)

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



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

Current Critical Decision: Closeout (BCP)

Status Date: 02/26/2012

CPP Data As-Of Date: 01/22/2012

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

6/18/2017



Closeout Approved By

John Smith



Closeout Date Received By
OECM

6/19/2017



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

Planned Dates:

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.

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP



All Attachments

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

OVERSIGHT & ASSESSMENT

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

PROJECT PERFORMANCE

ALL REPORTS

ADMINISTRATION

HELP

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 CD0	Document	CD-0 Approval memo		2010-
Critical Decisions CD0	Document	Mission Need Statement		2012-
Critical Decisions CD0	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 – OOU and UCNI

U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 02/28/2012 CPP Data As-Of Date:
Current Critical Decision: CD2
Current User: CREEMAR Logout

Critical Decisions

Edit | Save | Cancel | KPP | Attachments | Reports

Select Critical Decision:
CD2-Approve Performance Baseline PPD: 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 CD0	Document	CD-0 Approval memo		2010-
Critical Decisions CD0	Document	Mission Need Statement		2012-
Critical Decisions CD0	Narrative	APPROVALNOTES		
Critical Decisions CD1	Document	CD-1 Approval memo		



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

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



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
- 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

2012

2013

WBS Number

Description

Percent

Actual

1

2

3

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10

11

12

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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 - 05-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.

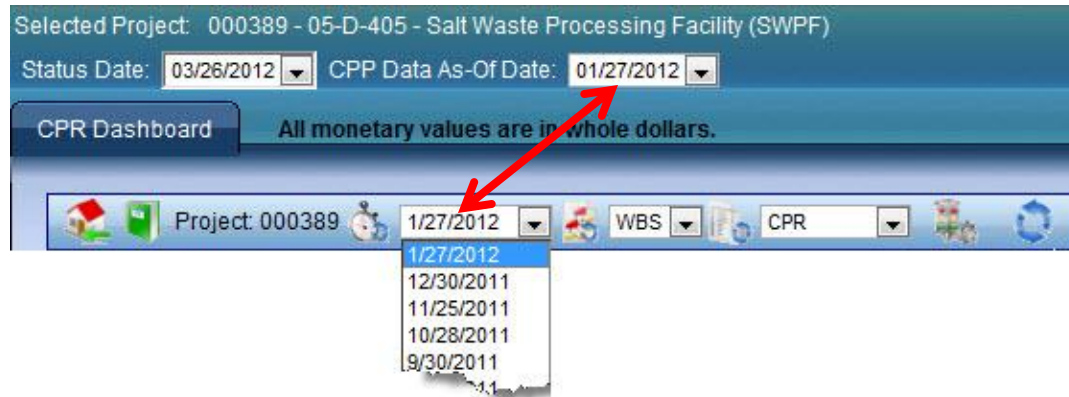
Project: 000389 1/27/2012 ▼ WBS ▼ CPR ▼

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

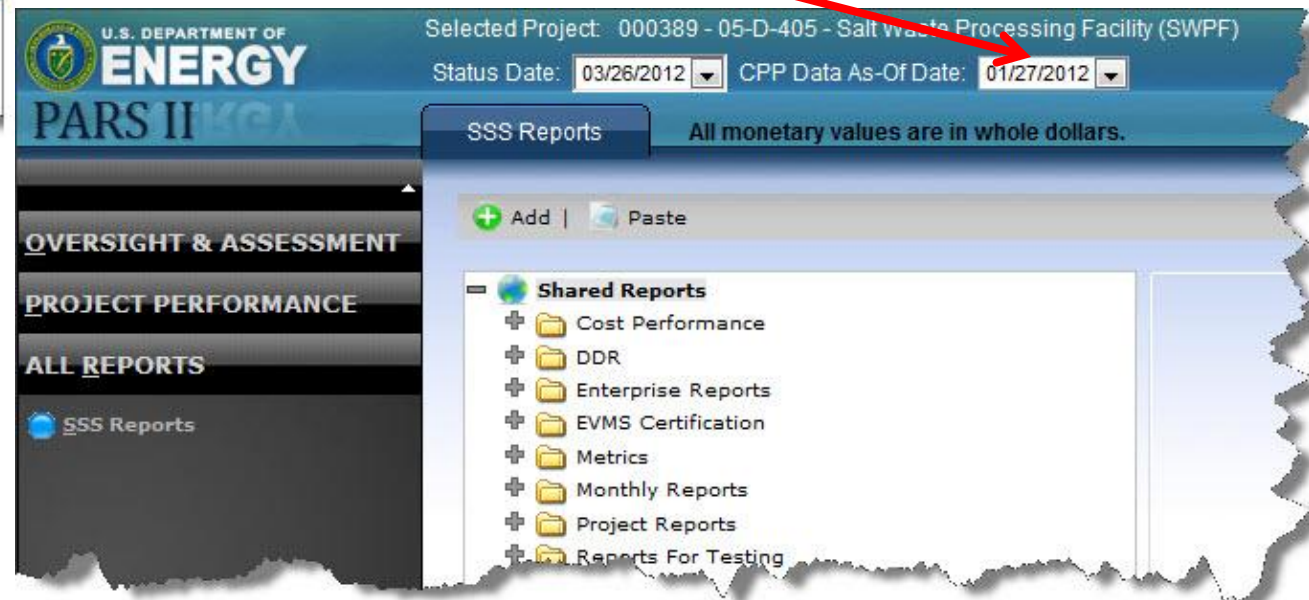
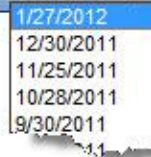
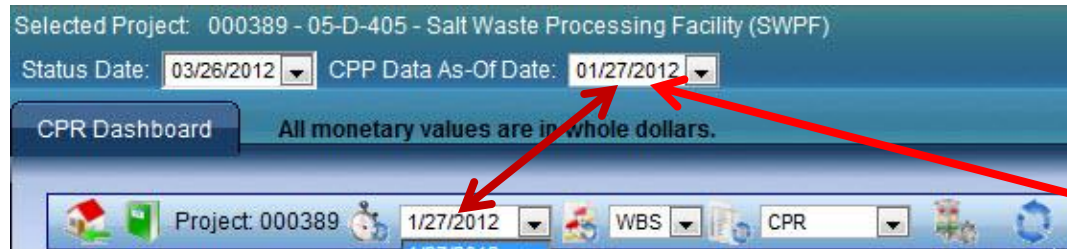


- Changing Date in Dashboards Will Change CPP Date in PARS II Header



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.



CPR Dashboard – Overview

Variety of Ways to Review the Data

- WBS and OBS
- CPI and SPI
- EAC v. IEAC

Project: 000389

1/27/2012

WBS

CPR

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

WBS
OBS

CPR
Analysis
IEAC

Change Threshold

Recycle Button – to Refresh the Dashboard and Apply Selected Filters

WBS Number	Description
2.1	Design
2.3	Construction Phase
2.4	Commissioning Phase
3.1	M&O Support
3.2	DOE Support

OBS Number	Description
01	ENVIRONMENTAL SAFETY, HEALTH
02	ENGINEERING
03	BUSINESS MANAGEMENT
04	OPERATIONS
05	PROJECT MANAGEMENT / PROJECT CONTROLS
06	QUALITY ASSURANCE

WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	At Complete
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	1,203,931,397
UB	Undistributed Budget											0
PMB	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	1,203,931,397
MR	Management Reserve											8,220,611
Totals		20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	1,212,152,008

WBS Number	Description	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BAC	ETC	EAC	At Complete
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	0.74	0.71	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,203,931,397	375,784,820	1,200,800,161	-56,866,754
UB	Undistributed Budget																		0
PMB	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	0.74	0.71	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,203,931,397	375,784,820	1,200,800,161	-56,866,754
MR	Management Reserve																		8,220,611
Totals		20,163,699	14,933,011	21,032,371	-5,230,688	-6,099,360	0.74	0.71	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,212,152,008	375,784,820	1,200,800,161	-56,866,754

WBS Number	Description	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BAC	ETC	EAC	VAC	At Complete
1	Undefined	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,203,931,397	375,784,820	1,200,800,161	-56,866,754	1,227,444,569
UB	Undistributed Budget								0	0	0	0	0
PMB	Performance Measurement Baseline	903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,203,931,397	375,784,820	1,200,800,161	-56,866,754	1,227,444,569
MR	Management Reserve								8,220,611				
Totals		903,361,488	868,061,812	885,015,341	-35,299,676	-16,965,530	0.96	0.96	1,212,152,008	375,784,820	1,200,800,161	-56,866,754	1,227,444,569



CPR Dashboard - Thresholds

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:** $> 10\%$ AND $\leq 20\%$
 - **RED:** $> 20\%$
 - NoRounding! $10.1\% = \text{YELLOW}$

- **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**

- $IEAC1 = ACWP_{cum} + (BCWR / CPI_{cum})$
- $IEAC2 = ACWP_{cum} + (BCWR / (CPI_{cum} \times SPI_{cum}))$
- $IEAC3 = ACWP_{cum} + (BCWR / CPI_{3\text{-mo avg}})$
- $IEAC4 = ACWP_{cum} + (BCWR / SPI_{cum})$
- $IEAC5 = ACWP_{cum} + (BCWR / (0.8 CPI_{cum} \times 0.2 SPI_{cum}))$

NOTE: Weights assigned to CPI and SPI for IEAC5 calculation cannot be changed by user.



CPR Dashboard – CPR View

Project: 000389

1/27/2012

WBS

CPR

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

WBS
OBS

CPR
Analysis
IEAC

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

Project: 000389

1/27/2012

WBS

Analysis

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

WBS
OBS

Analysis
CPR
Analysis
IEAC

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

SV = BCWP - BCWS

CV = BCWP - ACWP

CPI = BCWP / ACWP

K(\$)		Incremental						Cumulative						At Complete								
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BCWS	BCWP	Actual	SV	CV	SPI	CPI	BAC	ETC	EAC	VAC	IEAC 1	IEAC 2	IEAC 3
1	Undefined	20,163,699	14,933,011	21,032,371	-5,230,688	-8,099,359	0.74	0.71	903,361,488	888,061,812	885,015,341	-35,299,676	-18,953,530	0.98	0.98	203,931,397	75,784,820	1,280,800,161	-58,868,734	1,227,444,569	1,241,369,431	1,285,830,414
UB	Undistributed Budget															0	0	0	0	0	0	0
PMB	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688	-8,099,359	0.74	0.71	903,361,488	888,061,812	885,015,341	-35,299,676	-18,953,530	0.98	0.98	203,931,397	75,784,820	1,280,800,161	-58,868,734	1,227,444,569	1,241,369,431	1,285,830,414
MR	Management Reserve															8,220,811						
	Totals:	20,163,699	14,933,011	21,032,371	-5,230,688	-8,099,359	0.74	0.71	903,361,488	888,061,812	885,015,341	-35,299,676	-18,953,530	0.98	0.98	212,152,008	75,784,820	1,280,800,161	-48,848,133	1,227,444,569	1,241,369,431	1,285,830,414

IEAC1 = ACWP + (BAC - BCWP) / CPI

IEAC2 = ACWP + (BAC - BCWP) / (CPI * SPI)

IEAC3 = ACWP + (BAC - BCWP) / CPI(3 Period Avg)

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

Project: 000389 1/27/2012 WBS IEAC
1/27/2012 WBS
12/30/2011 OBS
11/25/2011
10/28/2011
9/30/2011

SV = BCWP - BCWS CV = BCWP - ACWP SPI = BCWP / BCWS CPI = BCWP / ACWP

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 (G)	-16,953,530 (G)	0.96 (G)	0.98 (G)	1,203,931,397	375,784,820	1,260,800,161	-56,868,764 (G)	1,227,444,569 (G)	IEAC1 = ACWP + (BAC - BCWP) / CPI			228,841,104 (G)	
UB	Undistributed Budget								0	0	0		IEAC2 = ACWP + (BAC - BCWP) / (CPI * SPI)			0		
													IEAC3 = ACWP + (BAC - BCWP) / CPI(3 Period Avg)					
PMB	Performance Measurement Baseline	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	0.96 (G)	0.98 (G)	1,203,931,397	375,784,820	1,260,800,161	-56,868,764 (G)	1,227,444,569 (G)	IEAC4 = ACWP + (BAC - BCWP) / SPI			228,841,104 (G)	
MR	Management Reserve								8,220,611				IEAC5 = ACWP + BAC - BCWP / (0.8 CPI + 0.2 SPI)					
	Totals:	903,361,488	868,061,812	885,015,341	-35,299,676 (G)	-16,953,530 (G)	0.96 (G)	0.98 (G)	1,212,152,008	375,784,820	1,260,800,161	-48,648,155 (G)	1,227,444,569 (G)	1,241,369,431 (G)	1,285,830,404 (Y)	1,234,543,041 (G)	1,228,841,104 (G)	

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

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	Undefined											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													

Project: 000389 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	173,135	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 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)
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	122,377,059	-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	248,279,206	-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	119,289,137	-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 p
(FSA), Alpha Finishing Facility (AF
percent complete is 56%. The pro
self-performed construction effort

Seven (7) structural
placements were originally scheduled
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 but were also impacted by late deliveries of the large ASME tanks.
also completed
HV network 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,
Base 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.
Construction also posted progress on

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

[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

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)
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	122,377,059	-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	248,279,206	-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	119,289,137	-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

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	Management Reserve													

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	Design	10,736	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	13,283	-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	30,624	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 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)
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	122,377,059	-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	248,279,206	-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	119,289,137	-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**

 Project 000389 1/27/2012 WBS CPR  														
K(\$)		Incremental					Cumulative					At Complete		
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	Red	903,361,488	85,015,341	85,015,341	Red	Red	1,203,931,397	1,260,800,161	Red
UB	Level 2				Yellow	Yellow				Yellow	Yellow			Yellow
	Level 3													
	Level 4													
	Level 5													
PM	Undistributed Budget											0	0	
PM	Performance Measurement Baseline	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	85,015,341	85,015,341			1,203,931,397	1,260,800,161	-56,868,764 (Y)
MR	Management Reserve													
	Totals:	20,163,699	14,933,011	21,032,371	-5,230,688 (R)	-6,099,359 (R)	903,361,488	85,015,341	85,015,341			1,203,931,397	1,260,800,161	-48,648,153 (Y)

Recycle Button Will Refresh the Dashboard and Apply Selected Filters



CPR Dashboard – Filtering

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	VAR
Level 3														Yellow
VAR 2.1.7	NAME 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	1,625,856	-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	122,377,009	-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	248,279,256	-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	119,289,157	-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

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	VAR
Level 3										Yellow				Yellow
VAR 2.1.7	FRAME 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)
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	122,377,059	-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	99,141,529	-26,224,556 (R)	-12,055,527 (Y)	213,286,686	248,279,200	-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	119,289,137	-10,644,470 (Y)
VAR 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)

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

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
Level 3										Yellow				Yellow
2.1.7	NAME Testing - Balance	50,736	40,455	109,893	-10,281 (R)	-69,438 (R)	1,027,691	861,127	1,240,004	-166,564 (R)	-378,966 (R)	1,151,055	1,625,806	-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	61,175,109	802,756 (G)	-675,783 (G)	112,090,648	122,377,009	-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	248,279,206	-34,992,520 (R)
2.3.6	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	119,289,107	-10,644,470 (Y)
2.4.5	Commissioning Phase Mgmt	324,717	850,269		5,899 (G)	174,479 (Y)	12,392,549	11,543,561	10,171,806	-848,988 (Y)	1,371,735 (Y)	116,964,332	113,339,300	3,624,982 (G)

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
2.3.5.1	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

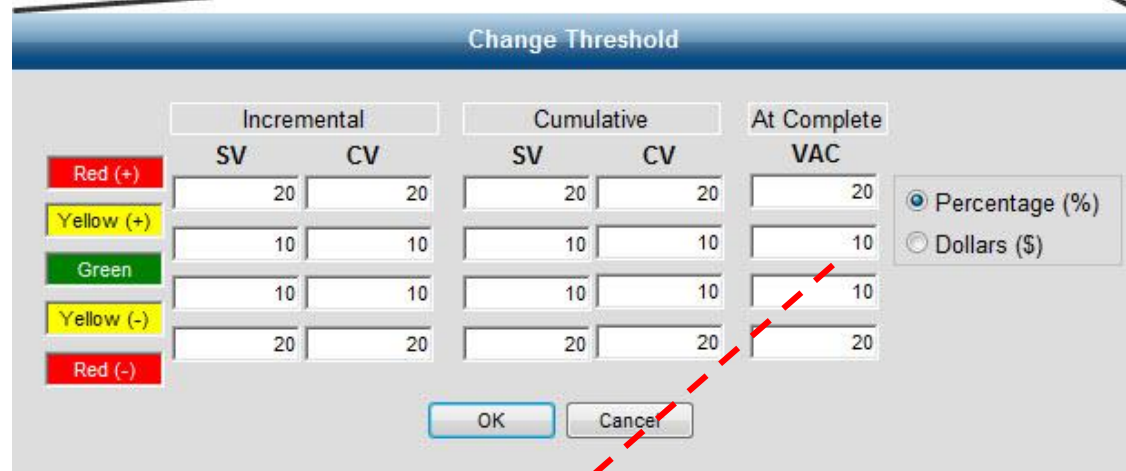
- Not dictated by contract, but is up to each individual User.
- Used for data review and filtering on CPR Dashboard.
- PARS II default thresholds

GREEN: $\leq 10\%$

YELLOW: $> 10\%$ AND $\leq 20\%$

RED: $> 20\%$

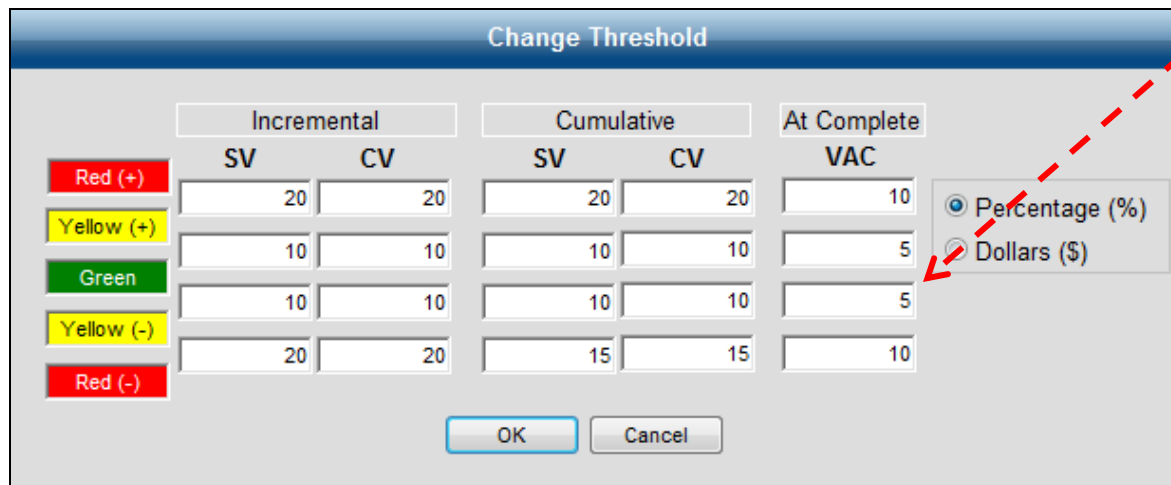
No Rounding! $10.1\% = \text{YELLOW}$

	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 (-)					

☒ Percentage (%)
☐ Dollars (\$)

OK Cancel



	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 (-)					

☒ Percentage (%)
☐ Dollars (\$)

OK Cancel

- **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

- Change in Thresholds Is Immediately Reflected on the Dashboard

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
Level 3										Yellow				Yellow
VAR 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)
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	122,377,059	-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	248,279,206	-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	119,289,137	-10,644,470 (Y)
VAR 2.4.5														

K(\$)		Incremental					Cumulative					At Complete		
WBS Number	Description	BCWS	BCWP	Actual	SV	CV	BCWS	BCWP	Actual	SV	CV	BAC	EAC	VAC
Level 3										Yellow				Yellow
VAR 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)
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	122,377,059	-10,286,411 (Y)
VAR 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)
VAR 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)
VAR 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

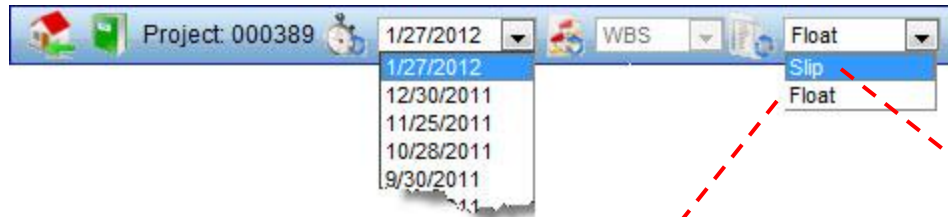
Project: 000389 Parent WBS: 1 1/27/2012 WBS Drilldown Reports																					
WBS Number	Description	Element	Prior	2012												2013				ROP	Total
				10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1		
2.1	Design	S	248,703,083	65,199	65,926	78,409	50,736	45,095	42,598	32,902	2,769										249,088,697
		P	248,630,952	39,951	41,506	43,905	40,455														248,796,769
		A	249,280,687	117,862	75,766	69,255	110,620														249,654,190
		EAC	249,280,687	117,862	75,766	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	18,829,660	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	496,092,052	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	18,513,766	12,362,133	17,353,897	14,618,615	11,407,255	14,290,937	9,082,647	9,607,634	71,439,493	842,410,786
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	2,460,855	1,948,747	2,613,714	2,347,498	2,449,409	3,473,407	2,924,974	2,910,433	78,640,206	126,206,064
		P	16,945,929	771,860	791,363	1,253,393	1,024,747														20,787,293
		A	16,139,624	915,443	641,069	949,303	850,275														19,495,714
		EAC	16,139,624	915,443	641,069	949,303	850,275	1,231,388	1,447,394	1,101,173	1,118,211	1,793,269	1,514,844	1,859,766	1,341,355	1,567,962	2,072,179	1,583,726	1,605,263	84,930,995	122,683,238
3.1	M&O Support	S	24,034,100	160,768	173,135	216,419	173,135	173,135	216,419	173,135	173,135	216,419	173,135	216,419	173,135	83,022	111,780	89,408	92,601	1,705,136	28,354,417
		P	24,034,100	160,768																	558
		A	23,053,357	312,615																	459
		EAC	23,053,357	312,615																	417
3.2	DOE Support	S	15,183,524	77,148																	787
		P	15,183,524	77,148																	224
		A	9,170,077	175,365	126,005	309,655	155,569														9,936,671
		EAC	9,170,077	175,365	126,005	309,655	155,569	-3,983,760	704,759	563,807	563,807	704,759	563,807	704,759	563,807	247,694	326,650	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

- 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



		Start Date Slips (Days)				End Date Slips (Days)				
Project	Description	< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	ETi
1	Undefined	5,678	484	295	2,725	4,946	509	338	3,389	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)



• 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.



- **ETi – Elapsed Time Index**

- $ETi_{\text{activity}} = \text{Baseline Duration} / \text{Actual Duration}$
- $ETi_{\text{WBS}} = \text{Sum of Baseline Durations} / \text{Sum of Actual Durations}$

- **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

Project: 000389		1/27/2012		WBS		Slip		Drilldown Reports				
				Start Date Slips (Days)				End Date Slips (Days)				
WBS Number	Description	< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	ETI		
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				
		Start Date Slips (Days)				End Date Slips (Days)				
WBS Number	Description	< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	ETi
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

Project: 000389		1/27/2012	WBS	Float	Drilldown Reports													
		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETi
WBS Number	Description	> 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

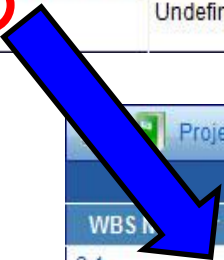
Drilldown Reports

		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				
WBS	Description	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	> 60	≤ 60	≤ 30	≤ 0	ET
2.1	Design	6	2	4	38	6		6	38	50				22				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	DOE Support			1	2				3	1		1	1		1		2	96 (G)



Schedule Dashboard – Float View

Project: 000389		1/27/2012	WBS	Float	Drilldown Reports													
		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETI
WBS Number	Description	> 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												
		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETI
WBS Number	Description	> 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												
		Baseline Critical (Free Float)				Current Critical (Free Float)				Baseline Critical (Total Float)				Current Critical (Total Float)				ETI
Project	Description	> 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-Orig Dur	Act Dur	Rem Dur	ETI	%	ASDATE	AFDATE	ESDATE	EFDATE	LSDATE	LFDATE	B-Start	B-Finish	Slip Start	Slip Finish	Free Float	Total Float	Critical
M&O_OPC-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	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	C
WDCD10A67	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	1/24/2013	7/17/2012	7/17/2012			342	342	C
WDCD10A69	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	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

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	9,772,332.27	822,386.17	.00	WBS:2.3.5.1.1 OBS:05 Activity: Resource:
	9/30/2011	8,949,946.1			Resource:
	9/30/2011	8,996,442.8			Resource:
	5/27/2011	8,734,417.8			Resource:
	5/27/2011	8,734,417.8			4.95 OBS:07 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:

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 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: 000389 1/27/2012

+

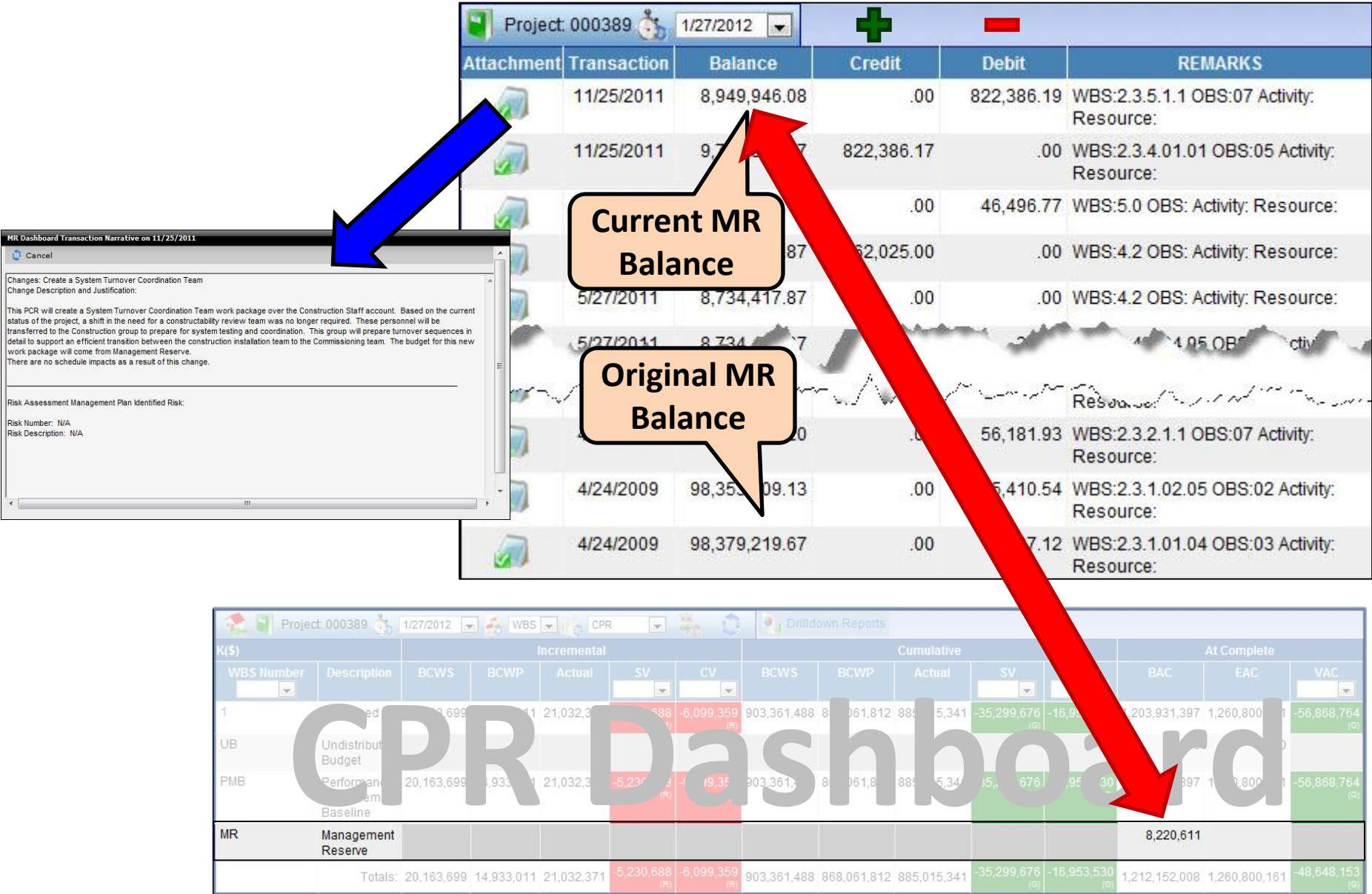
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Attachment	Transaction	Balance	Credit	Debit	REMARKS
	11/25/2011	8,949,946.08	.00	822,386.19	WBS:2.3.5.1.1 OBS:07 Activity: Resource:
	11/25/2011	9,772,332.00	822,386.17	.00	WBS:2.3.4.01.01 OBS:05 Activity: Resource:
	9/30/2011	8,949,946.08	.00	46,496.77	WBS:5.0 OBS: Activity: Resource:
	9/30/2011	8,996,442.81	.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:

Current MR Balance

Original MR Balance

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



CPR Dashboard



Manual Data Entry – CPR Entry Screen

- 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
1	Nuclear Facility D&D - Brookhaven G		1,187,224.00	90,566.00	1,417,833.22	60,613,479.00

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 (BGRR)	1,187,224	90,566	1,417,833	-1,096,658 (R)	-1,327,267 (R)	60,613,479	58,011,719	58,011,719	-2,601,769 (Y)	-10,951,419 (R)	61,541,503	73,728,785	-12,187,282 (R)
UB	Undistributed Budget													
PMB	Performance Measurement Base													
MR	Management Reserve													
To														

Project: 000431 1/31/2012 WBS Slip Drilldown Reports														
		Start Date Slips (Days)				End Date Slips (Days)								
Project	Description	< 30	> 30	> 60	> 90	< 30	> 30	> 60	> 90	ETI				
1	Nuclear Facility D&D - Brookhaven Graphite Research Reactor (BGRR)													

Project: 000431 1/31/2012 WBS Drilldown Reports													
No data was found.													

Project: 000431 1/31/2012													
---------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--

No data was found.

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



EVMS Overview

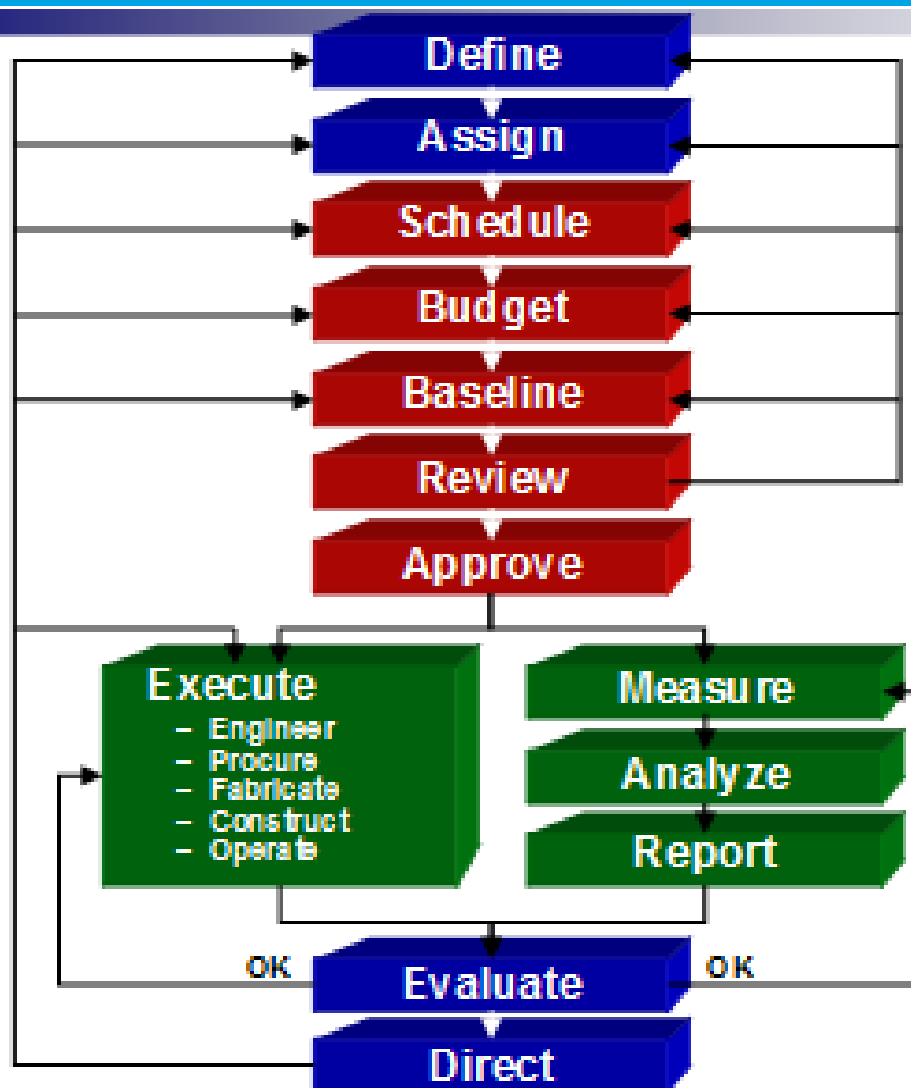


What is an Earned Value Management System?



- 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.

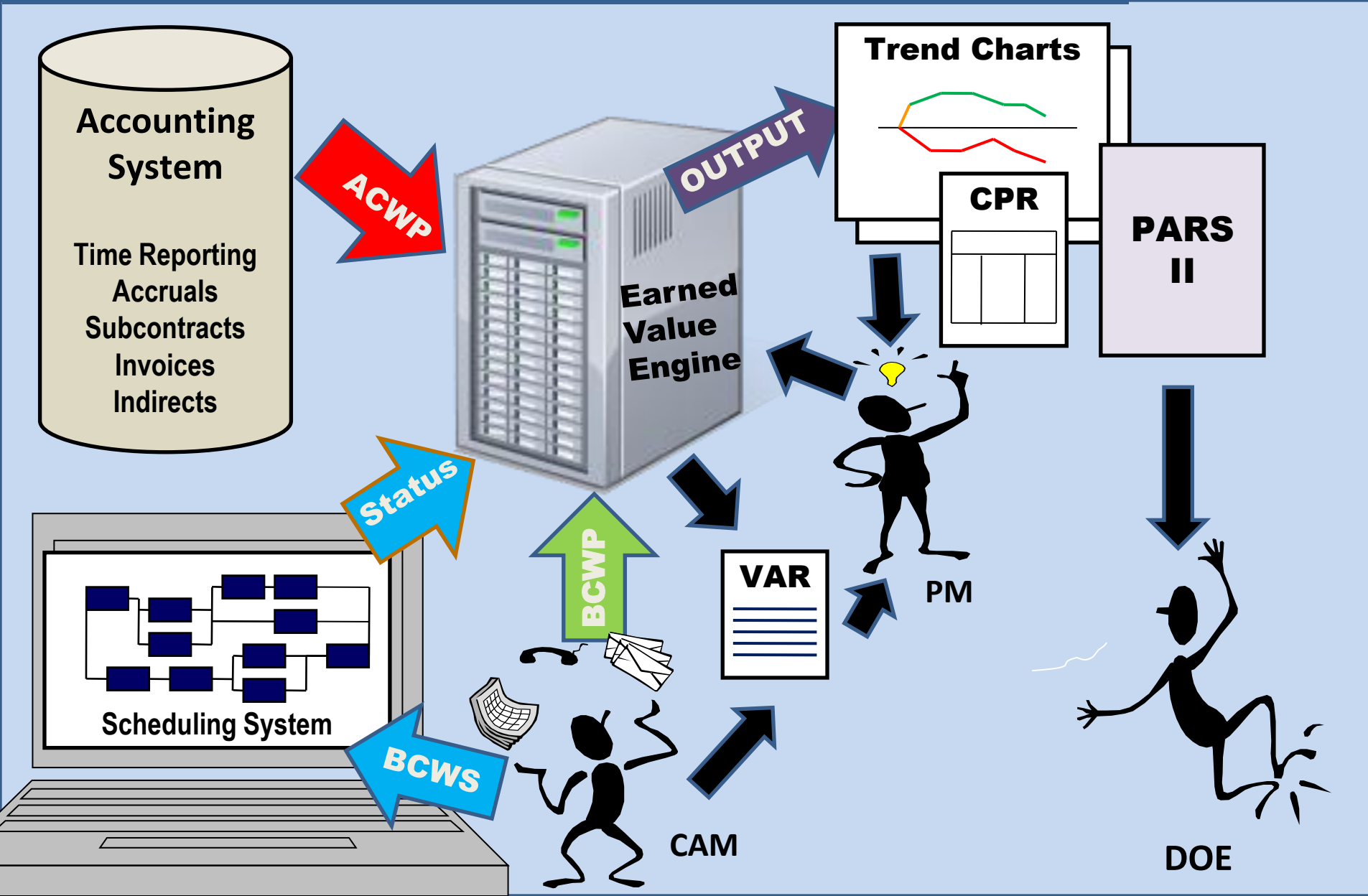
EVMS Processes



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

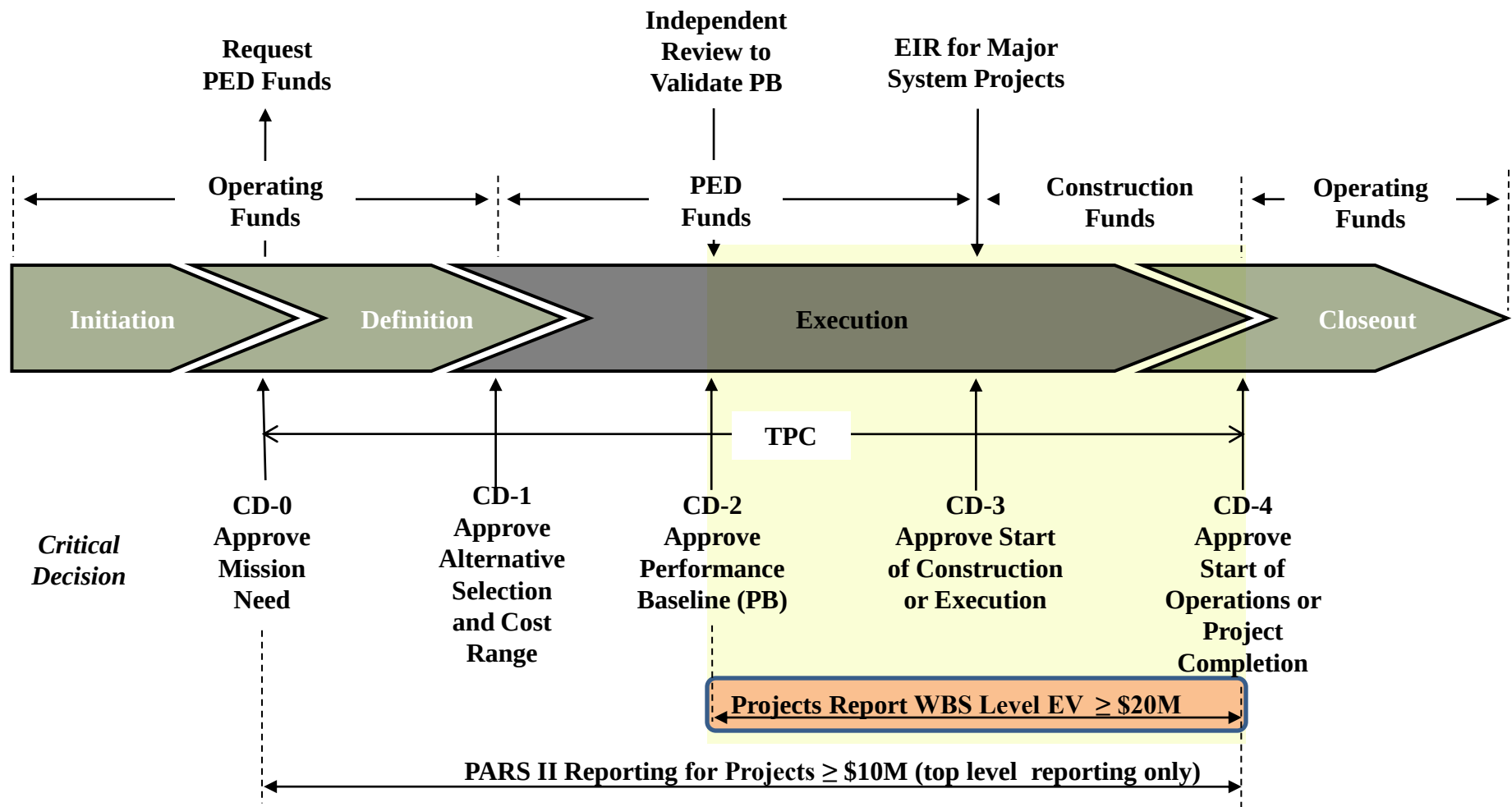
The EVM System I/O



- **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



- 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



Page 113

Readiness Assessment	• After CD-1 • "Level-set" expectations • 1 Day on-site meeting; two or more months prior to review
Pre-Review Assessment	• After CD-2 • Assess policy/procedures, i.e. System Description • Review and analyze 3 months of data
On-Site EVMS Review	• CAM and Managerial Interviews • Conduct Data Traces • Typically 5 days on site
Follow Up Review	• Review CAP Evidence Submittal • Assess CAP Implementation • Typically 1 to 3 days on site
Certification	• Final Report • Certification Letter from Contracting Officer prior to CD-3
Surveillance	• Follows Certification • Contractor conducts annual surveillance • Internal APM SOP provides for on-going data driven, risk based analysis



EVMS Changes After Certification

- **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

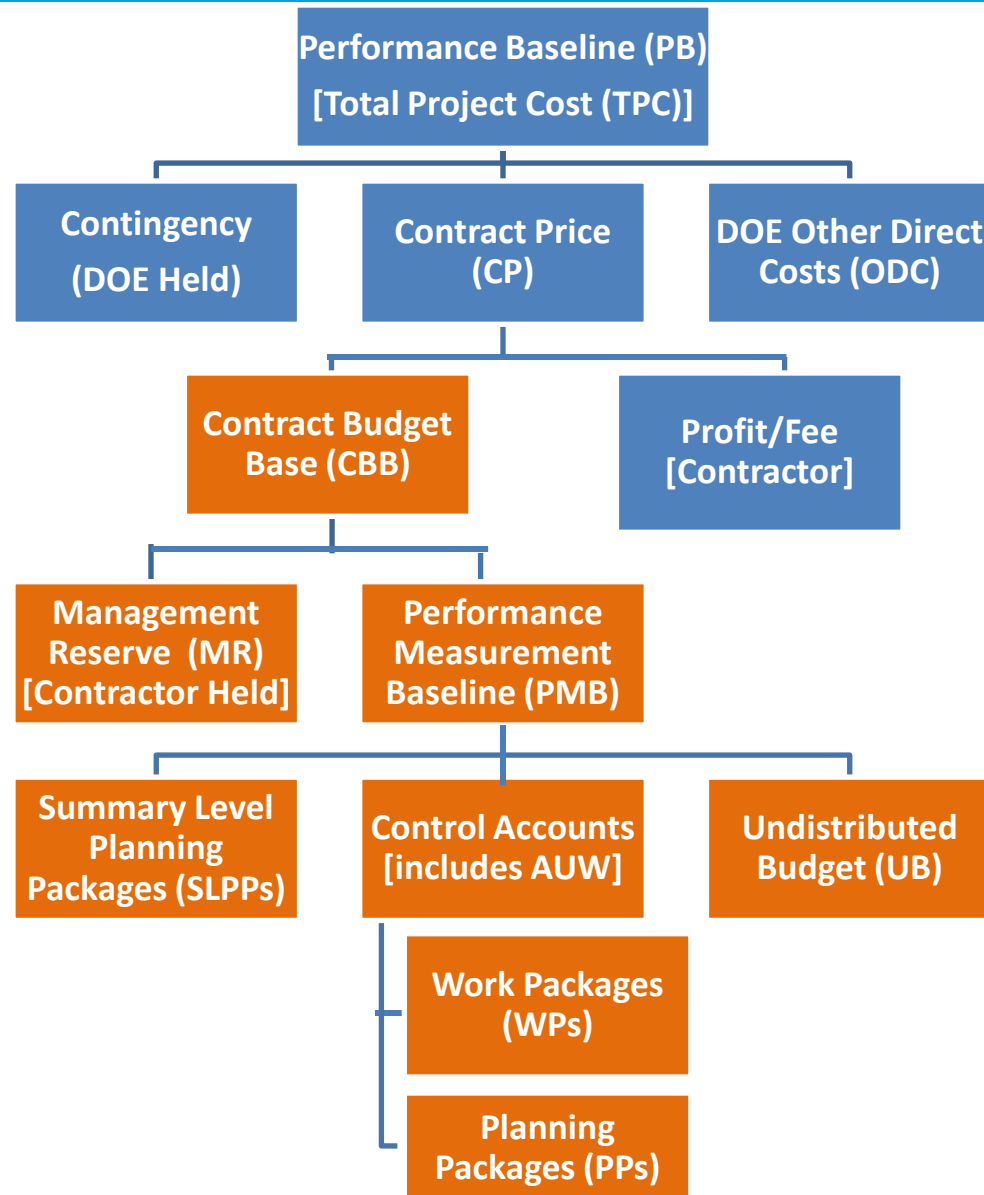
- **What?**
 - EVMS Certification and Surveillance status is maintained in a Central DOE Repository
- **Where?**
 - PARS II
- **Who?**
 - APM is primary responsible for maintaining a repository of the status of all certifications, regardless of certifying authority and dollar thresholds, across DOE projects, 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



- **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



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EARNED VALUE MANAGEMENT

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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 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





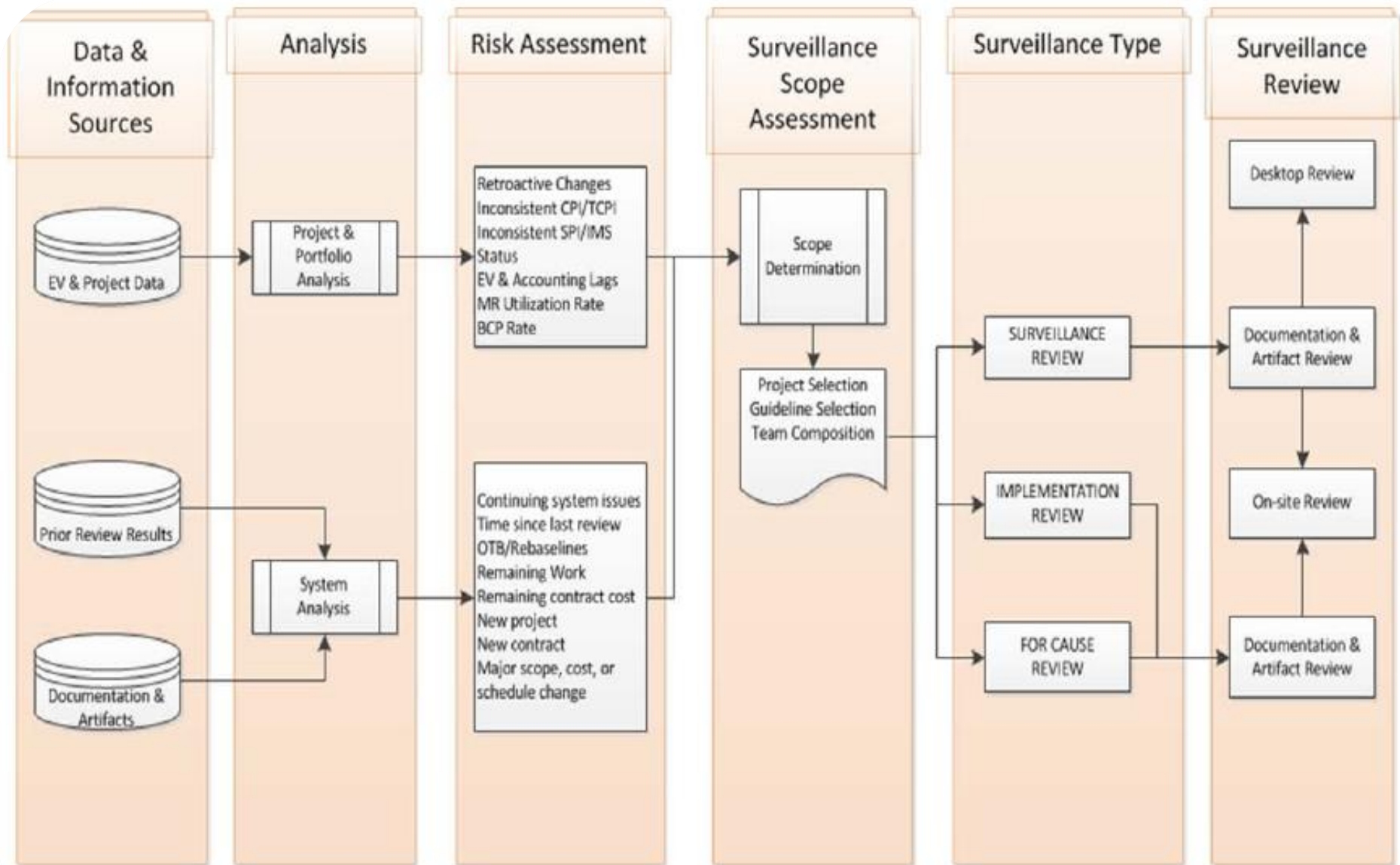
- **National Defense Industry Association (NDIA) Surveillance Guide 2004, 2011**
 - “Management’s objective should be to select processes based upon the risk associated with the remaining work and content that is specific to the programs being reviewed. The selection of EVM guidelines and processes reviewed 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?

- **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





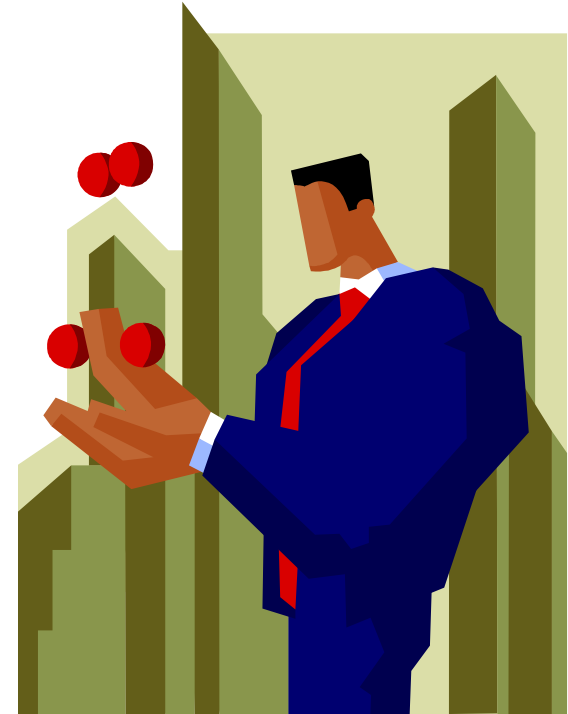
- **SURVEILLANCE REVIEW**
 - Conducted to demonstrate continued compliance of a certified system to the ANSI/EIA 748 guidelines, ensure company processes are being followed, verify the EVM data is useful, timely, and effective, and assess whether the data is used to make informed decisions.

- **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



- 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

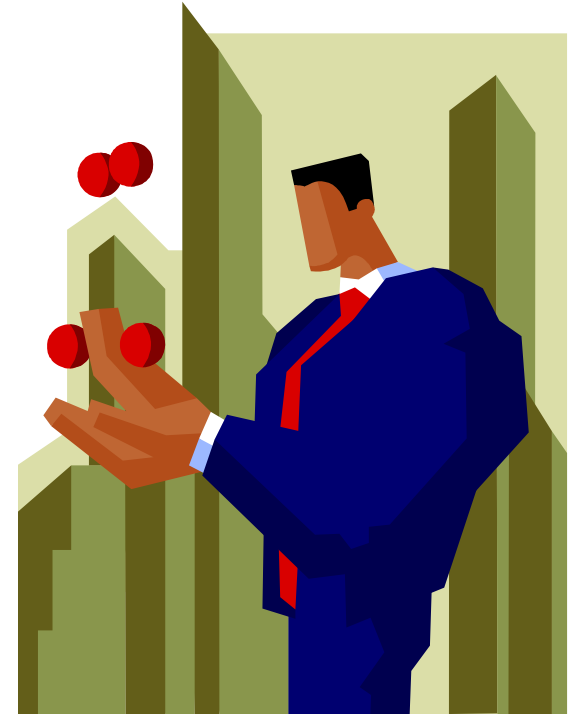


- Contract:
 - Ensures all applicable EVMS regulatory and contractual requirements, FAR clauses, related data item deliverables, and language included
- Award Fee:
 - Ensures that contractor performance and EVMS health is integrated with the contract award fee determinations
- Letter:
 - Issues letter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

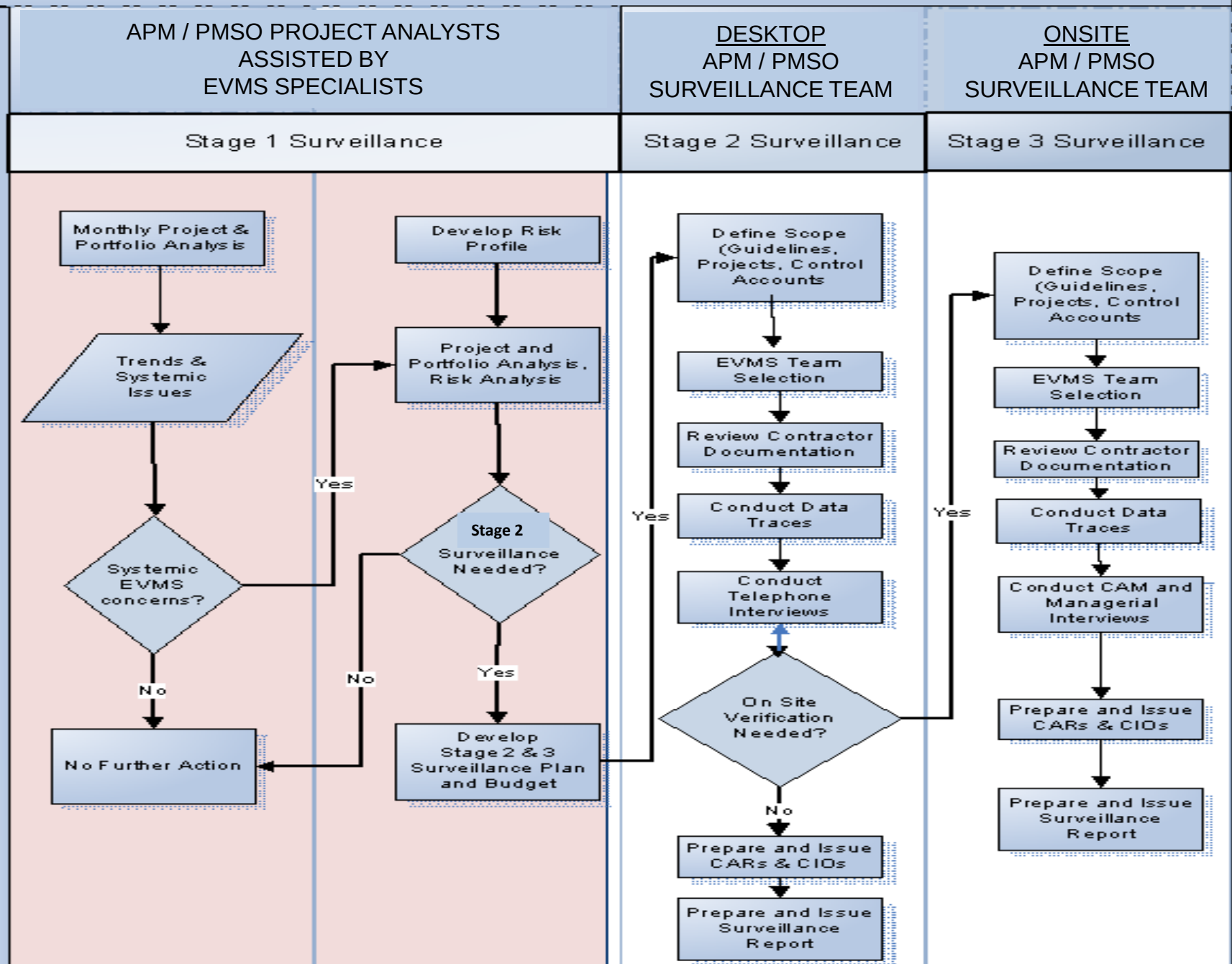


Breakdown of the EVMS Surveillance SOP

- **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



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 . . .

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

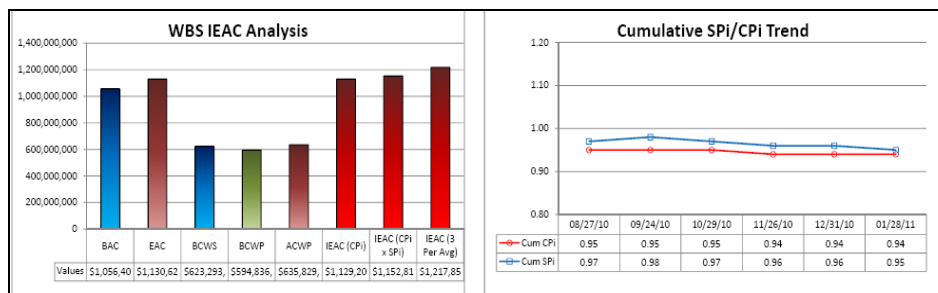
BCWS	\$36,364,214.15	\$25,284,817.00	\$28,253,804.76
BCWP	\$65,026,378.23	\$23,684,994.92	\$22,023,595.79
ACWP	\$16,859,675.33	\$25,829,028.36	\$21,202,240.25
SV	\$28,662,164.08	(\$1,599,822.08)	(\$6,230,208.97)
SV%	78.82%	-6.33%	-22.05%
SPi	1.788	0.937	0.779
CV	\$48,166,702.90	(\$2,144,033.44)	\$821,355.54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



Current FPD Assessment:	Yellow	Forecast TPC (\$M): 1/227
Forecast CD4: 07/01/14		
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 pipe 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 CD4: 11/01/13		
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-at-Completion (EAC) and a revised project schedule incorporating a new construction strategy designed to offset the effects of delayed delivery of major ASME vessels. OEM has not yet been provided with those 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 as 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 CD4: 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.		

Project Quick View Management Report

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 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		



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, $BCWR = BAC - BCWP_{cum}$

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



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MATERIAL REMAINING %: Of total original material budget, what is the percentage of remaining material budget? $(\text{Material BAC} - \text{Material BCWP}_{\text{cum}}) / \text{Material BAC}$
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

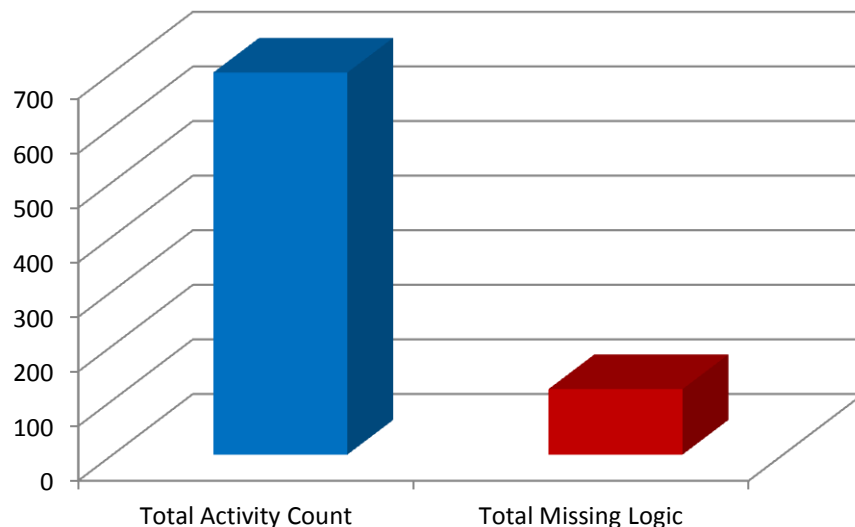


- **NOTE:** This report currently includes Level Of Effort (LOE) tasks so keep that in mind when using this report to assess schedule health.
- The number of discrete tasks without predecessors and/or successors **should not exceed 5%**

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



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

EV Data Validity (WBS Level)

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	Missin g ETC	Extra ETC	
2.45	1.68	650,826	598,341	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	0.89	1,774,836	1,774,836		85.7%	0.94						0.07				
0.66	0.62	39,783,451	45,161,553	(5,372,102)	38.9%	1.12				X	X	-0.47				
0.73	0.43	4,192,742	4,401,689	(208,947)	11.9%	0.99						-0.26				
1.10	0.29	11,880,202	12,019,599	(139,397)	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)	56.8%	0.93										
1.01	0.84	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	0.86	686,912	912,134	(225,222)	84.7%	0.33	Inc BCWP					0.66				
0.83	0.80	45,655,349	54,945,426	(9,290,077)	78.4%	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



- **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:		PMO:		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? $(\text{Material BAC} - \text{Material BCWPCum}) / \text{Material BAC}$
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 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.

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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	IEAC2	IEAC3
AC + (BCWR / CPI)	AC + BCWR / CPI * SPI	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%		

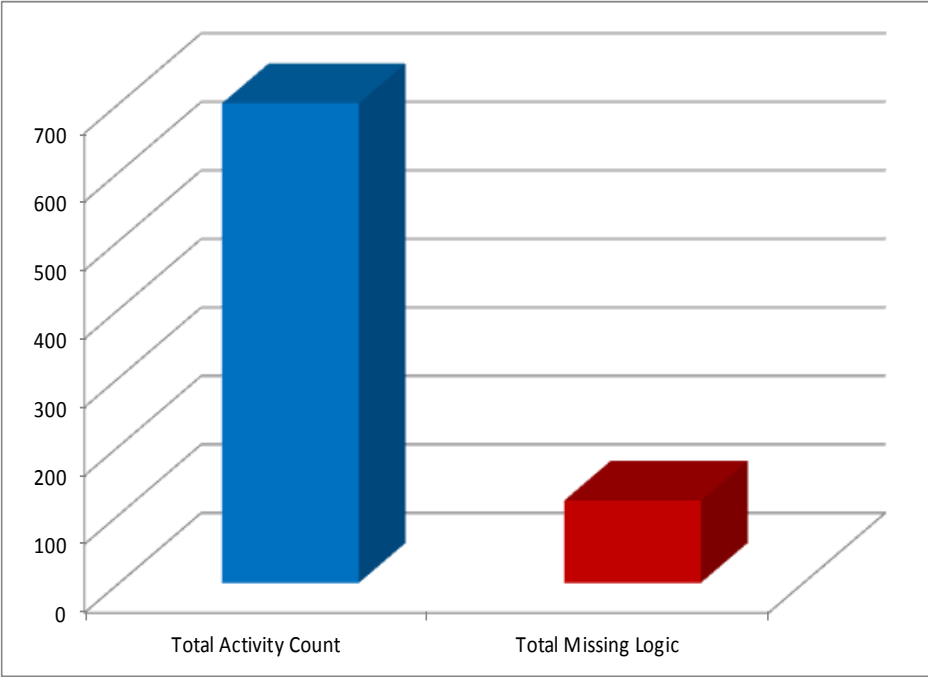
Average % Change last 6 months 0%

Exercise 1: EVMS Risk Matrix, pg 7 of 7



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%



OUT BRIEF





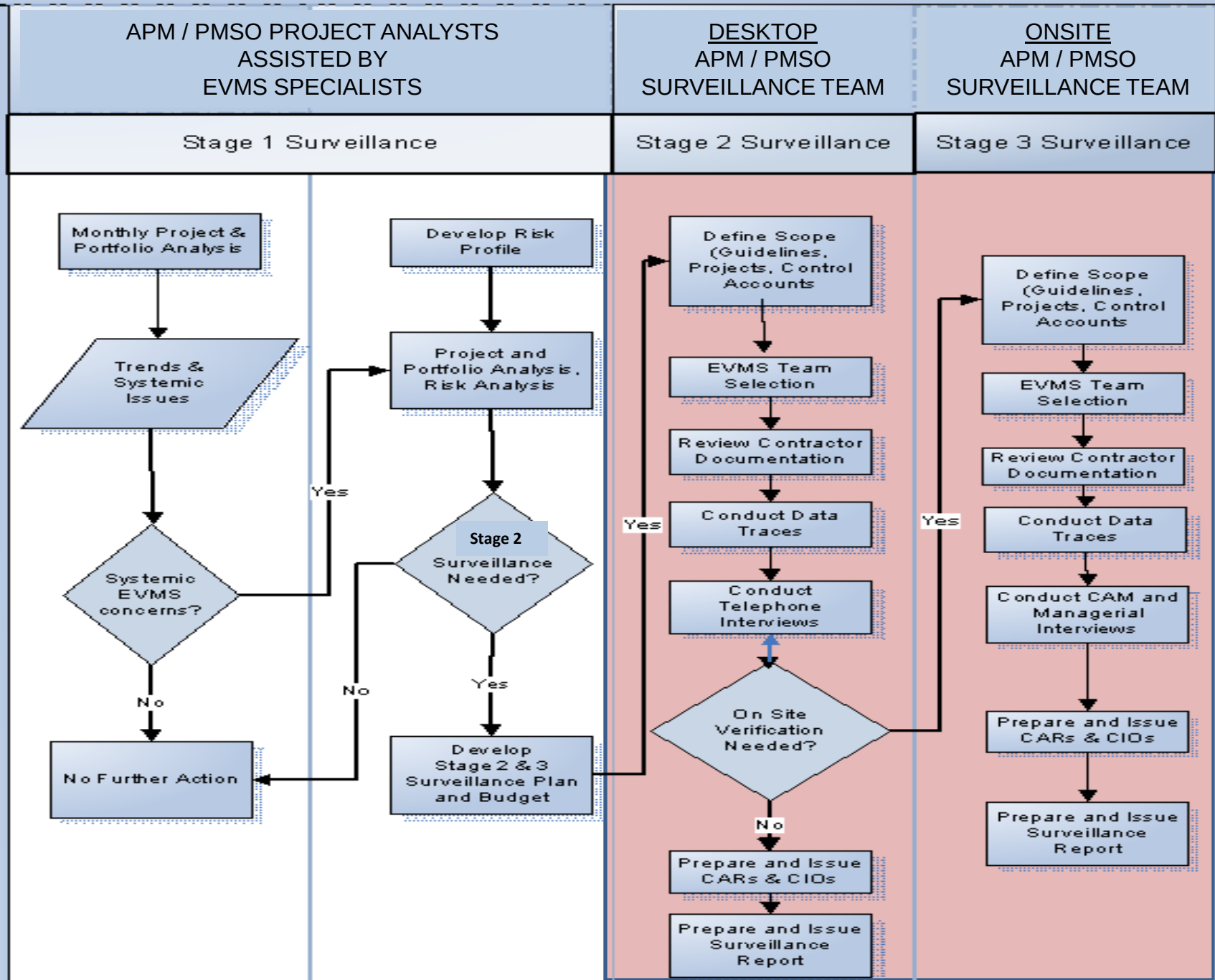
Surveillance: Applying the Risk Matrix Results to Determine Scope

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





- **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

- **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

- **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



- **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

- **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

- 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.

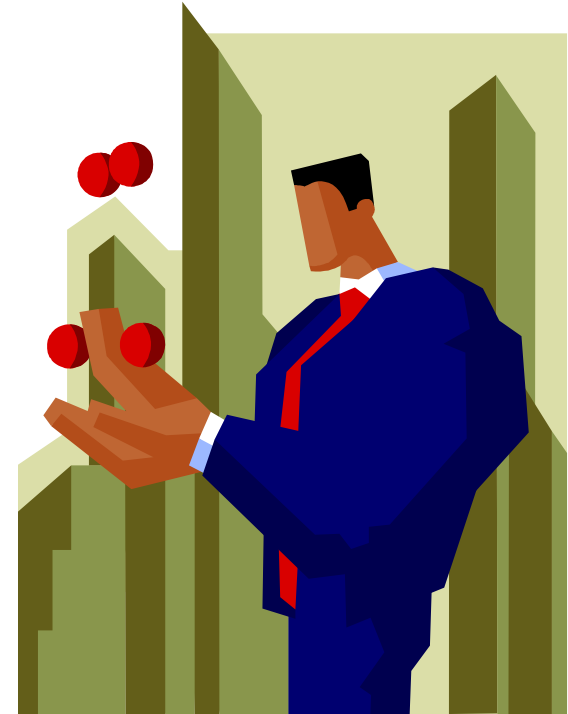
TRUST BUT VERIFY



- **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





- **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

- **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

- 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

- **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

- **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



- **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



- **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

- **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





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

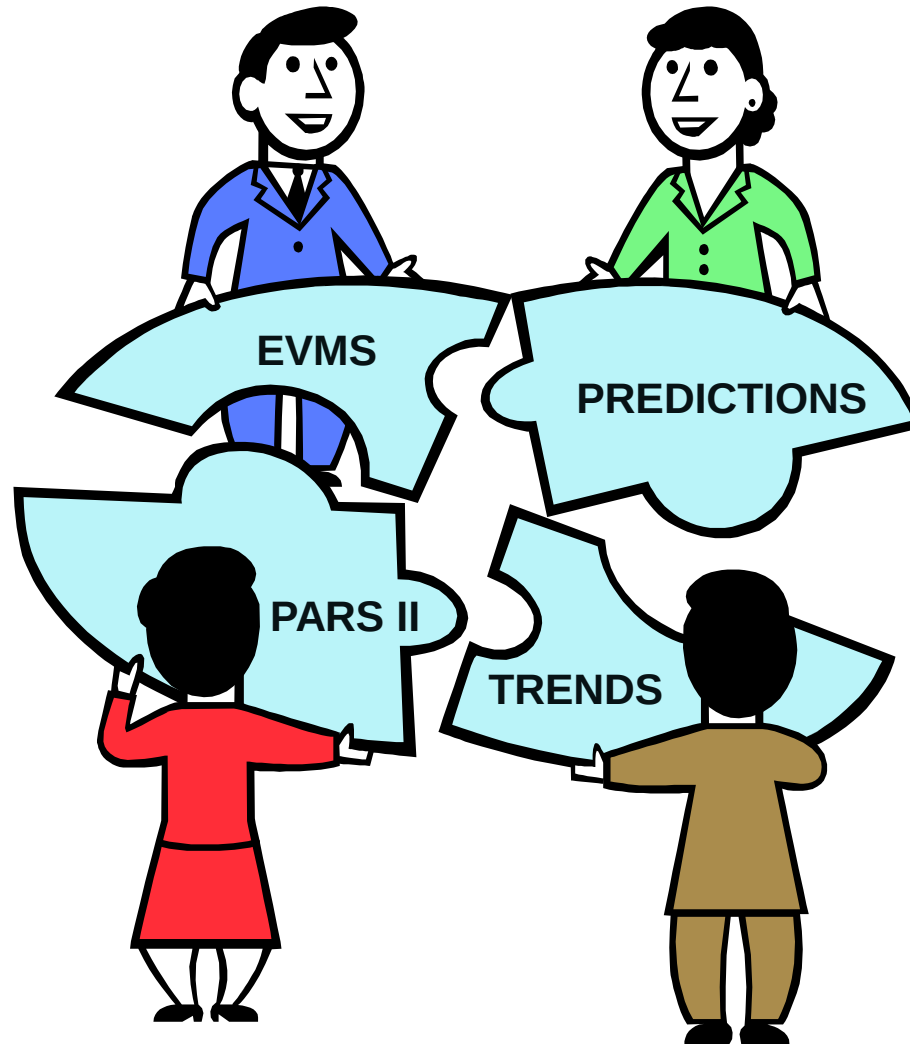


- **An expert schedule analyst should periodically review the schedule to ensure compliance to sound scheduling principles.**
- **Critical Path Refresher**
 - A sequence of discrete tasks/activities in the network that has the longest total duration through the contract or project.
 - The critical path 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



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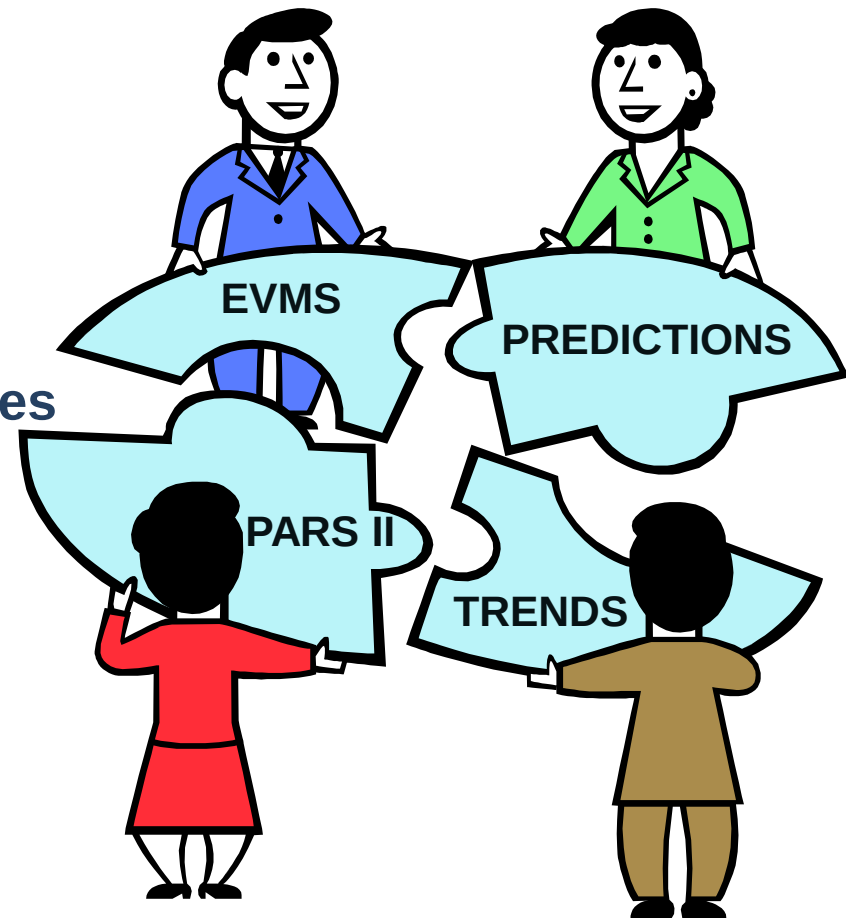


Agenda – Day 2



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- 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.**



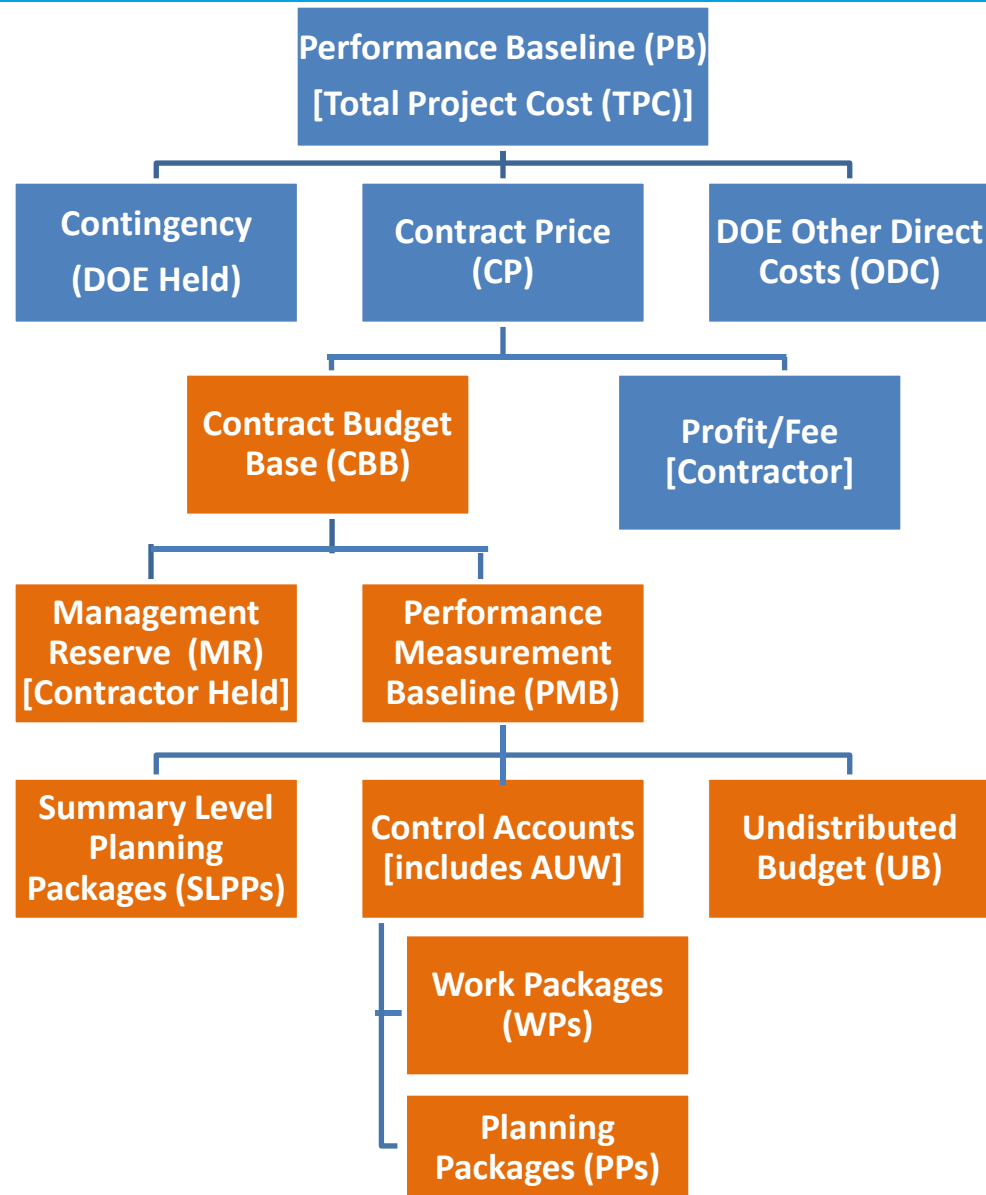
VS.



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



Performance Baseline Components





- 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)

- **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



- **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



- 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



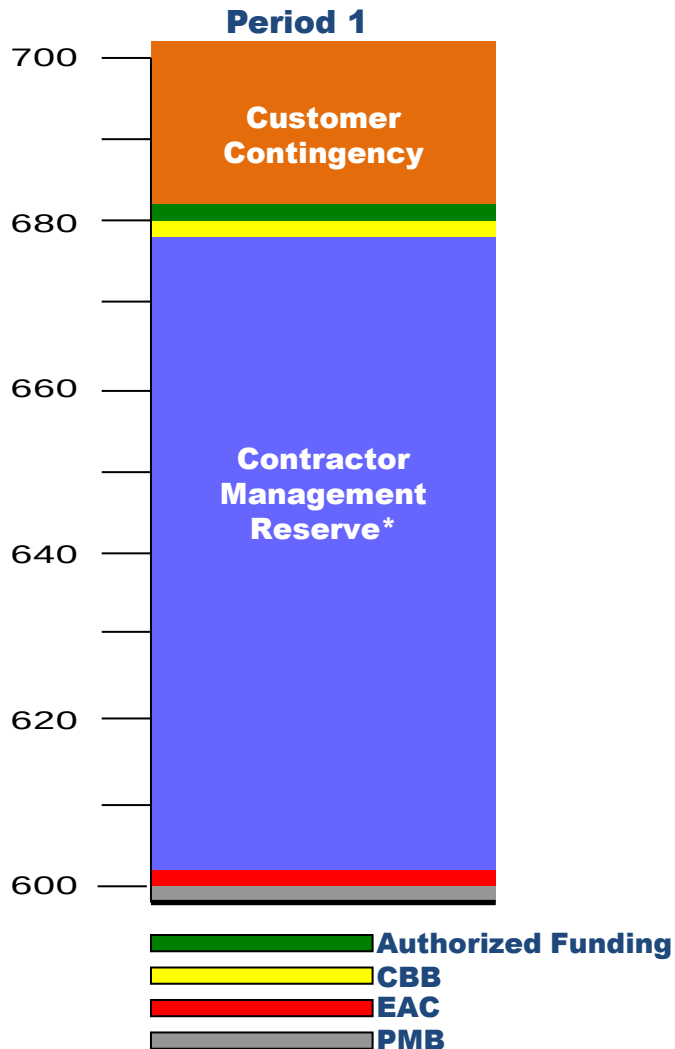
- **Cost Overruns**

- 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



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- 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.

***Represents an MR forecast in the Most Likely EAC**

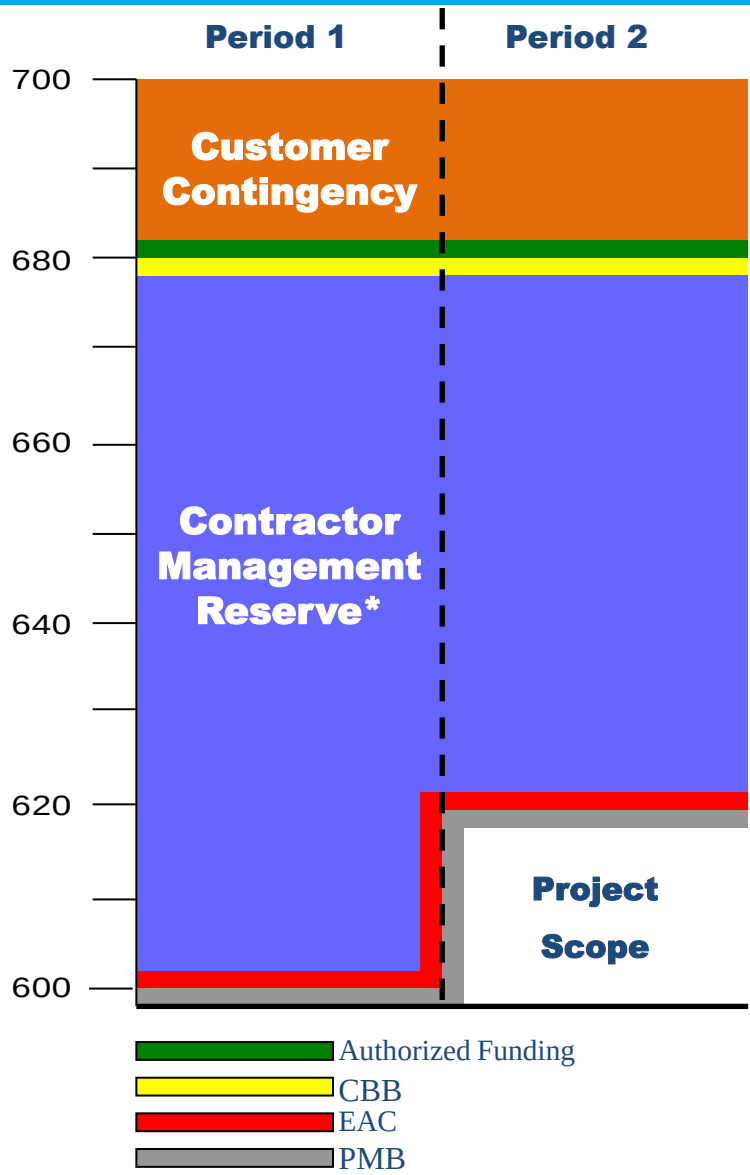
Management Reserve and Contingency Usage Scenarios, pg 2 of 16



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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 through 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



*Represents an MR forecast in the Most Likely EAC

Management Reserve and Contingency Usage Scenarios, pg 4 of 16

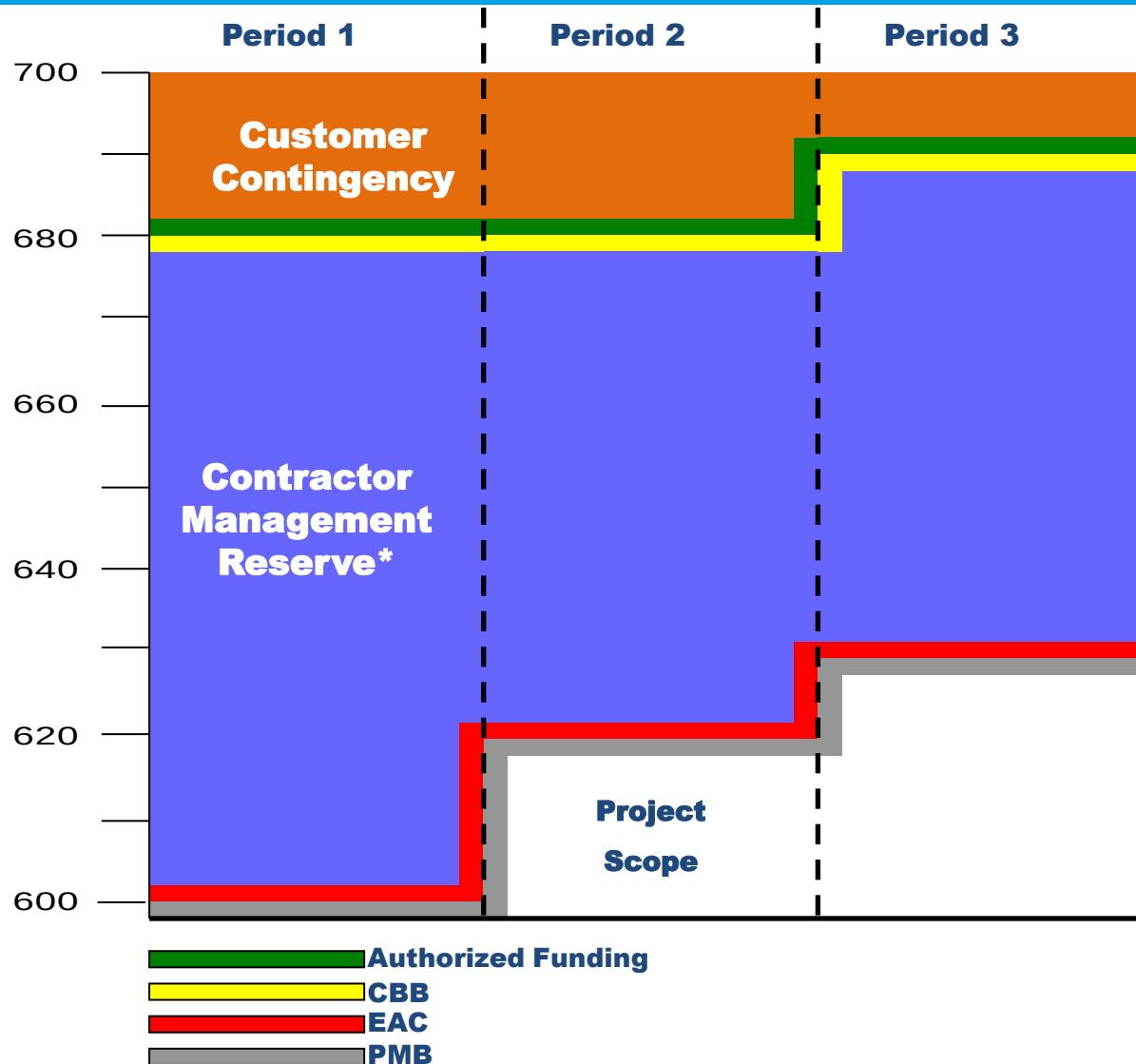


- In Period 2, the contractor applied MR to the PMB due to the realization that additional unanticipated waste treatment testing would need to be done as part of their risk mitigation program.
- Because of this internal application of budget, the PMB (and therefore the BAC and EAC associated with this 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



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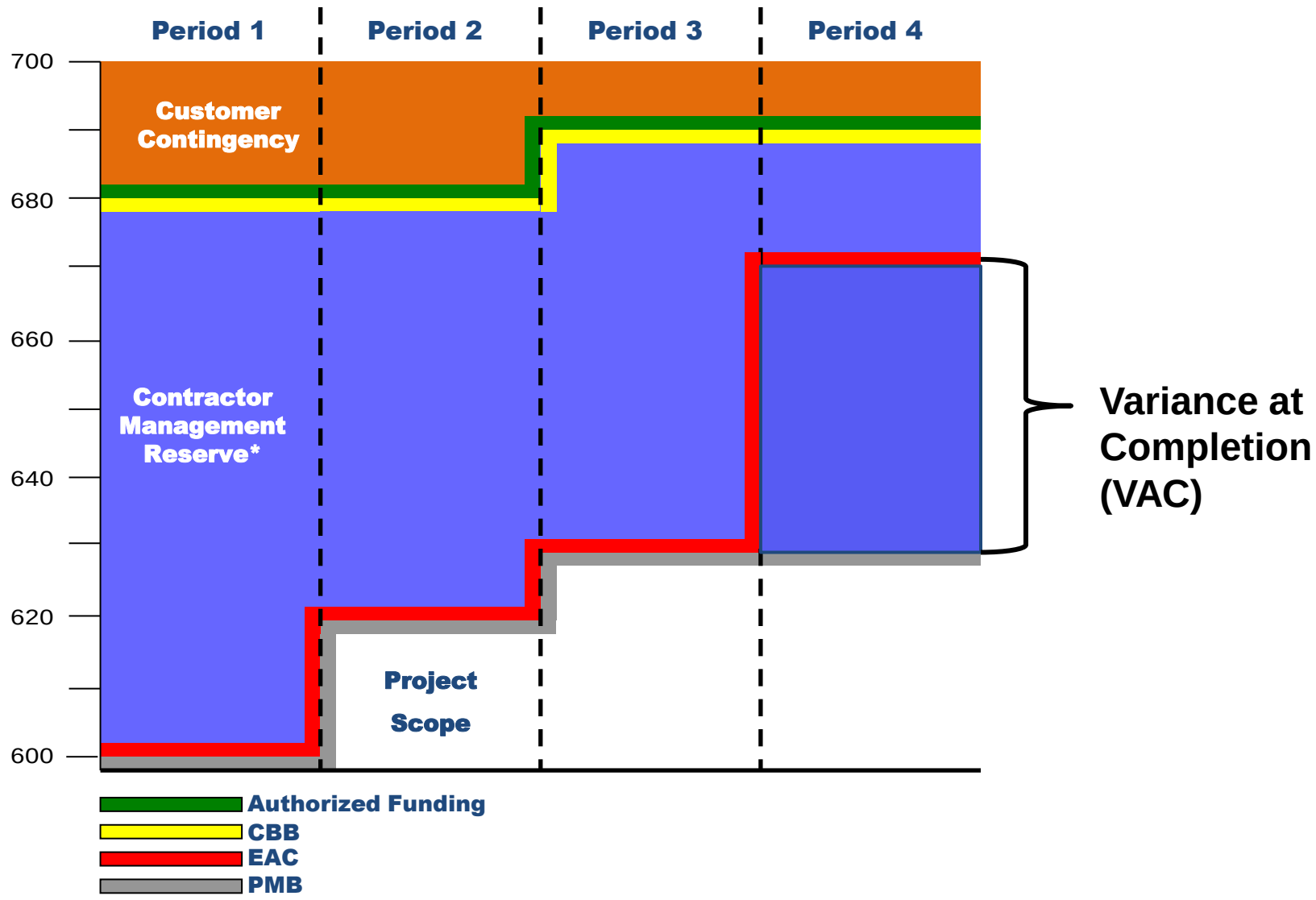
*Represents an MR forecast in the Most Likely EAC

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



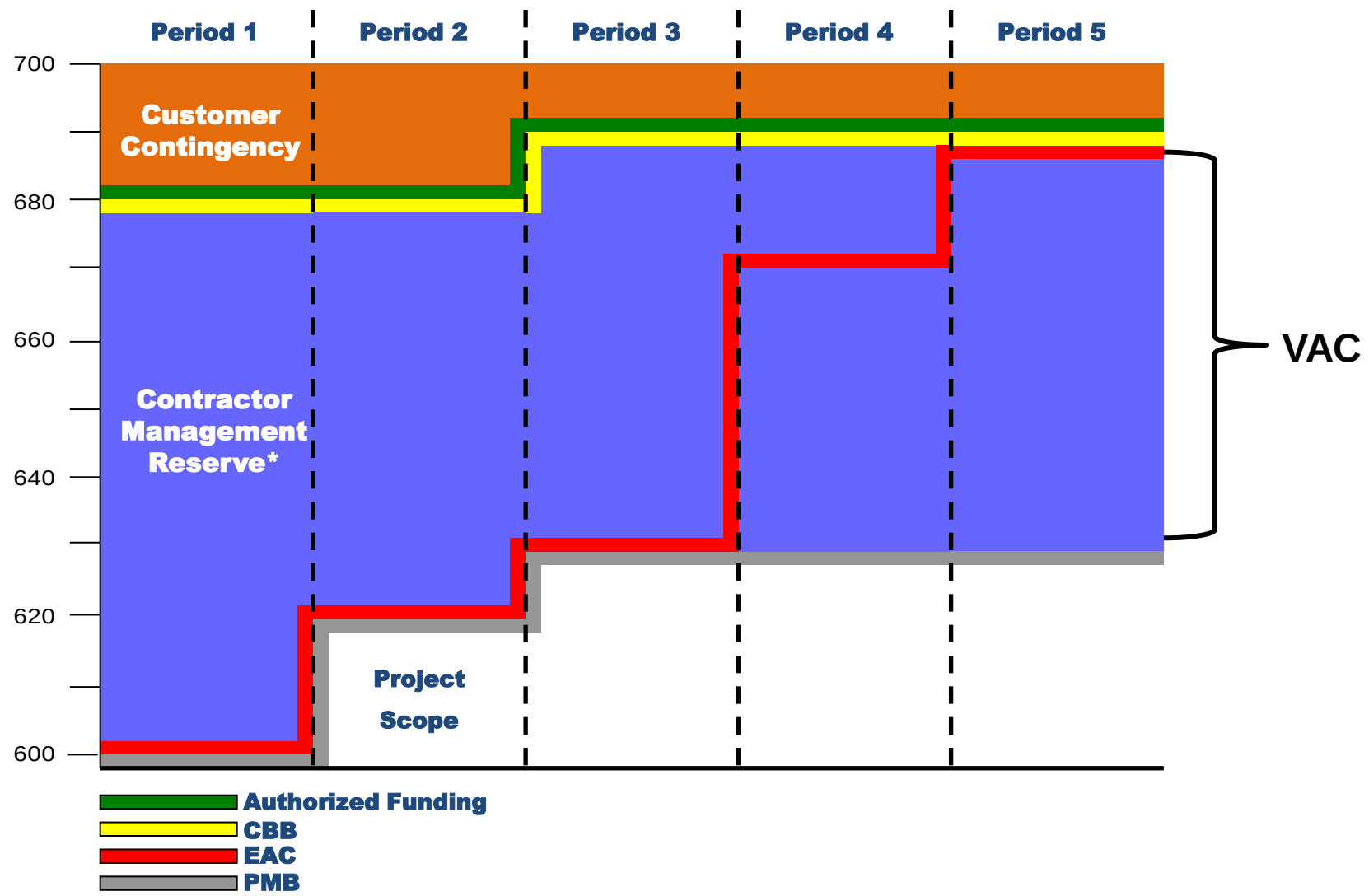
*Represents an MR forecast in the Most Likely EAC

Management Reserve and Contingency Usage 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



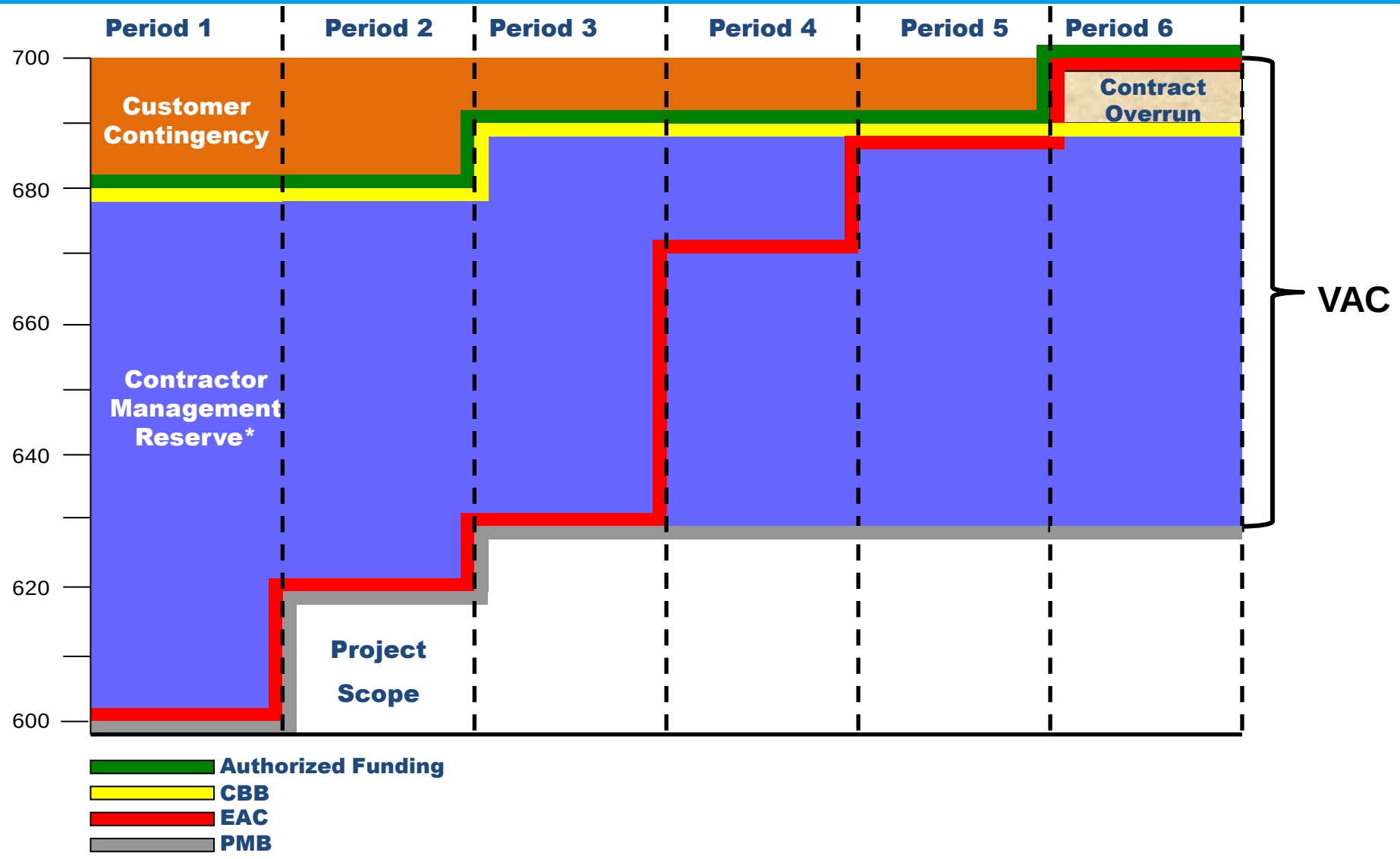
*Represents an MR forecast in the Most Likely EAC

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



*Represents an MR forecast in the Most Likely EAC

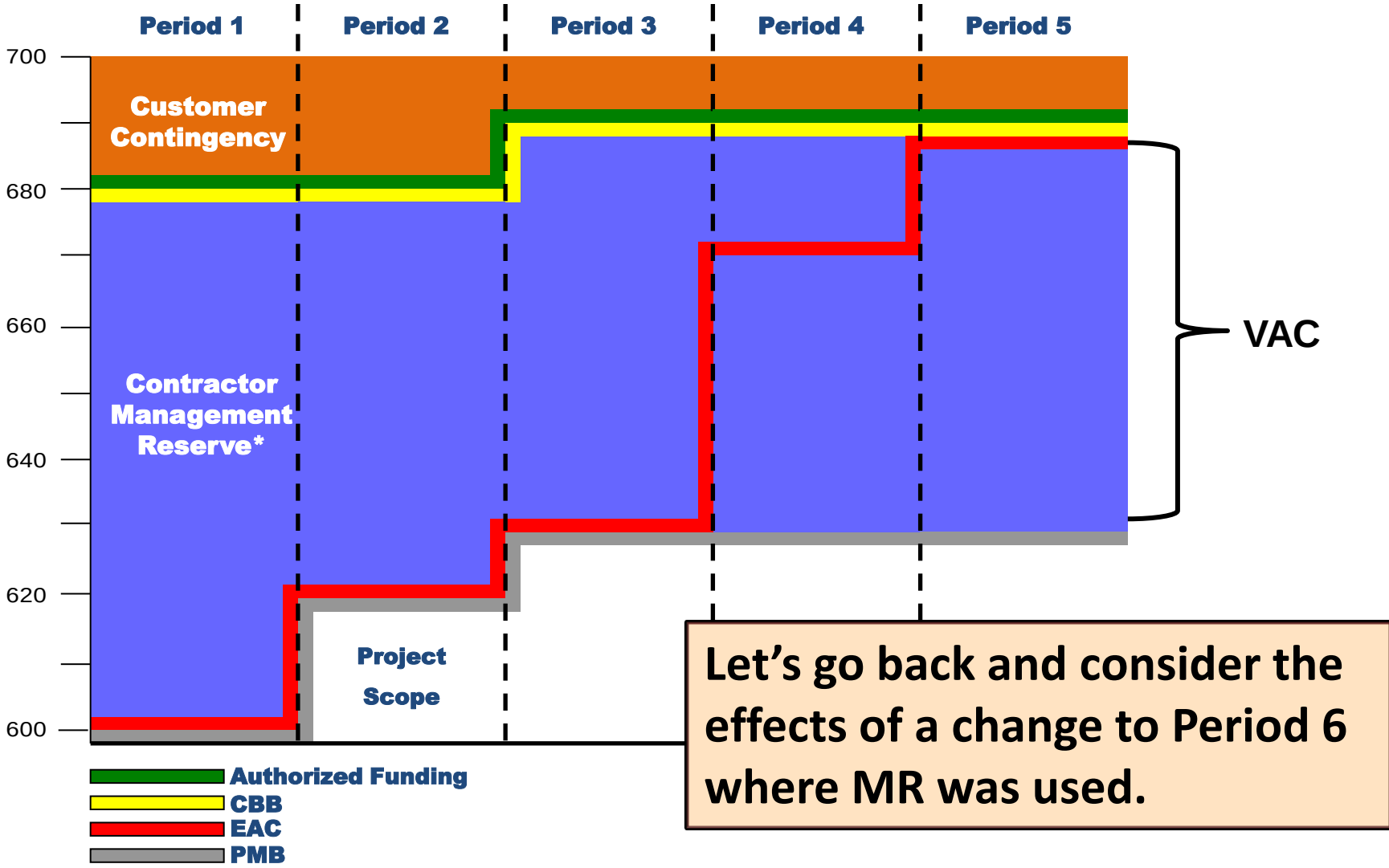
Management Reserve and Contingency Usage Scenarios, pg 12 of 16



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- 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



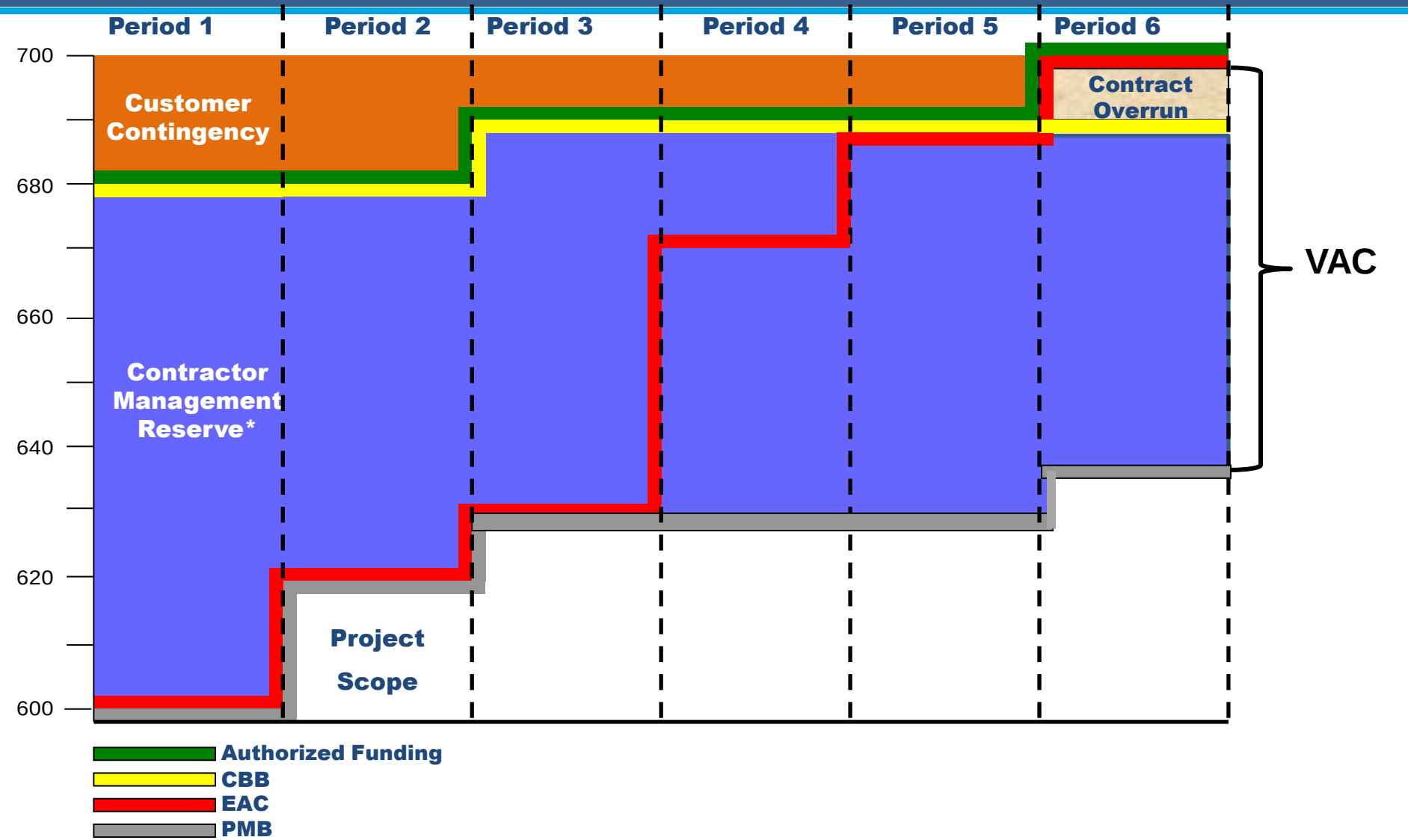
*Represents an MR forecast in the Most Likely EAC

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



*Represents an MR forecast in the Most Likely EAC

Management Reserve and Contingency Usage Scenarios, pg 16 of 16

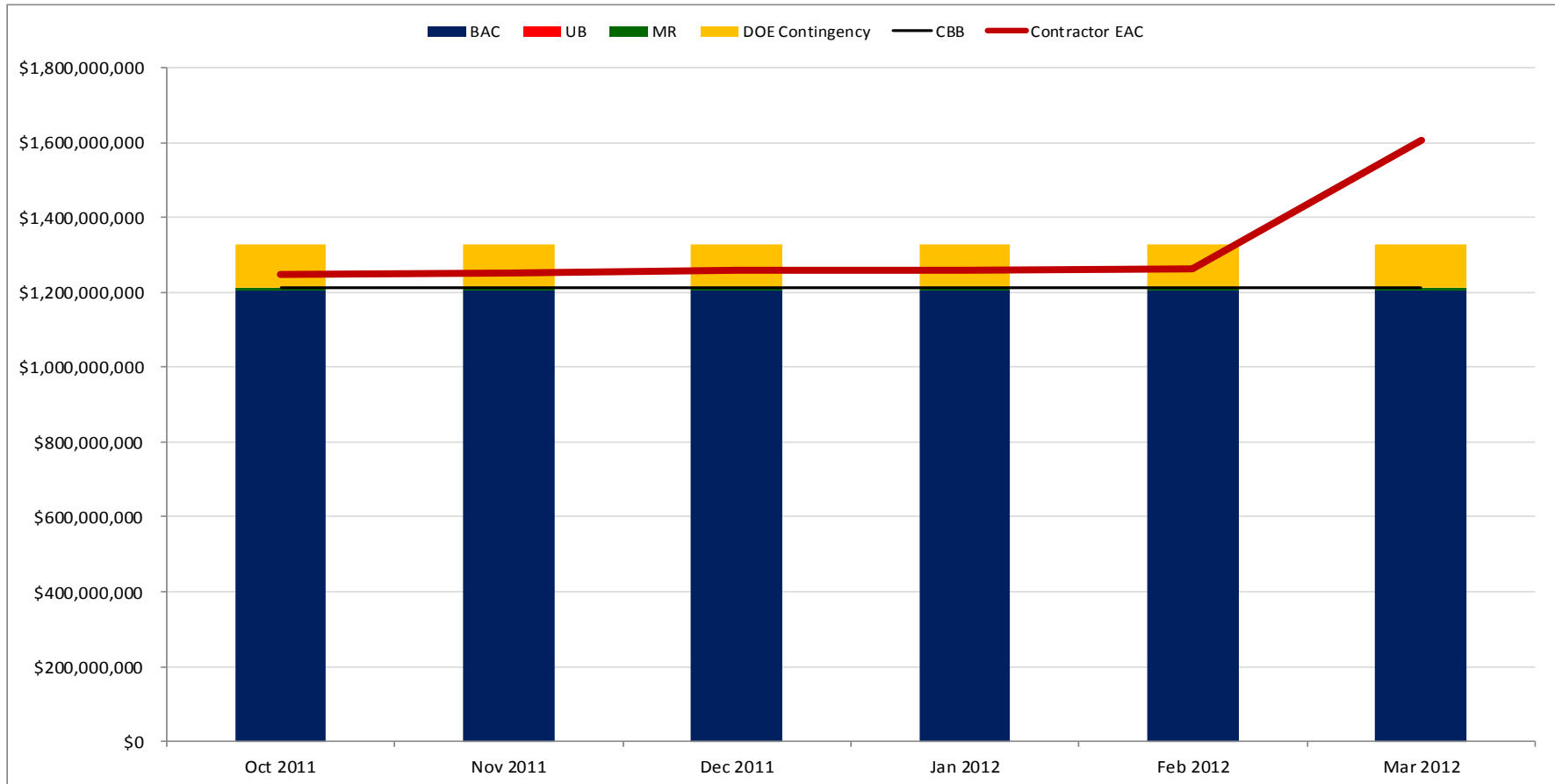


- Period 6 scenario 2: The contractor applied \$10M MR to the PMB due to the realization that additional unanticipated ground water testing would need to be done as part of their risk mitigation program. Because of this internal application of budget, the PMB (and therefore the BAC and EAC associated 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

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



- 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

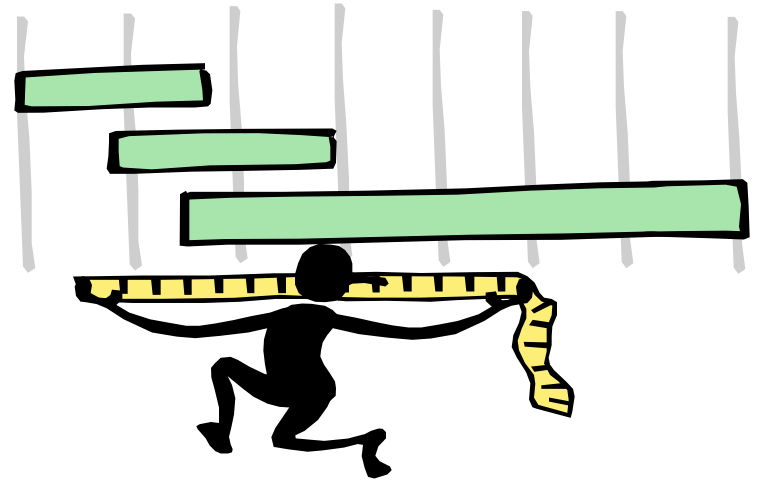
Budget Vs. Funds Wrap Up



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EV Data Analysis



- **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.

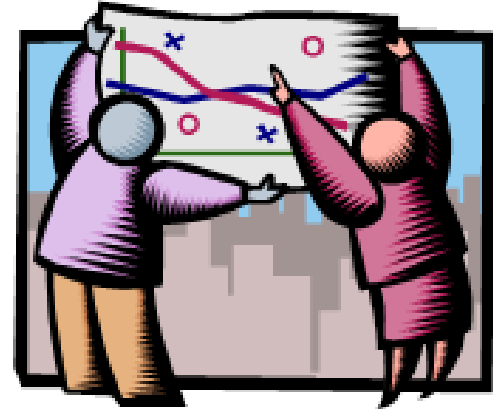
- 1. Validity check of data**

- 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**
 - o Briefed at DepSec level for PARS II reportable capital asset projects
 - o 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**



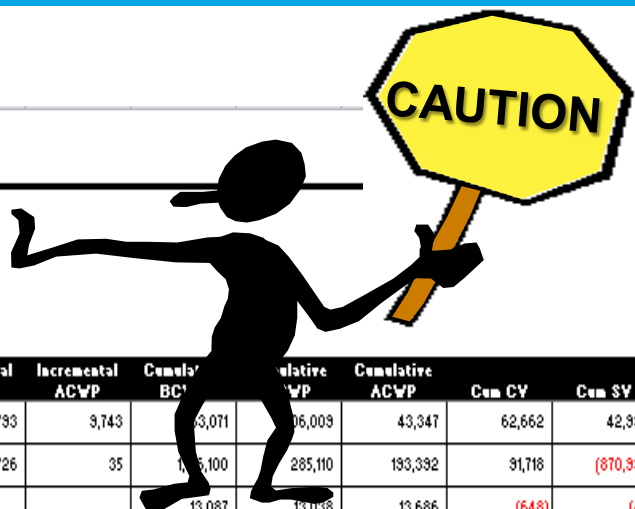
How Do We Assess Validity?

- **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	$\leq \pm$	10%
Yellow	$\leq \pm$	20%
Red	$> \pm$	20%

Incremental BCWP	Incremental ACWP	Cumulative BCWP	Cumulative ACWP	Cumulative CV	Cumulative SV	Cumulative CPI	Cumulative SPI	BAC	EAC	VAC	% Compl	TCPI to	Negative SPA	Inc SPA >	BCWP > BAC	Cum ACWP	CV < VAC	CPI < TCPI	EAC without BAC	Missing ETC	Extra ETC
15,793	9,743	13,071	16,009	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	13,100	285,110	193,392	91,718	(870,990)	1.47	0.25	1,265,640	1,265,640		22.5%	0.91					0.56			
		13,087	13,038	13,686	(648)	(49)	0.95	1.00	576,566	577,397	(831)	2.3%	1.00								
		13,087	13,038	13,686	(648)	(49)	0.95	1.00	576,566	577,397	(831)	2.3%	1.00								
916,580	2,409,989	27,913,531	17,500,985	25,725,021	(8,224,036)	(10,412,546)	0.68	0.63	45,757,030	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)	(9,562,244)	0.66	0.62	39,789,451	45,161,553	(5,372,102)	38.9%	1.12			X	X	-0.47			
2,659	29,292	1,161,866	496,852	676,690	(179,838)	(665,014)	0.73	0.43	4,192,742	4,401,689	(208,947)	11.9%	0.99					-0.26			
84,169	109,154	6,169,140	1,803,302	1,644,320	158,982	(4,365,838)	1.10	0.29	11,880,202	12,019,599	(139,397)	15.2%	0.97					0.13			
55,553	77,742	3,878,066	1,076,327	809,815	266,512	(2,801,739)	1.33	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								
17,698	8,177	5,446,717	4,594,683	4,543,119	51,564	(852,034)	1.01	0.84	10,072,341	12,415,920	(2,343,579)	45.6%	0.70					0.32			
849	(1,905)	3,125,675	3,174,949	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)	5,759	676,768	581,627	591,180	(9,553)	(95,141)	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	35,781,469	43,287,183	(7,505,714)	(9,128,933)	0.83	0.80	45,655,349	54,945,426	(9,290,077)	78.4%	0.85	Inc BCWP							
4,564,944	5,313,322	14,997,346	15,808,265	15,714,691	93,574	810,919	1.01	1.05	30,807,704	30,625,294	182,410	51.3%	1.01								
3,015	(27,939)	1,362,593	1,716,184	1,704,896	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																					

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



- **EAC with no BAC (indicates an unbudgeted activity)**
- **Missing ETC indicates $BCWP < BAC$ yet there is no future ETC planned as $ACWP \geq EAC$**
 - Baselined 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				6/24/2012				5/22/2012				4/22/2012				3/25/2012				3/19/2012			
	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		\$53,416,001	\$49,078,038	\$48,643,888		\$53,416,001	\$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	
06/21/2009	\$4,834,514																							
07/26/2009	\$5,337,752																							

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		\$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	\$113,224,488	\$117,078,531		\$85,102,893	\$113,224,488	\$117,078,531		\$85,102,893	\$113,224,488	\$117,078,531		\$85,102,893	\$113,224,488	\$117,078,531		\$127,608,634	\$113,224,488	\$117,078,531		\$127,608,634	\$113,224,488	\$117,078,531	
04/20/2011	\$89,192,583	\$117,082,106	\$121,807,704		\$89,192,583	\$117,082,106	\$121,807,704		\$89,192,583	\$117,082,106	\$121,807,704		\$89,192,583	\$117,082,106	\$121,807,704		\$132,315,994	\$117,082,106	\$121,807,704		\$132,315,994	\$117,082,106	\$121,807,704	
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		\$89,751,462	\$119,933,951	\$124,815,171		\$137,119,802	\$119,933,951	\$124,815,171		\$137,119,802	\$119,933,951	\$124,815,171	
06/19/2011	\$91,729,208	\$124,837,175	\$128,625,388		\$91,729,208	\$124,837,175	\$128,625,388		\$91,729,208	\$124,837,175	\$128,625,388		\$91,729,208	\$124,837,175	\$128,625,388		\$136,423,460	\$124,837,175	\$128,625,388		\$136,423,460	\$124,837,175	\$128,625,388	
07/24/2011	\$92,984,529	\$128,227,147	\$134,232,287		\$92,984,529	\$128,227,147	\$134,232,287		\$92,984,529	\$128,227,147	\$134,232,287		\$92,984,529	\$128,227,147	\$134,232,287		\$141,090,843	\$128,227,147	\$134,232,287		\$141,090,843	\$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		\$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	\$99,103,643	\$138,525,557	\$147,159,659		\$99,103,643	\$138,525,557	\$147,159,659		\$99,103,643	\$138,525,557	\$147,159,659		\$99,103,643	\$138,525,557	\$147,159,659		\$153,636,684	\$138,525,557	\$147,159,659		\$153,636,684	\$138,525,557	\$147,159,659	
10/23/2011	\$102,072,702	\$140,612,042	\$149,627,467		\$102,072,702	\$140,612,042	\$149,627,467		\$102,072,702	\$140,612,042	\$149,627,467		\$102,072,702	\$140,612,042	\$149,627,467		\$157,990,961	\$140,612,042	\$149,627,467		\$157,990,961	\$140,612,042	\$149,627,467	
11/20/2011	\$104,902,876	\$144,520,176	\$154,618,299		\$104,902,876	\$144,520,176	\$154,618,299		\$104,902,876	\$144,520,176	\$154,618,299		\$104,902,876	\$144,520,176	\$154,618,299		\$161,023,598	\$144,520,176	\$154,618,299		\$161,023,598	\$144,520,176	\$154,618,299	
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		\$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	\$107,506,639	\$149,773,255	\$162,791,309		\$107,506,639	\$149,773,255	\$162,791,309		\$107,506,639	\$149,773,255	\$162,791,309		\$107,506,639	\$149,773,255	\$162,791,309		\$167,282,072	\$149,773,255	\$162,791,309		\$167,282,072	\$149,773,255	\$162,791,309	
02/19/2012	\$110,449,075	\$153,045,649	\$166,740,727		\$110,449,075	\$153,045,649	\$166,740,727		\$110,449,075	\$153,045,649	\$166,740,727		\$110,449,075	\$153,045,649	\$166,740,727		\$174,309,699	\$153,045,649	\$166,740,727		\$174,309,699	\$153,045,649	\$166,740,727	
03/25/2012	\$114,901,384	\$156,077,371	\$170,617,916		\$114,901,384	\$156,077,371	\$170,617,916		\$114,901,384	\$156,077,371	\$170,617,916		\$114,901,384	\$156,077,371	\$170,617,916		\$180,445,451	\$156,077,371	\$170,617,916		\$180,445,451	\$156,077,371	\$170,617,916	
04/22/2012	\$156,746,766	\$160,556,259	\$175,673,722		\$156,746,766	\$160,556,259	\$175,673,722		\$156,746,766	\$160,556,259	\$175,673,722		\$156,746,766	\$160,556,259	\$175,673,722		\$183,477,257	\$156,077,371	\$170,617,916		\$183,477,257	\$156,077,371	\$170,617,916	
05/29/2012	\$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		\$159,127,232	\$164,376,288	\$179,229,781		\$188,121,994	\$159,127,232	\$179,229,781		\$188,121,994	\$159,127,232	\$179,229,781	
06/26/2012	\$164,557,896	\$171,713,853	\$181,881,165		\$164,557,896	\$171,713,853	\$181,881,165		\$164,557,896	\$171,713,853	\$181,881,165		\$164,557,896	\$171,713,853	\$181,881,165		\$196,526,031	\$164,557,896	\$181,881,165		\$196,526,031	\$164,557,896	\$181,881,165	
07/22/2012	\$170,424,291	\$176,289,468	\$193,249,917		\$170,424,291	\$176,289,468	\$193,249,917		\$170,424,291	\$176,289,468	\$193,249,917		\$170,424,291	\$176,289,468	\$193,249,917		\$202,532,227	\$170,424,291	\$193,249,917		\$202,532,227	\$170,424,291	\$193,249,917	

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?**

- **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



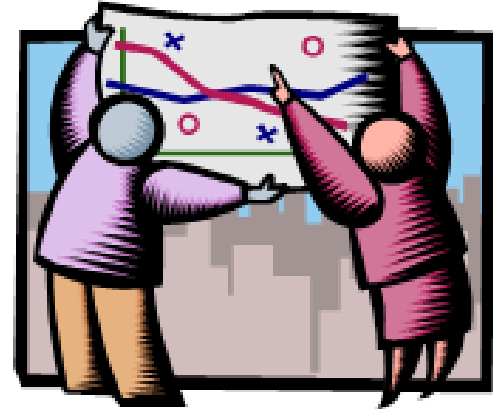
1. Validity check of data

2. Analyze variances

3. Analyze trends

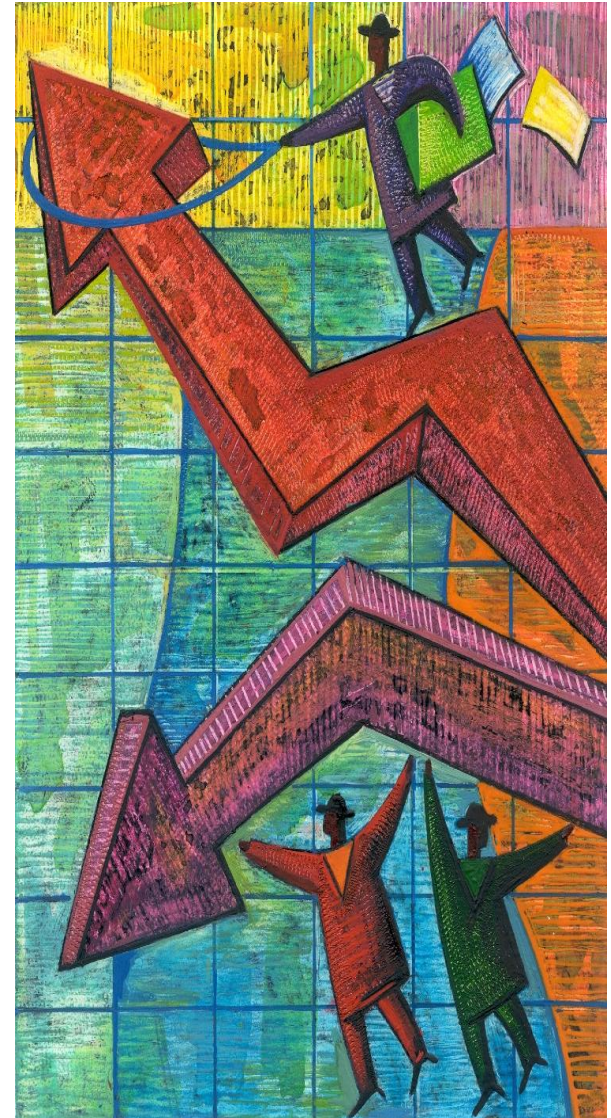
4. Assess realism of contractor's EAC

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)



- **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

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...

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

Favorable

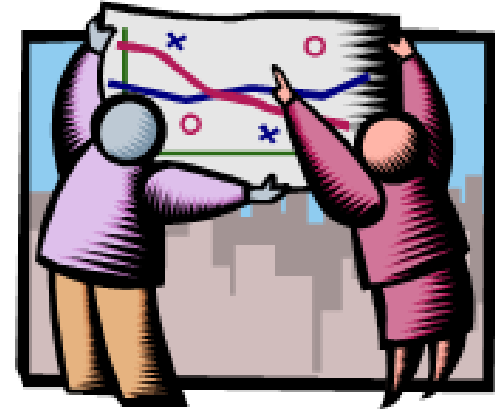
- Increased efficiency due to...
- Work less complex than anticipated in the areas of...
- Fewer revisions and rework because...
- Subcontractor ahead of schedule because...

- 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

- 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?





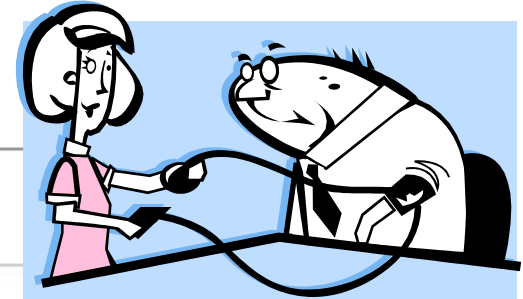
How Can We Use the Data

Variance Analysis Cumulative (WBS Level)

2							
3	THRESHOLD		CHANGE		COMMENTS		
4	STATUS	MAX	STATUS	ARROW			
5	Red	0.80	Better	▲			
6	Yellow	0.90	No Change	-			
7	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 &	▼	▼	▼	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)





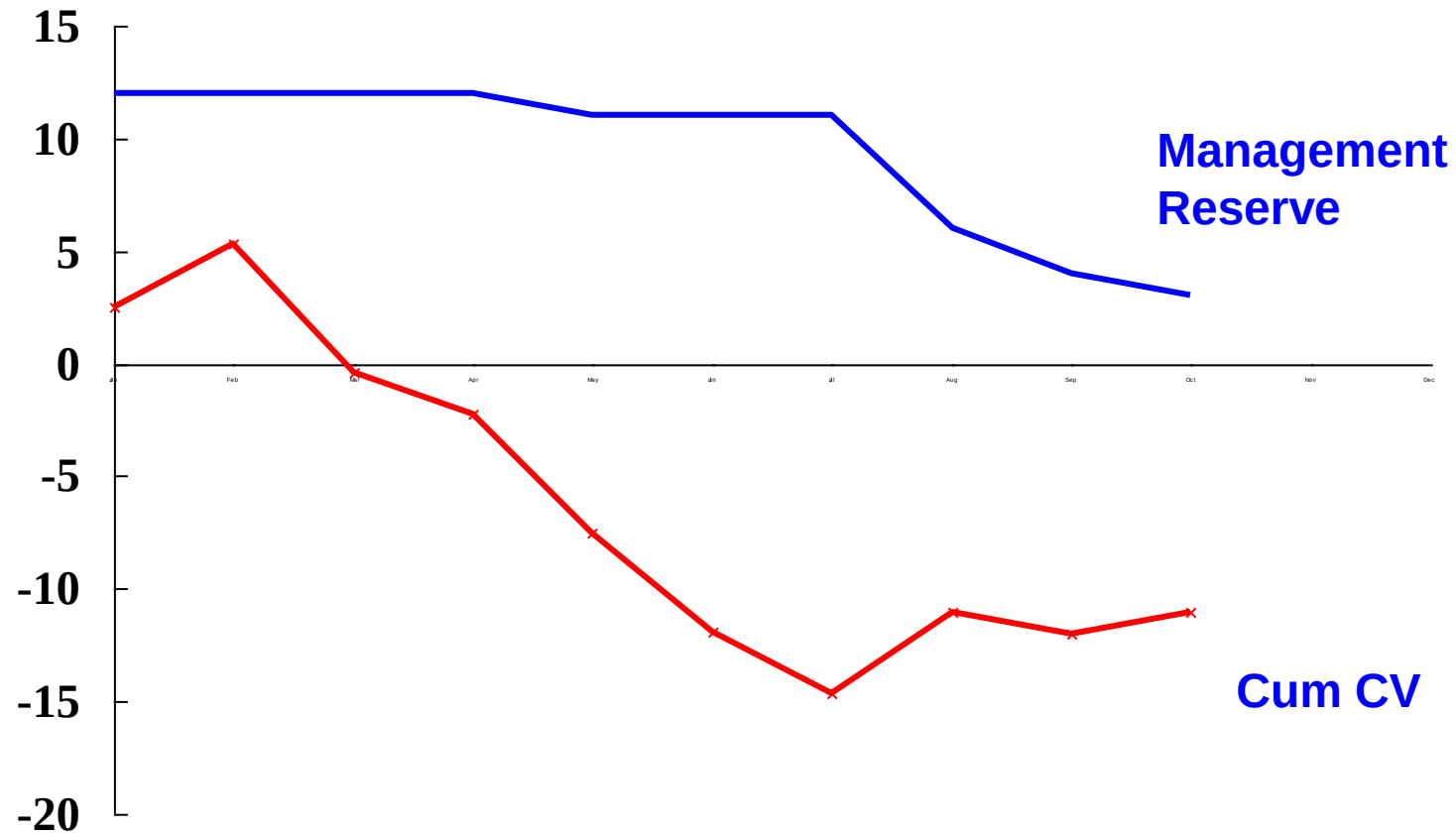
PARS II Management Reserve (MR) Log

- 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, additional work scope and delay in start approved sk ent Plan risk rocess-2" atisfactory in February lier delivered for that had ge includes the surance oversight required for PL-2 procurements of engineered equipment that are considered to be high-risk either

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.

Is MR applied to effectively mask the cum CV?



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

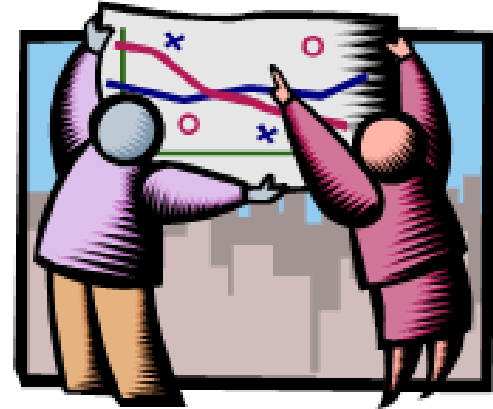
1. Validity check of data

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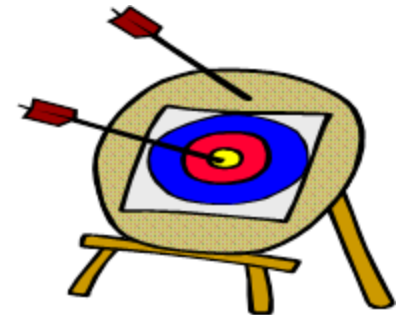
Estimates at Completion

- **What is the EAC?**

- $ACWP_{cum} + \text{estimate to complete (ETC)} = EAC$

- 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?

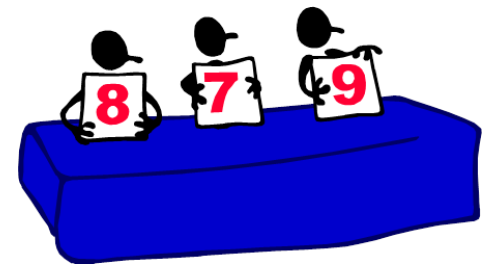
Using the To Complete Performance Index (TCPI)



- **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)**

$$TCPI_{EAC} = (BAC - BCWP_{cum}) / (EAC - ACWP_{cum})$$

$$TCPI_{EAC} = \text{work remaining} / ETC$$



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



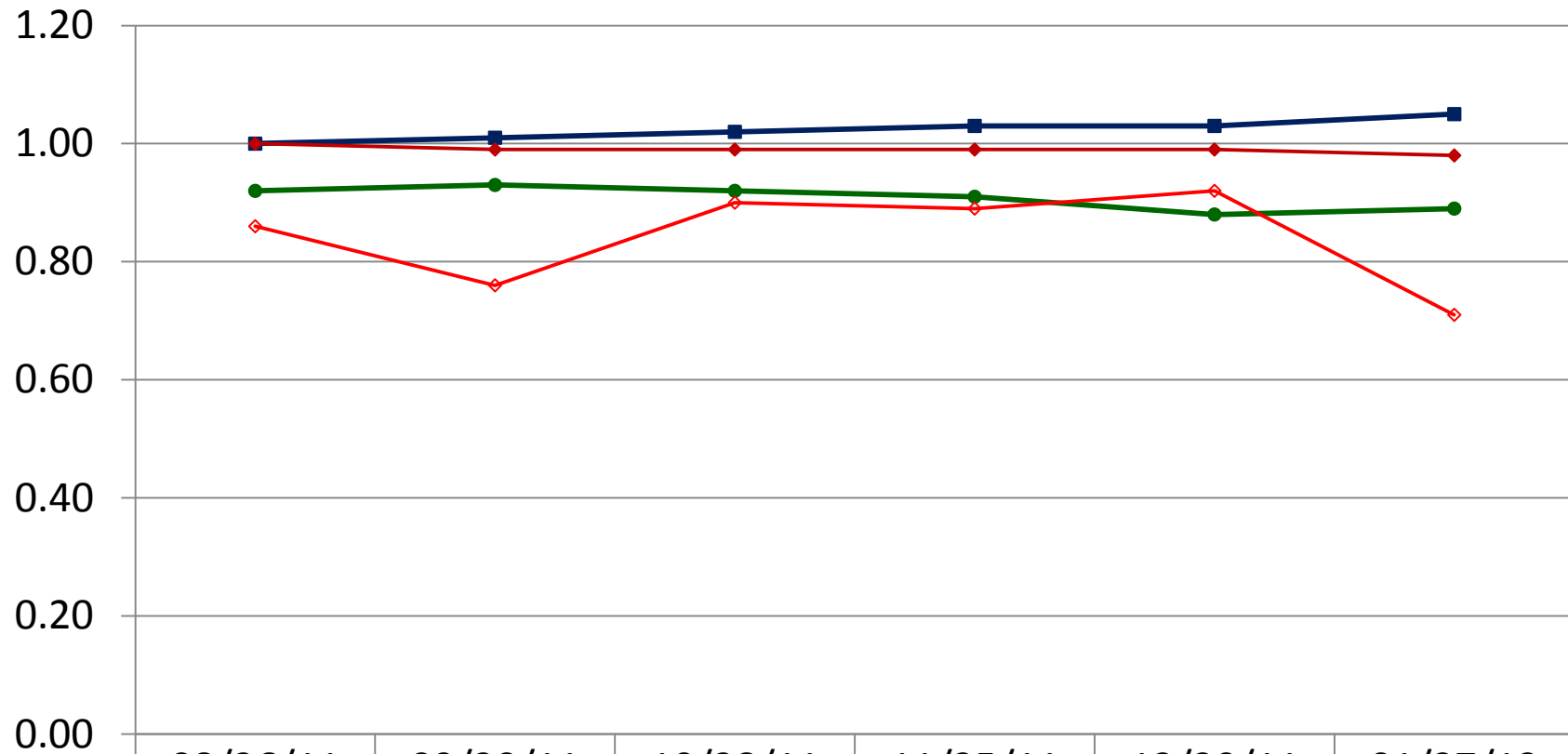
Assessing EAC Realism

- **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
<u>View SPI/CPI Trend Chart</u>			CPI_{cum}	0.98	0.97	0.97	0.96
<u>View Actual vs. Projected Performance Chart</u>			TCPI To EAC	1.20	1.22	1.22	1.23
<u>View All Indices Trend Chart</u>			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)"

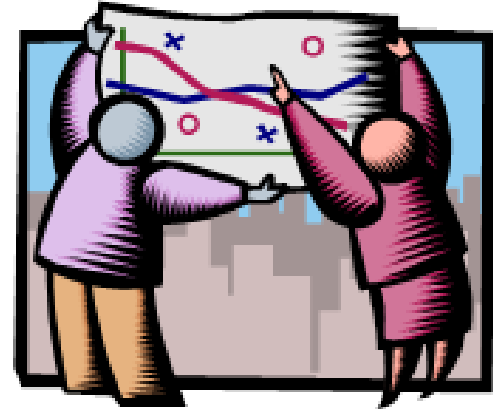


Date Generated: 1/8/2013
PARS II Project ID:
DOE Project:
CPP Data As-Of Date: 11/30/2012

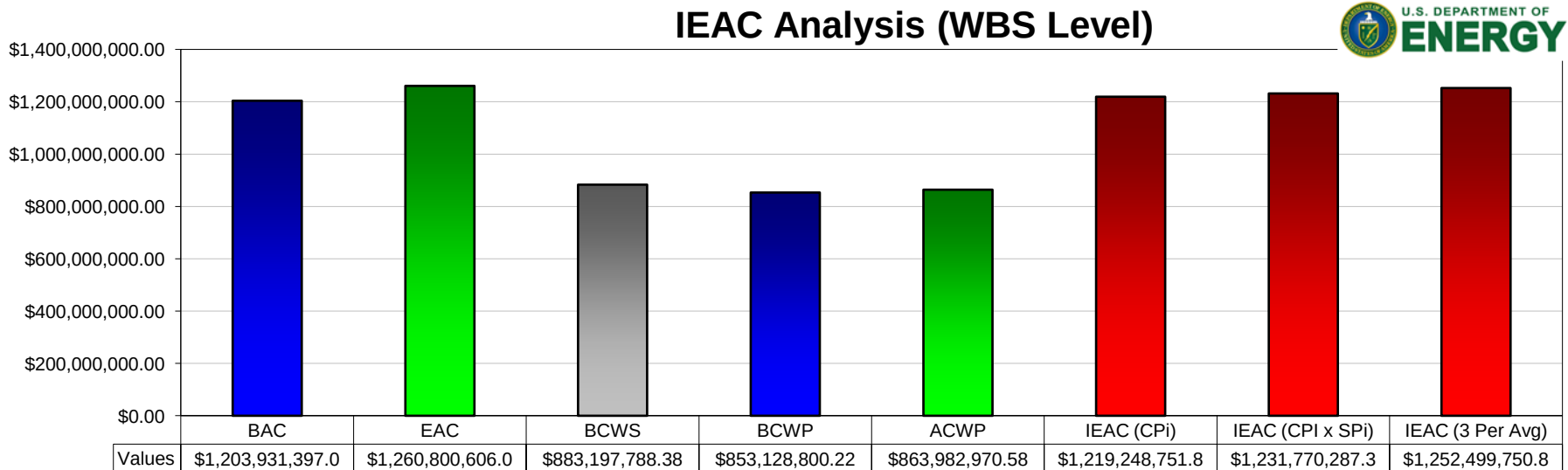


WBS IEAC Analysis												
Summary Level												
WBS Number	Description	Level	BAC	EAC	BCWS	BCWP	ACVP	IEAC (CPI)	IEAC (CPI x SPI)	IEAC (3 Per Avg)	SPI	CPI :Pi (3 Per Avg)
1	Undefined	1	1,204,221,496	1,707,298,089	1,086,470,101	994,162,545	1,063,400,525	1,288,088,933	1,308,951,153	1,344,332,752	0.92	0.93
2.1	Design	2	249,086,637	247,365,654	249,086,637	248,930,040	247,534,642	247,750,459	247,750,557	237,882,125	1.00	1.01
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	0	1.00	1.02
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	0	1.00	1.01
2.1.2	Final Design	3	14,517,200	14,444,724	14,517,200	14,517,200	14,444,724	14,444,724	14,444,724	0	1.00	1.01
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	0	1.00	1.00
2.1.4	Enhanced Final Design (EFD)	3	130,652,122	129,911,630	130,652,122	129,911,630	129,911,630	129,911,630	129,911,630	0	1.00	1.01
2.1.4.01	Project Management	4	4,153,127	4,083,219	4,153,127	4,153,127	4,083,219	4,083,219	4,083,219	0	1.00	1.02
2.1.4.02	Business & Administrative Functions	4								0	1.00	1.02
2.1.4.03	Environmental Safety, Health And Quality	4								0	1.00	1.07
2.1.4.04	Procurement	4	3,426,372	3,357,481						0	1.00	1.02
2.1.4.05	Construction Management	4								0	1.00	1.02
2.1.4.06	Commissioning Management	4								0	1.00	1.10
2.1.4.07	Management Plans / Documents	4								0	1.00	0.97
2.1.4.08	Technical Plans / Documents	4								0	1.00	0.70
2.1.4.09	Process Engineering	4								0	1.00	0.96
2.1.4.10	Safety Analysis	4								0	1.00	0.93
2.1.4.11	Design Engineering	4								0	1.00	1.06
2.1.4.12	Process Building	4								0	1.00	1.04
2.1.4.13	Administration Building	4								0	1.00	0.98
2.1.4.14	Diesel Generator Unit	4								0	1.00	1.03
2.1.4.15	Compressor Building	4								0	1.00	1.15
2.1.4.16	Exhaust Stack	4								0	1.00	1.21
2.1.4.17	Yard	4								0	1.00	0.99
2.1.4.18	Alpha Finishing Facility	4								0	1.00	1.10
2.1.4.19	Nuclear Engineering	4								0	1.00	1.02
2.1.4.20	Training	4								0	1.00	1.00
2.1.4.21	Performance Optimization Functions	4								0	1.00	1.04
2.4.5.04.02	Comm Spt - Project Management	5								0	0.00	0.00
2.4.5.04.03	Comm Spt - Business & Administrative	5								0	0.00	0.00
2.4.5.04.04	Comm Spt - Environmental Safety & Quality	5								0	0.00	0.00
2.4.5.04.05	Comm Spt - Quality Assurance/Quality	5								0	0.00	0.00
2.4.5.04.06	Comm Spt - Procurement LOE	5								0	0.00	0.00
2.4.5.04.07	Comm Spt - Assurance	5								0	0.00	0.00
2.4.5.04.08	Comm Spt - Nuclear Safety	5	6,671,015	7,347,069	3,085,263	2,038,573	2,605,769	8,283,304	10,352,738	10,406,875	0.68	0.81
2.4.5.04.09	Comm Spt - Cognizant System Engineering	5	1,956,603	5,002,410	590,849	596,157	386,553	1,268,679	1,260,825	1,159,196	1.01	1.54
2.4.5.04.21	Comm Spt - Project Optimization Functions	5	1,666,240	6,912,039	0	0	0	0	0	0	0.00	0.00
2.4.5.04.30	Comm Spt - Other Direct Costs	5	6,971,335	11,763,350	240,331	240,331	161,513	4,685,038	4,685,038	3,106,539	1.00	1.43
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
2.4.5.05	Engineering Support for Cold Commissioning	4	6,408,524	20,692,835	3,253,129	2,399,181	1,852,415	4,948,041	6,049,877	5,251,990	0.74	1.30
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
2.4.5.05.02	Comm Spt - Eng Spt Testing/Commissioning Engineering	5	1,481,329	3,444,390	546,487	546,487	16,371	44,375	44,375	44,716	1.00	###
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
2.4.5.05.04	Comm Spt - Eng Spt Technical Administration Support LOE	5	295,363	0	0	0	0	0	0	0	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	1,852,694	1,836,044	2,881,108	3,362,801	3,068,960	0.68	1.01
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	32,809,959	1.00	0.95
3.1.101	M&O Support During Design	3	0	0	0	0	0	0	0	0	0.00	0.00
3.2	DOE Support	2	17,331,787	26,705,000	16,395,527	16,395,527	12,479,231	13,191,853	13,191,853	16,671,817	1.00	1.31
3.2.100	DOE SW/PF Support PNNL	3	0	0	0	0	0	0	0	0	0.00	0.00
Total:			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	0.92	0.93

- 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**



- There are **five** Independent Estimate at Completion (IEAC) computed in PARS II
 - $EAC_{CPI} = BAC / CPI_{cum} = ACWP_{cum} + BCWR / CPI_{cum}$ = Estimate at Completion (CPI)
 - $EAC_{CPI3} = ACWP - (BCWR / CPI_3)$ = Estimate at Completion (CPI 3 Period Ave)
 - $EAC_{composite} = ACWP_{cum} + BCWR / (CPI_{cum} * SPI_{cum})$ = Estimate at Completion (composite)
 - $EAC_{weighted} = ACWP_{cum} + BCWR / (0.8CPI_{cum} + 0.2SPI_{cum})$ = Est at Completion (weighted)
 - $EAC_{SPI} = BAC / SPI_{cum} = ACWP_{cum} + BCWR / SPI_{cum}$ = Estimate at Completion (SPI)
- IEACs are often used to establish a tolerance band





Various Independent EAC Formulas

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

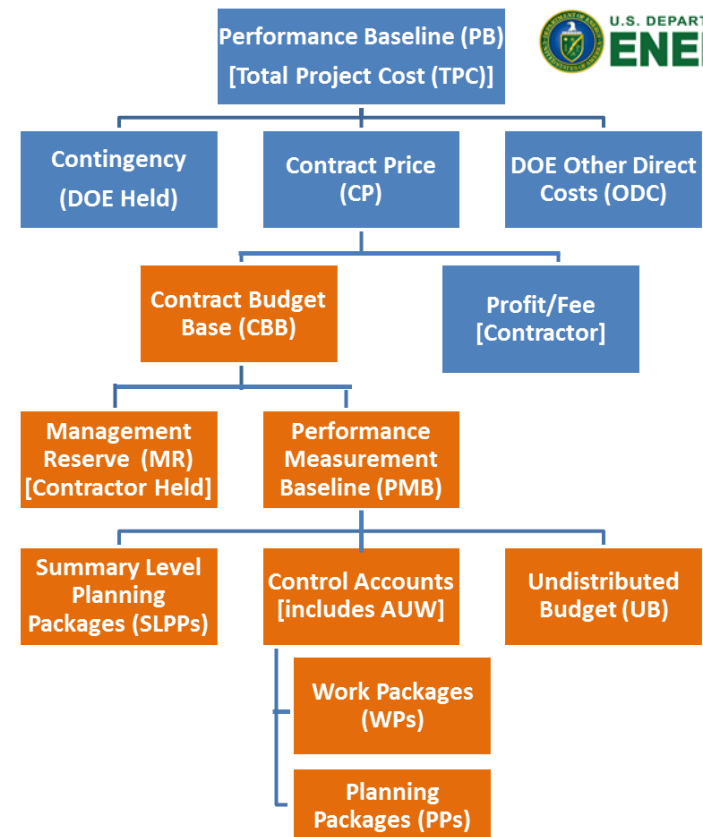
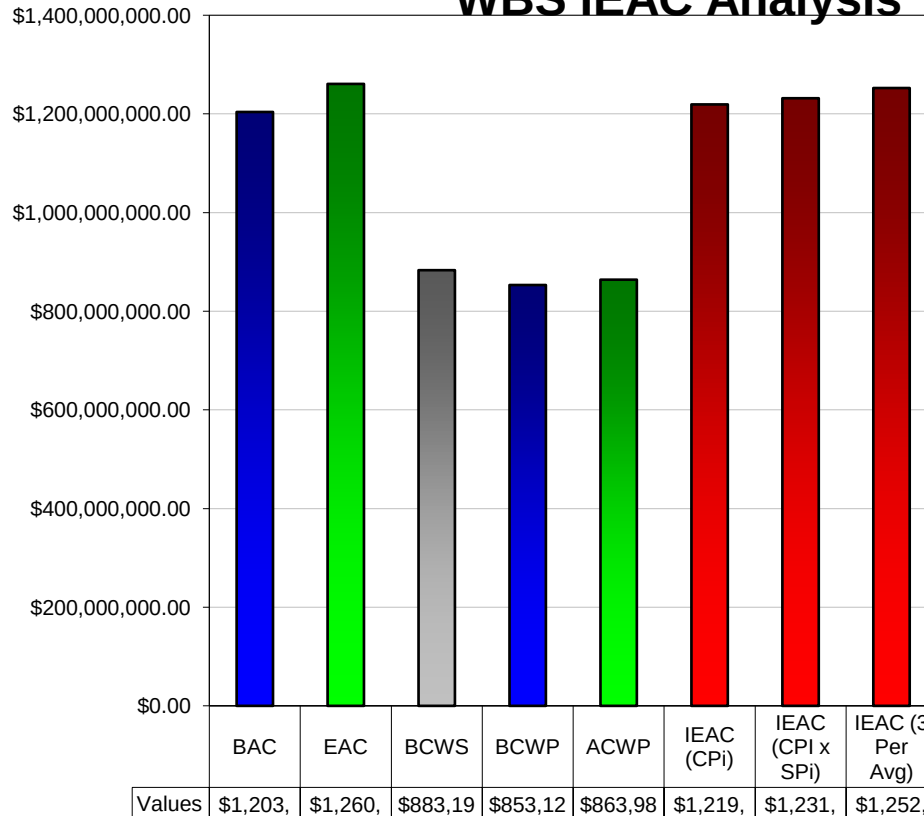
	EARLY	MID	LATE
MIN	CPI_{cum}	CPI_{cum}	
MOST LIKELY	CPI_3 $.8 * CPI + .2 * SPI$	CPI_6 CPI_3 $.8 * CPI + .2 * SPI$	CPI_{12} CPI_3 CPI_6 CPI_{cum}
MAX	$CPI * SPI$ $CPI_6 * SPI$	$CPI * SPI$ $CPI_6 * SPI$	

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?

WBS IEAC Analysis





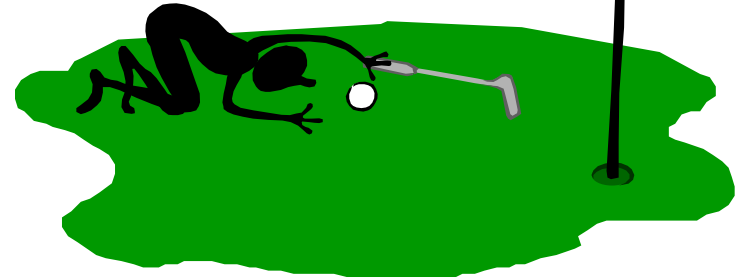
Narrative Assessment Tips

- 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 for 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

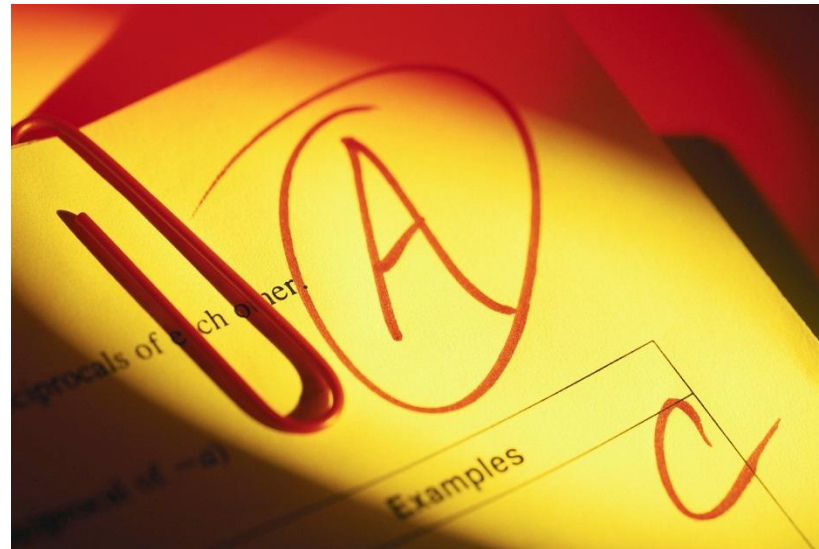


12. What does EAC represent?
 - a. A basis for funding the work
 - b. The work
 - c. The schedule
 - d. The budget for the work.
13. Management Reserve (MR) is:
 - a. For activities within the scope of the contract SOW but outside the scope of any Control Account
 - b. Calculated by subtracting the BAC 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



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FPD, PMSO and APM PARS II Assessment Roles





- 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



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:

FPD - Monthly Status - FPD

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

Is the OA data current?

FPD CPP Data As-Of Date

Assessment Narrative

FPD Assessment RYG

Program Assessment RYG

OECD 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

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 Strickland 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
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 Strickland Certification: Level 3

Monthly Status Detail:

Forecast For TPC	0
Forecast Completion	
Has the CPP data been reviewed?	☐
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	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	12/8/53:55 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



Date Generated: 8/16/2012
OA Status Date: 8/26/2012



Monthly Status (FPD)										Monthly Status (FPD)										
05-D-405 - Salt Waste Processing Facility (SWPF)										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 Used	DOE ODCs Remaining	Profit Fee Used	Profit Fee Remaining	Updated By	Update Date
Aug	2012	08/26/12			No							\$114,360,097		226				\$13,032,096		
Jul	2012	07/26/12	\$1493,548,586	10/31/15	Yes	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	Kimberly Rapp	07/09/12
Jun	2012	06/26/12	\$1493,548,586	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	06/06/12
May	2012	05/26/12	\$1493,548,000	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	05/04/12
Apr	2012	04/26/12	\$1,339,548,000	10/31/15	Yes	02/24/12	During the month of February, the schedule performance for the total project was 62, and	Red	Red	Red		\$114,360,097		226				\$13,032,096	Kimberly Rapp	03/30/12
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	03/05/12
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	02/02/12
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 93, and	Yellow	Yellow	Yellow		\$114,360,097		226				\$13,032,096	Kimberly Rapp	01/05/12
Dec	2012	12/26/11	\$1,301,864,000	12/04/14	Yes	10/28/11	During the month of October, the schedule performance for the period was 83, and cost	Yellow	Yellow	Yellow		\$114,360,097		226				\$13,032,096	Nicholas B	12/08/11
Nov	2012	11/26/11	\$1,339,549,000	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	11/03/11
Oct	2012	10/26/11	\$1,286,696,000	10/13/14	Yes	08/26/11	The project posted an overall unfavorable Cost Variance (CV) (CV-\$2,589K, Cost	Yellow	Yellow	Yellow		\$114,760,097		226				\$13,032,096	Igor Pedan	11/10/11
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
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		\$36,767,904	\$13,032,096	Kimberly Rapp	08/17/11
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		45500000		\$48,800,000	Kimberly Rapp	07/06/11
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		45500000		\$48,800,000	Kimberly Rapp	06/06/11
May	2011	05/26/11	\$1,227,000	07/11/14	Yes	03/25/11	During the month of March, the project CPI was .82 and the SPI was .84. The project	Yellow	Yellow	Yellow		\$162,690,000		224		45500000		\$48,800,000	Kimberly Rapp	05/03/11
Apr	2011	04/26/11	\$1,227,000,000	07/11/14	Yes	02/25/11	During the month of February, a Single Point Adjustment (SPA) was implemented to	Yellow	Yellow	Yellow		\$162,690,000		224		45500000		\$48,800,000	Kimberly Rapp	04/11/11
Mar	2011	03/26/11	\$1,227,000,000	07/01/14	Yes	01/28/11	During the month of January, the project performed below planned (SPI .79) and above	Yellow	Yellow	Yellow	\$2,070,000	\$162,690,000	2	224		45500000		\$48,800,000	Kimberly Rapp	03/02/11
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	(\$144,368,290)	\$164,760,000	42	226		45500000	\$13,000,000	\$48,800,000	Kimberly Rapp	02/09/11
Jan	2011	01/26/11	\$1,339,548,000	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	(\$146,408,290)	76	-162					Kimberly Rapp	01/26/11
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
Nov	2011	11/27/10	\$1,227,125,000	09/11/13	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
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	\$37,341	(\$37,341)	76	-76						
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										
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									Kimberly Rapp	08/30/10

OVERSIGHT & ASSESSMENT

- Capital Projects
- Projects
- Critical Decisions
- BCPs
- Monthly Status
- Budget/Eunding
- KPPs

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

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?



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
 05/27/2011
 04/29/2011
 03/25/2011

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 8:06:46 PM

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.

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



Page 261

*** 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



- **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**



- **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 8:10:31 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



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: 02/28/2011 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

Cost Assessment RYG

Green

Schedule Assessment RYG

Green

Updated By

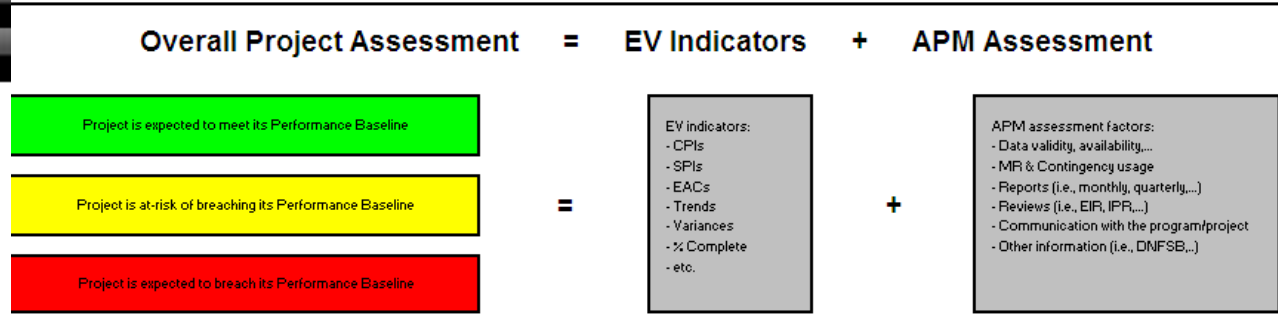
CREEMAR

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.



FPD, PMSO and APM PARS II Assessment Roles Wrap-UP



Page 267

- APM, PMSO, FPD Assessment Roles

- FPD Monthly Assessment: 3rd Business Day

- Period

- 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



- **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 ActionNet 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**



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

- **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)	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

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

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	—		09/30/13	—	No
NA	000750	08-Y12MIE	Microwave Deployment	Teresa M. Robbins	01/31/12	Daniel Hoag	—		\$19.4	▲	335	12/31/12	—	No

- New BCP Approvals Received by APM
- BCPs that impact approved TPC, CD4 Date, and/or Project Scope



Summary Pages – Completed Projects

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

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	\$17.4

- **Critical Decision Approval Memos Received by APM**
- **Includes All New Critical Decisions Achieved Except for CD-0, CD-4, and Closeout**



Sample Red/Yellow Project Report

Report Date: 2/20/2012
OA Status Date: 2/26/2012
CPD Data As-Of Date: 12/30/2011

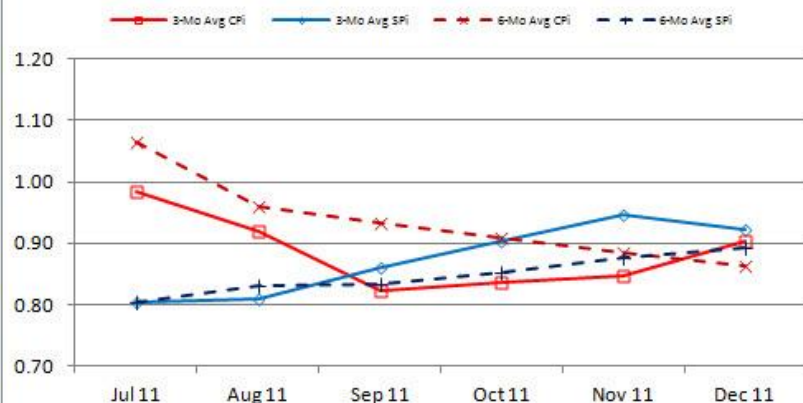
Red - Yellow Project Status Report February 2012

Sample Project Name

PARS II Project ID: 000123 | DOE Project No.: 123-X-321

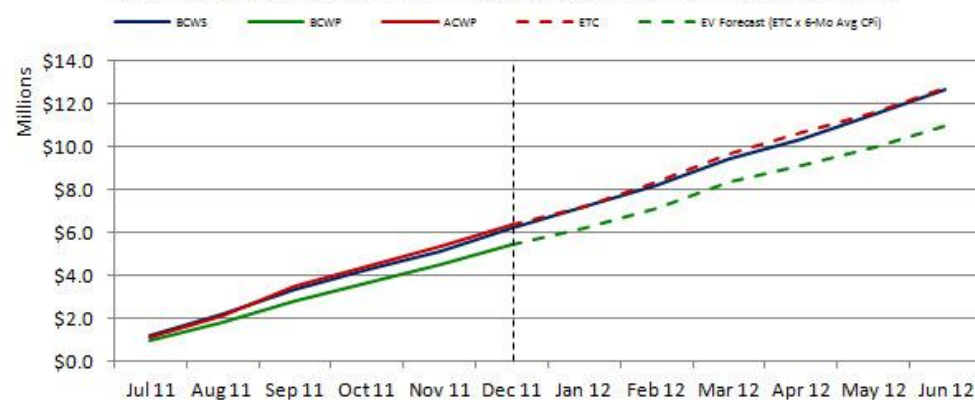
APM Analyst:	John White	FPD:	John Smith	Level 1	Contractor:	ABC Corp	Certified
Current APM Assessment	Prior APM Assessment	# of Months At Yellow	TPC (\$M)	CD-4 Date	Project % Complete	Program	Site
Yellow	Yellow	6	Approved: \$31.0 APM Forecast: \$31.0	9/30/2012 9/30/2012	62.4%	NA	SRS

6-Mo. Performance Trends



12-Mo. Plan v. Actual/Forecast

* values on the chart are representative of amounts cumulative since the first period displayed on the chart.



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%

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)			Management Reserve (\$M)		
Approved (PMB)	Forecast (EAC)	To-Go (ETC)	Approved	Remaining	% of ETC
\$26.3	\$29.0	\$8.1	\$8.0	\$0.2	2.5%

Independent Estimates At Complete

TCPI to EAC	CPI x SPI	3 Mo. Avg CPI
0.87	\$28.9	\$29.2

APM Assessment

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

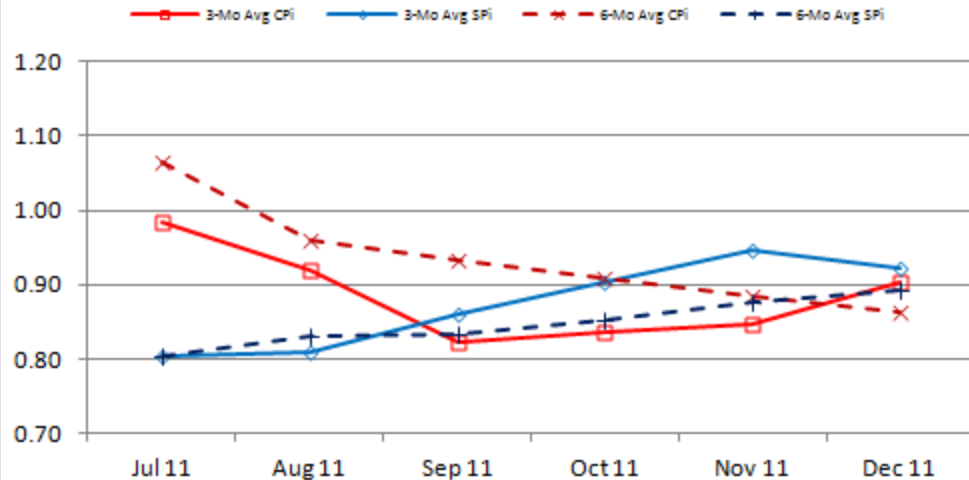
Report Date: 2/20/2012 OA Status Date: 2/26/2012 CPP Data As-Of Date: 12/30/2011			Red - Yellow Project Status Report February 2012					
Sample Project Name PARS II Project ID: 000123 DOE Project No.: 123-X-321								
APM Analyst: John White			FPD: John Smith		Level 1	Contractor: ABC Corp		Certified
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	9/30/2012	62.4%	NA	SRS
			APM Forecast:	\$31.0	9/30/2012			

- **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

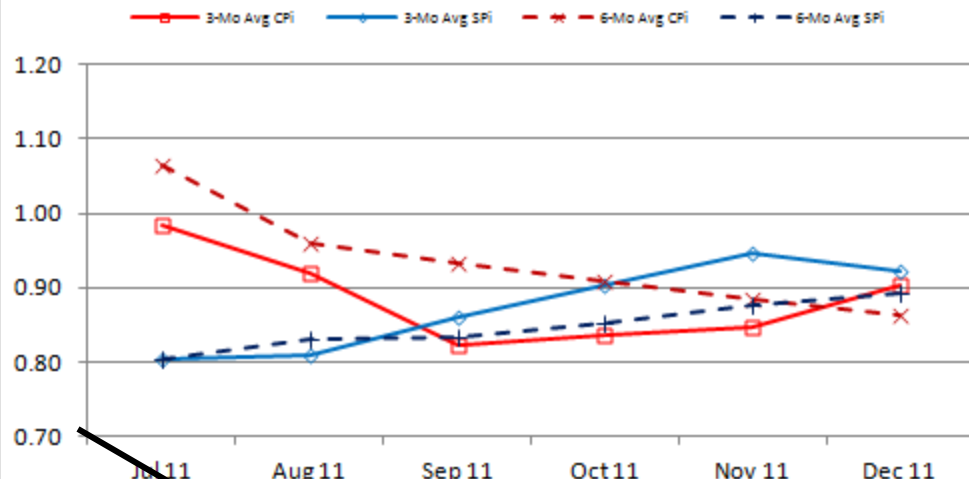
6-Mo. Performance Trends



- 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



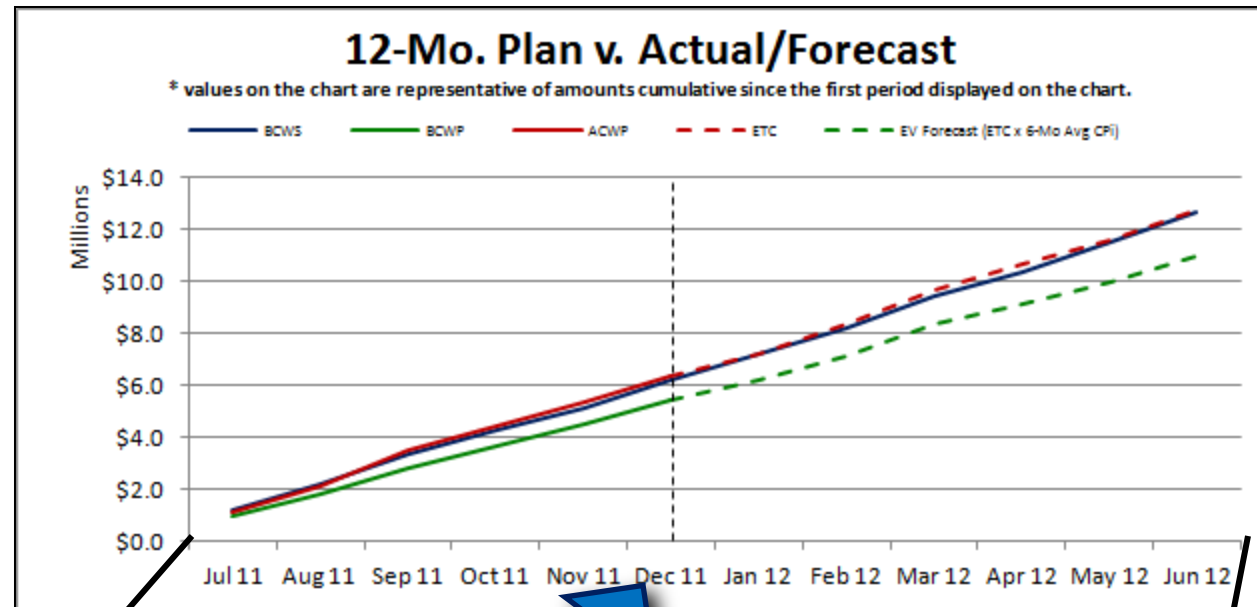
Red/Yellow Project Report Detail 1

6 Month Trend Chart Detail

WBS Number	TYPE	09/30/10	10/24/10	11/21/10	12/16/10	01/23/11	02/20/11	03/27/11	04/24/11	05/22/11	06/12/11	07/24/11
01	Inc BCWS	1,818,211	1,264,241	1,412,630	1,211,471	1,121,623	1,233,587	976,761	1,112,061	930,497	840,576	1,073,404
	Inc BCWP	3,251,319	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	0.93	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

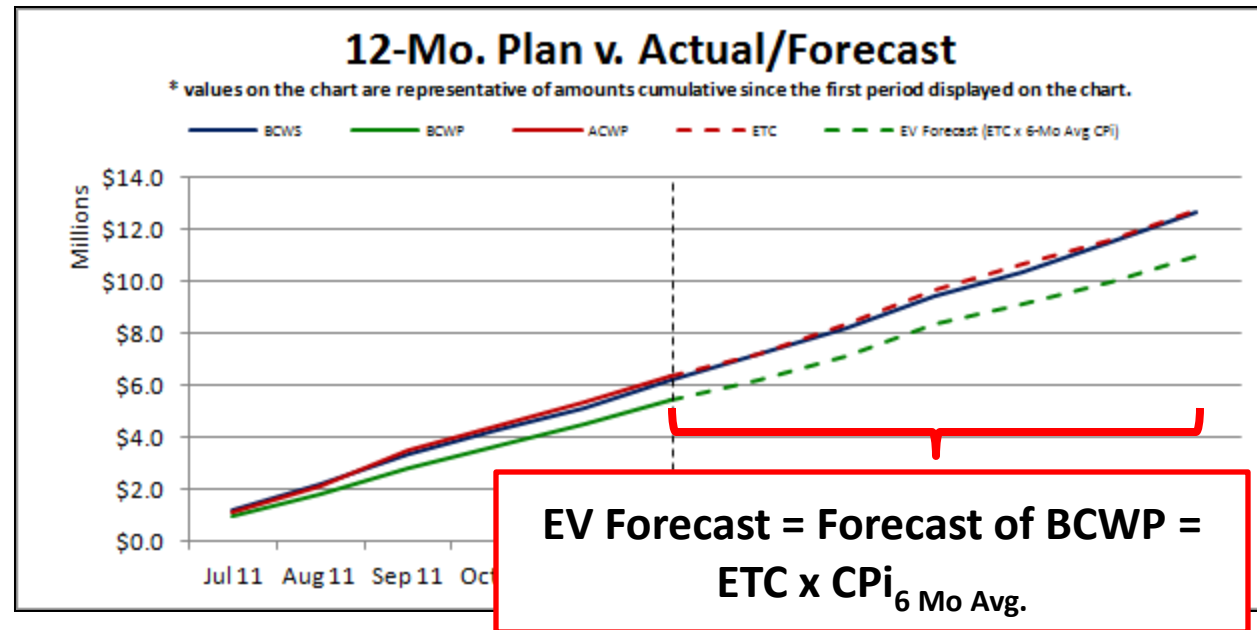


Red/Yellow Project Report Detail 2
 12 Month Plan v. Actual Chart Detail

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	2,849,597	3,683,289	4,515,459	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

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 at 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	MINUS
TPC To-Go:	9,337,127	

• Calculations Used

- % of TPC To-Go = $\text{Contingency}_{\text{remaining}} / \text{TPC To-Go} = (2,800,000 / 9,337,127)$
- $\text{TPC To-Go} = \text{TPC}_{\text{approved}} - (\text{FEE}_{\text{paid}} + \text{ODC}_{\text{used}} + \text{Sunk Cost} + \text{ACWP}_{\text{cum}})$



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 OA Status Date: 2/26/2012 CPP Data As-Of Date: 12/30/2011			Red - Yellow Project Status Report February 2012					
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 = $\text{Contingency}_{\text{remaining}} / \text{To-Go Duration}$
- To-Go Duration = Approved CD4 Date – CPP Date = 9/30/2012 – 12/30/2011



Key Performance Indicators – CPI & SPI

- **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:**
 - $TCPi \text{ to EAC} = (BAC - BCWP_{cum}) / (EAC - ACWP_{cum})$
 - $MR \text{ as } \% \text{ of ETC} = MR_{remaining} / ETC$
 - **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

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 Report Detail 3
Contractor Completion Forecast

Definitions
Date highlighted in **YELLOW** is displayed on the Red/Yellow Report as the Contractor Forecasted Completion Date. If report shows two or more dates highlighted in **YELLOW**, this indicates the Contractor is forecasting work stoppage in a future period(s). This condition should be reviewed with project team. In this scenario the last date is used on the Red/Yellow Project Report.

WBS Number	Period Finish Date	Inc BCWS	Inc ETC
01	12/31/12	\$ -	\$ -
01	11/30/12	\$ -	\$ -
01	10/31/12	\$ -	\$ -
01	09/30/12	\$ 123,443	\$ -
01	08/31/12	\$ 125,443	\$ 123,098
01	07/31/12	\$ 231,753	\$ 234,098
01	06/30/12	\$ 322,654	\$ 324,993
01	05/31/12	\$ 237,172	\$ 234,827
01	04/30/12	\$ 126,221	\$ 123,876
01	03/31/12	\$ 335,732	\$ 333,387
01	02/29/12	\$ 497,675	\$ 509,820

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**

- **Reasons for New Report Format**
 - Ability to Quickly Identify Changes from Prior Period Report
 - Provide Greater Project Performance
 - Demonstrate
- **Report Content**
 - Updated Project
 - High-Level Changes from Prior Period Report
 - Detailed Report for Each Red and Yellow Projects



PARS II SSS Reporting Custom Reporting





- **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

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

SSS Reports

+ Add - Remove | Copy Paste | View Save

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
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ADMINISTRATION
HELP

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)
Project Descriptions
Project List
Projects On Hold
Projects on Hold Post CD-2
EVMS Certification
Metrics

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
Dekker Default Folder Path	N/A
Customer Folder Path (If Different)	Shared Reports/Project Reports
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	Filter(s)
Project Overview - The data elements in this data source have been custom-defined based on the specific columns in the report.	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.

Information REPORT



SSS Reports - Analysis

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

SSS Reports

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Shared Reports

- Analysis Reports
- Baseline Volatility - Past and Near-Term (PMB Level)
- 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:
 Browse... Upload

Created by: PEDANIG
Modified by: N/A
Last viewed by: PRATTV on 1/4/2013 1:42:03 PM

The seal of the U.S. Department of Energy is a circular emblem. It features a blue outer ring with the text "DEPARTMENT OF ENERGY" at the top and "UNITED STATES OF AMERICA" at the bottom in gold lettering. The center of the seal is a shield with a green background. On the shield, there is a white eagle with spread wings at the top, a yellow sun with rays on the left, a yellow lightning bolt in the center, and a yellow gear on the right. The shield is set against a blue background.

Current Critical Decision: CD4

Current User: CREEMAR [Logout](#)

 Add | Paste

- 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 Description:

Browse...

Upload

ADMINISTRATION

HELP



SSS Reports - Cost Performance

**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: 12/30/2011

Current Critical Decision: CD3A
Current User: CREEMAR Logout

SSS Reports

OVERSIGHT & ASSESSMENT
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HELP

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 Numbe
 - 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)



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

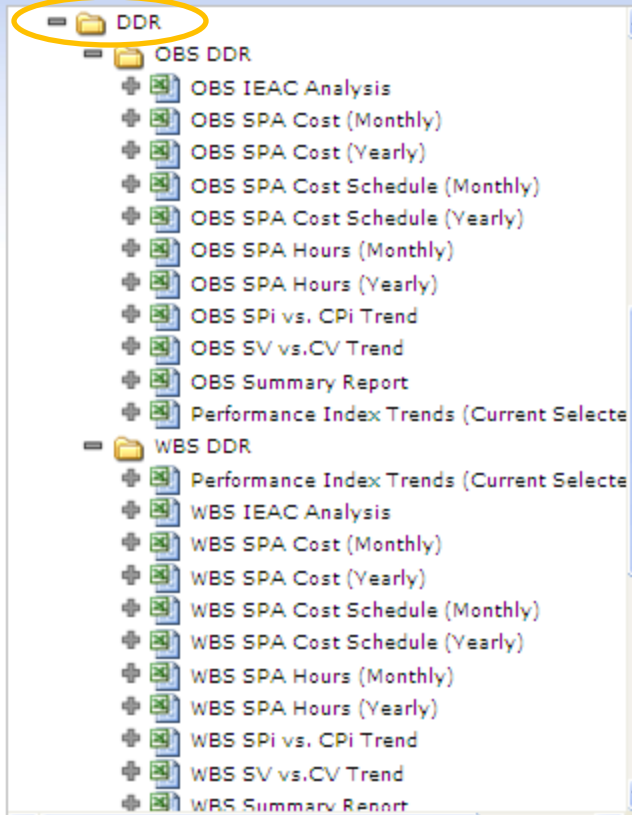
Current Critical Decision: CD3A

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

Current User: CREEMAR Logout

SSS Reports

+ Add | Paste



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.

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SSS Reports - Enterprise (Portfolio) and EVMS



U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/28/2012 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



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

Current Critical Decision: CD4

Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

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**
 - 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

Selected Project: 000925 - RS-CAP-2012 - Capital Asset Project
Status Date: 03/20/2012
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
- EM

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 OEMC) 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).

See next Slide for Report Detail

Project Summary	
PARS II Project ID	000389
DOE Project Number	05-D-405
DOE Project Name	Salt Waste Processing Facility (SWPF)
Managing Office Code	EM
Site Code	SRS
Project Status	Active
Project Start Date	01/01/1997
Project Type	Facility Construction
Nuclear/Non-Nuclear	Non-Nuclear
Current CD	CD3
Current BCP	BCP-01
CD-2 Approval Date	09/24/2007
Project Description Short	Plan, design, construct and commission a facility that separates highly radioactive cesium, actinides and strontium from high level waste salt/supernate and enables the decontaminated residual waste to be dispositioned as low level waste. Mission: The SWPF will provide EM the capability to safely separate the highly radioactive constituents of the salt waste stored in underground tanks at the Savannah River Site for treatment in the SRS Defense Waste Processing Facility and will result in a low level waste product that is suitable for disposal in the SRS Saltstone Facility.
Last Update	06/25/2012
Updated by	Marc Cree



SSS Reports - Reports For Testing

U.S. DEPARTMENT OF ENERGY
PARS II KCA

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
 - 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.

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SSS Reports - Schedule



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

Current Critical Decision: CD4

Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

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**
- 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
- EI/ETI Analysis
- Schedule Missing Logic (Activity Level)
- Schedule Slip Report

Helpful Hint:
If the contractor is not uploading schedule data via the CPP Upload process, these reports will not be available.

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 not 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 not 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



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

Current Critical Decision: CD4

Status Date: 03/25/2012 CPP Data As-Of Date: 10/31/2011

Current User: CREEMAR Logout

SSS Reports

+ Add | Paste

- [-] 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



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

Current Critical Decision: CD4

Status Date: 03/26/2012 CPP Data As-Of Date: 10/31/2011

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**
 - + 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.

OVERSIGHT & ASSESSMENT

PROJECT PERFORMANCE

ALL REPORTS

SSS Reports

ADMINISTRATION

HELP

My Reports



Page 310



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

Current Critical Decision: Closeout (BCP)

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

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

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: CREEMAR Logout

SSS Reports

+ Add - Rem **2** Copy Paste View Save

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

- New Folder
- 5** CPR Format 1

Report Title: **CPR Format 1**
Report Subtitle:
Report Description:
Update Report File: Browse... Upload
Created by: N/A
Modified by: N/A
Last viewed by: BIELEJO on 5/28/2012 1:07:01 PM

+ Add Folder + Add Report - Remove **4** Paste Up Down Save

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

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

My Reports

- New Folder
- 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	☒	Group by
2	Project ID	PARS II Project ID	Ascending	2	☒	Group by
3	CD2 Approved Date	CD2 Approved Date			☒	Group by
4	Total Cost Pre CD-2	TC Pre CD-2			☒	Sum
5	Total Cost Pre CD-2 No	TC Pre CD-2 No			☒	Sum
6	Total Cost Post CD-2	TC Post CD-2			☒	Sum
7	Total Cost Post CD-2 No	TC Post CD-2 No			☒	Sum
8	Total Cost Post CD-2 Green	TC Post CD-2 Green			☒	Sum
9	Total Cost Post CD-2 Green No	TC Post CD-2 Green No			☒	Sum

Field Selection

SSS Query Configuration

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	QA Status Order	equals	1	

Filter By Selection



SSS Reporting - Data Sources

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: 01/22/2012
 Current Critical Decision: Closeout (BCP)
 Current User: CREEMAR Logout

SSS Reports

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
 SSS Reports

OA Datasources	
Data Source	Description
CAP Metric #1 and #2	Specially Designed Data Source for OECM 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 - OECM	OECM 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

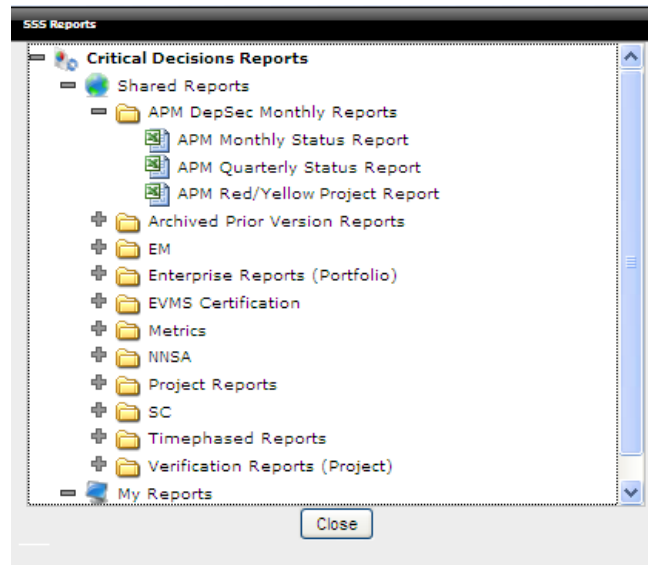
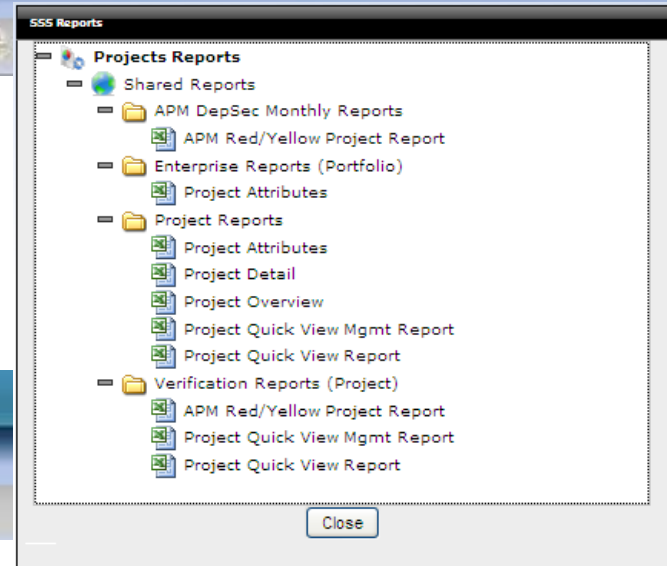
CPP Data Datasources	
Data Source	Description
Activity Predecessor Successor Detail	Activity Predecessor Successor Data from CPP Schedule Data
Activity Relationship	Activity Relationship Data from CPP Schedule Data
Contract Level Information	CPR Header Information Data by Project
Performance Data by 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

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.



Reports Button per Module





Reports Button per Module

CPR Dashboard

Project: 000397 10/31/2011 WBS CPR Drilldown Reports

Schedule Dashboard

Project: 000397 10/31/2011 WBS Slip Drilldown Reports

Timephased
Dashboard

Project: 000397 Parent WBS: 1 10/31/2011 WBS 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



Request a Custom Report

- **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

The screenshot displays the SSS Reports interface. At the top, a yellow oval highlights the text "Selected Project: No Project Selected". Below this, a modal window titled "No Data for Report" is shown, containing the message: "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." Below the message are "Edit" and "Cancel" buttons. To the right, a helpful hint box states: "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,". At the bottom, another helpful hint box states: "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". The interface also shows a sidebar with navigation links like "OVERSIGHT & ASSESSMENT", "PROJECT PERFORMANCE", "ALL REPORTS", and "SSS Reports". The main content area includes a "CPR Format 1" dropdown, "Browse..." and "Upload" buttons, and a table with columns "Created by:", "Modified by:", and "Created by:". The table contains the following data:

Created by:	Modified by:	Created by:
N/A	N/A	DUCHA\$T on 3/2/2012 1:18:51 PM

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: 12/18/2011
Current Critical Decision: CD3 (BCP)
Current User: TRNCONT05 Logout

SSS Reports All monetary values are in whole dollars.

+ 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

Select a Datasource from the dropdown list below to configure a query.

Data Source: Select 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.

As of PARS II Production Release 8.0.20120308, Contractors have been granted access to reports via the SSS Reports module.

PARS II Production Enhancements - Contractors' Access to SSS Reports



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U.S. DEPARTMENT OF ENERGY
PARS II

Selected Project: 000396 - 09-D-404 - Test Capabilities Revitalization (Phase II)
Status Date: 03/28/2012 CPP Data As-Of Date: 01/30/2012

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

SSS Reports

OVERSIGHT & ASSESSMENT
PROJECT PERFORMANCE
ALL REPORTS
SSS Reports

Warning

This report cannot be imported because it requires access rights you do not have.

OK

Program

Save

New Folder

Browse... Upload

NNSA
SC
Analysis Reports
My Reports
New Folder

HEL

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 Var
 - 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
 - Elastice Time Index (ETI) Analysis
 - Schedule Missing Logic (Activity Level)
 - Schedule Slip Report

- Analysis Reports
 - Baseline Volatility - Past and Near-Term (F
 - 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 L
 - Schedule Missing Logic (Activity Level)
 - Schedule Relationship Types (Activity Leve
 - Variance Analysis Cumulative (WBS Level)

PARS II Production Enhancements - Contractors' Access to SSS Reports



PARS II

OVERSIGHT & ASSESSMENT

Projects | All Attachments

Projects

SSS Reports

Attachments | **Reports** | Change Program | Save Configuration

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.

CPR Dashboard

Project: 2/24/2012 WBS CPR **Drilldown Reports**

Schedule Dashboard

Project: 2/24/2012 WBS Slip **Drilldown Reports**

Timephased Dashboard

Project: 2/24/2012 WBS **Drilldown Reports**

Note: Drilldown Reports are available for Contractors and contain both the DDR WBS and DDR OBS reports which can also be found in Shared 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

Dynamic Drilldown Reports

- Shared Reports
 - 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

- Information Tab
 - Shared
 - My P
 - Co
 - Da
 - Re
 - How to Report
 - SSS Re, sage
 - Contractors' Access to SSS Reports
- 
- A large, stylized blue question mark is centered on a dark gray circular background with a subtle gradient and shadow. This graphic is overlaid on the list of topics.

PARS II Wrap-Up





PARS II Production Enhancements

- **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: 02/29/2011 CPP Data As-Of Date: 12/18/2011

Current Critical Decision: CD3 (BCP)

Current User: TRNCONT05 Logout

User Guide

All monetary values are in whole dollars.

[Click to view the User's Guide Information](#)

OVERSIGHT & ASSESSMENT

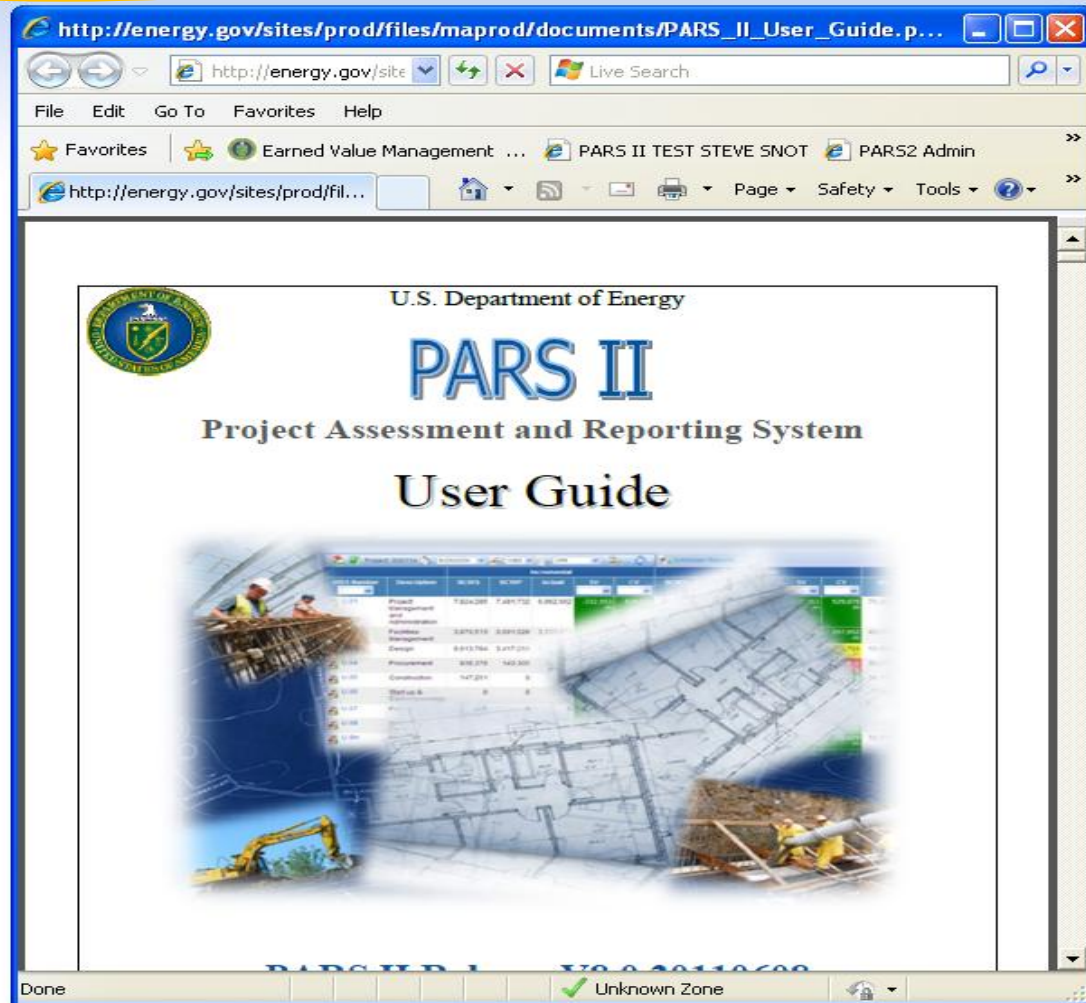
PROJECT PERFORMANCE

ALL REPORTS

HELP

About

User Guide



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.



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)



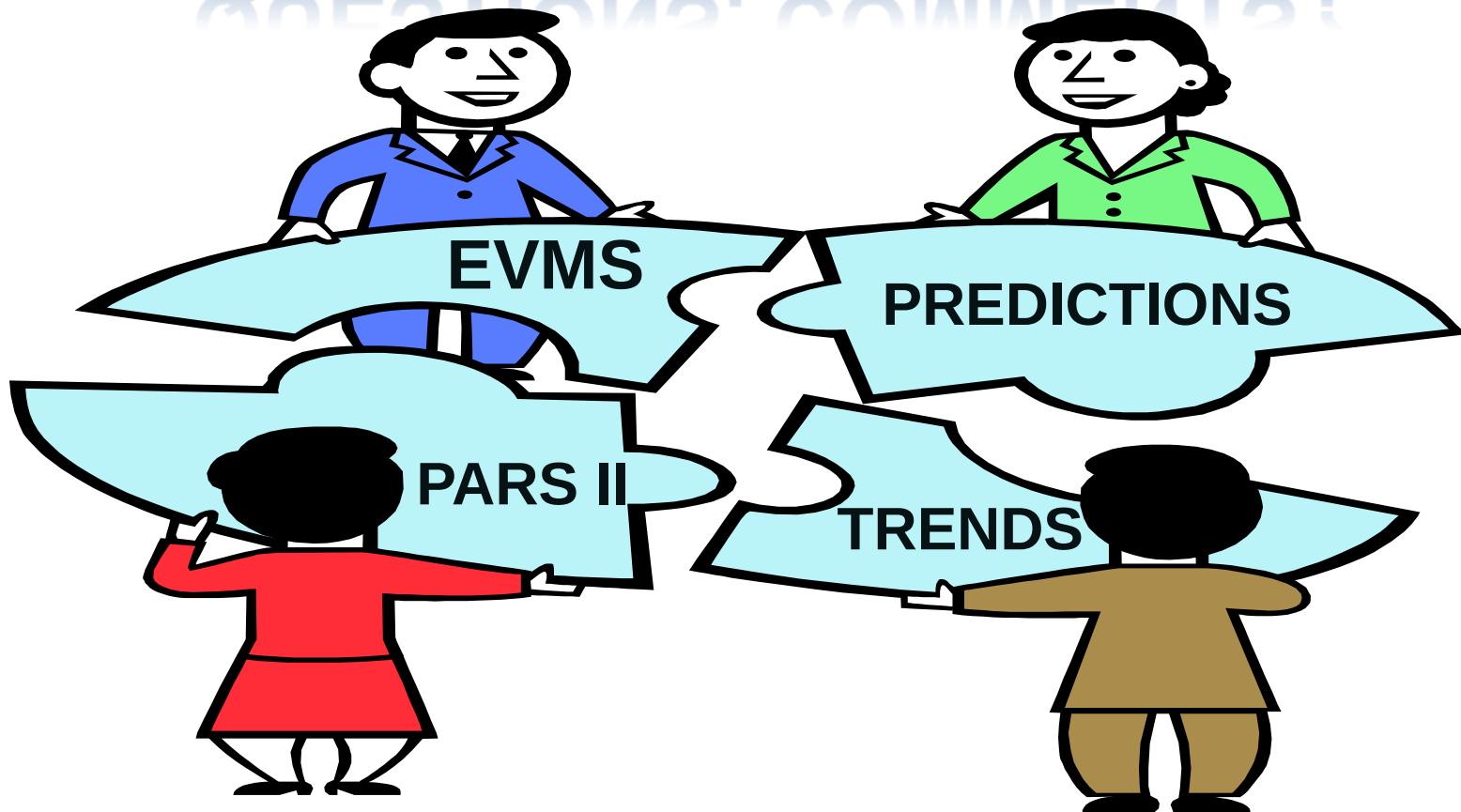
PARS II Information and Documentation

- **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 Overview
- Navigating PARS II
- PARS II Roles
- PARS II Monthly Reports and
- Standard and Custom Reports in PARS II



QUESTIONS, COMMENTS?



- **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
ACI	Actual Cost Index
Act Dur	Actual Duration
ACWP	Actual Cost of Work Performed
AE	Acquisition Executive
AFDATE	Actual Finish Date
ANSI	American National Stds Institute
APM	Office of Acquisition and Project Management (MA60)
ARRA	American Recovery and Reinvestment Act
ASDATE	Actual Start Date
AUW	Authorized Unpriced Work
BAC	Budget At Complete
BCP	Baseline Change Proposal
BCWP	Budgeted Cost for Work Performed
BCWR	Budgeted Cost of Work Remaining
BCWS	Budgeted Cost for Work Scheduled
BOM	Bill of Material
B-Finish	Baseline Finish Date
B-Org Dur	Baseline Original Duration
B-Start	Baseline Start Date
CA	Control Account
CA	Corrective Action
CAD	Computer-aided Design
CAM	Control Account Manager
CAP	Corrective Action Plan
CAR	Corrective Action Request
CBB	Contract Budget Base
CBR	Congressional Budget Request
CD	Critical Decision
CFA	Civilian Federal Agency
CIO	Continuous Improvement Opportunity
CM	Corrective Measure
CO	Contracting Officer
CP	Contract Price
CPI	Cost Performance Index
CPP	Contractor Project Performance
CPR	Cost Performance Review
Cum	Cumulative
CV	Cost Variance
CWBS	Contract Work Breakdown Structure
D&D	Decontamination & Decommissioning

DCMA	Defense Contract Management Agency
DDR	Dynamic Drilldown Report
DFPD	Deputy Federal Project Director
DNFSB	Defense Nuclear Facilities Safety Board
DoD	Department of Defense
DOE	Department Of Energy
EAC	Estimate At Completion
ECP	Engineering Change Proposal
ECWR	Estimated Cost of Work Remaining
EERE	Office of Energy Efficiency and Renewable Energy
EFCOG	Energy Facilities Contractors Operating Group
EFDATE	Early Finish Date
EIA	Electronic Industries Alliance
EIR	External Independent Review
EIS	Environmental Impact Statement
EM	Office of Environmental Management
EMAAB	Environmental Management Acquisition Advisory Board
EM-C	Office of Environmental Management - clean up
EM-L	Office of Environmental Management - line item
EPA	Environmental Protection Agency
ESAAB	Energy Systems Acquisition Advisory Board
ESDATE	Early Start Date
ESSOP	EVMS Surveillance Standard Operating Procedure
ETC	Estimate To Complete
ETI	Elapsed Time Index
EV	Earned Value
EVM	Earned Value Management
EVMS	Earned Value Management System
FAQ	Frequently Asked Questions
FAR	Federal Acquisition Regulations
FE	Office of Fossil Energy
FPD	Federal Project Director
FPM	Federal Program Manager
FS	Finish-Start
FY	Fiscal Year
GAO	Government Accountabilty Office
GFE	Government Furnished Equipment
GFM	Government Furnished Material
GL	Guideline
HQ	Headquarters
ICE	Independent Cost Estimate

Acronyms

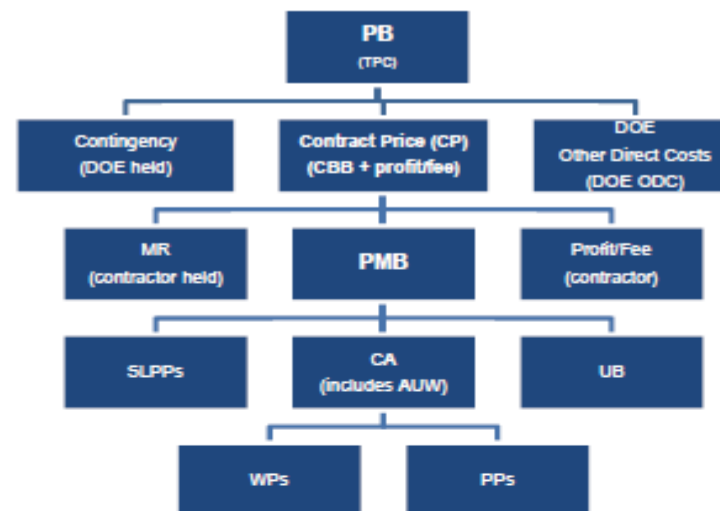
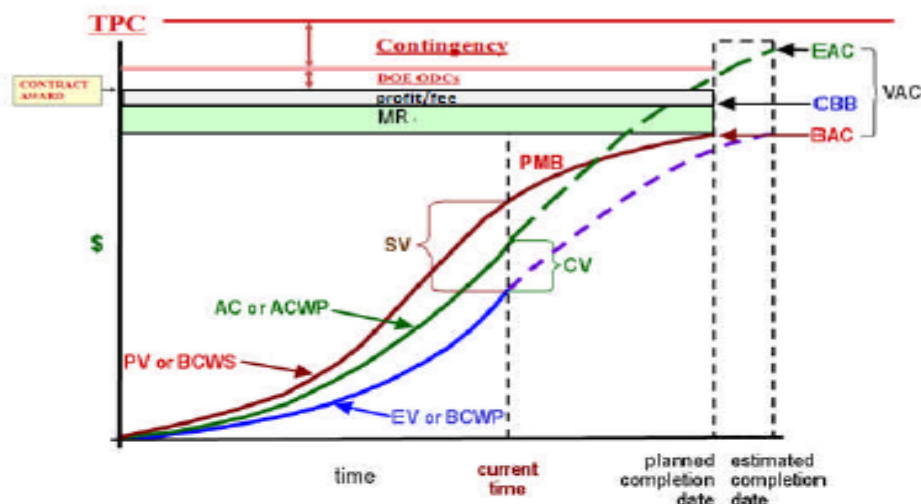


ICR	Independent Cost Review
ID	Identification
IDIQ	Indefinite-Delivery Indefinite-Quantity
IEAC	Independent Estimate At Complete
IMS	Integrated Master Schedule
Inc	Incremental
IPL	Integrated Priority List
IPR	Independent Project Review
IPT	Integrated Project Team
KPP	Key Performance Parameter
LCC	Life Cycle Cost
LFDATE	Late Finish Date
LOE	Level of Effort
LRE	Latest Revised Estimate
LSDATE	Late Start Date
LM	Office of Legacy Management
MA	Office Of Management
MIS	Management Information Systems
MOD	Contract Modification(s)
MR	Management Reserve
N/A	Not Applicable
NA	National Nuclear Security Administration
NDIA	National Defense Industry Association
NE	Office of Nuclear Energy
NEPA	National Environmental Policy Act
NR	Not Reporting
OA	Oversight and Assessment (or O&A)
OBS	Organization Breakdown Structure
ODC	Other Direct Costs
OECM	Office Of Engineering And Construction Management
OMB	Office of Management and Budget
OPC	Other Project Cost
Org Dur	Original Duration
ORR	Operational Readiness Review
OTB	Over Target Baseline
OUO	Official Use Only
PARS II	Project Assessment And Reporting System II
PB	Performance Baseline
PBS	Program Baseline Summary
PDS	Project Data Sheet

PDRI	Project Definition Rating Index
PED	Project Engineering and Design
PM	Project Management
PMB	Performance Measurement Baseline
PMSO	Project Management Support Office
PO	Program Office
POC	Point of Contact
PP	Planning Package
PV	Planned Value
RAM	Responsibility Assignment Matrix
RCA	Root Cause Analysis
REA	Reasonable Equitable Adjustment
Rem Dur	Remaining Duration
RFC	Review for Cause
ROD	Record Of Decision
ROP	Rest of Project
RW	Office of Civilian Radioactive Waste Management
RYG	Red Yellow Green
SAE	Secretarial Acquisition Executive
SC	Office of Science
SLPP	Summary Level Planning Package
SOP	Standard Operating Procedures
SOW	Statement of Work
SPA	Schedule, Performance, Actuals
SPI	Schedule Performance Index
SSOM	Standard Surveillance Operating Manual
SSS	Sort, Select and Summarize
SV	Schedule Variance
TEC	Total Estimated Cost
TCPI	To Complete Performance Index
TPC	Total Project Cost
TRA	Technical Readiness Assessment
UB	Undistributed Budget
UNCI	Unclassified Controlled Nuclear Information
VAC	Variance At Complete
VAR	Variance Analysis Report
WAPA	Western Area Power Administration
WBS	Work Breakdown Structure
WP	Work Package
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 = Actual Cost = ACWP = Actual Cost of Work Performed
- EV = Earned Value = BCWP = Budgeted Cost of Work Performed
- PV = Planned Value = BCWS = Budgeted Cost of Work Scheduled
- BAC = Budget at Completion = 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_{CPI} = 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

BUSINESS AND MANAGEMENT PROCESSES									
ANSI/EIA-748 Guidelines		ORGANIZING	SCHEDULING	WORK AUTHORIZATION	ACCOUNTING	INDIRECT MANAGEMENT	MANAGEMENT & ANALYSIS	CHANGE MANAGEMENT	MATERIAL 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		X			
2-2d	Identify significant cost elements within authorized budgets	X		X					X
2-2e	Identify discrete work packages	X		X					X
2-2f	All work package budgets & planning packages sum to control acct			X					
2-2g	Identify and control LOE budgets			X					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				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 job 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
2-4b	Explain significant variances		X				X		X
2-4c	Identify and explain indirect cost variances					X			
2-4d	Summarize data elements and variances thru WBS/OBS for right						X		
2-4e	Implement management actions as result of EVM analysis	X					X		
2-4f	Revise EAC based on performance data; calculate VAC	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	
2-5c	Control retroactive changes				X			X	
2-5d	Prevent all but authorized budget changes							X	
2-5e	Document changes to PMB							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:		PMO:		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.



- 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



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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	Review variance analysis reports to ensure the following • 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.