

EVMS Training Snippet Library: PARSII Analysis: Data Validity Reports



**Office of Acquisition and Project Management (OAPM) MA-60
U. S. Department of Energy
July 2014**

Analysis Reports – Project Analysis SOP




PARS II KGA



OVERSIGHT & ASSESSMENT


PROJECT PERFORMANCE








ALL REPORTS

 **SSS Reports**

SSS Reports All monetary values are

 Add |  Paste

 **Shared Reports**

-  Analysis Reports
 -  Data Validity Check
 -  Schedule Health Assessment
 -  Variance Analysis
 -  Trend Analysis
 -  EAC Reasonableness
 -  Predictive Analysis
-  APM DepSec Monthly Reports



- **Analysis Reports**

- Report use further explained in OAPM's EVMS Project Analysis Standard Operating Procedure (EPASOP)
- Data Validity Subfolder:
 - EV Data Validity (WBS Level)
 - Retroactive Change Indicator (6-Mo, PMB Level)

Why Assess Data Validity?

- **Data analysis depends on accurate data**
- **EV data receives high visibility**
 - Briefed at DepSec level for PARS II reportable capital asset projects
 - Critical that EVMS data reported to stakeholders is accurate
- **Trends and indices mean nothing if the data is incorrect**



Who Is Responsible?



- **Responsibility**

- Contractor - primary
- FPD and IPT - 'boots on the ground' verification
- HQ - 'trust but verify'

- **Primary purpose of a surveillance process**

- **Physical Verification**

- Physical verification by technical team's knowledge of project status
 - Does the data reflect reality?



Purpose of EV Data Validity Report



- **Provide indicators of potential data issues with contractor-reported Earned Value data**
- **Indicators**
 - Negative BCWS, BCWP, or ACWP entries in current period
 - Current period BCWS, BCWP, or ACWP greater than cumulative
 - $BCWS_{CUM} > BAC$ and/or $BCWP_{CUM} > BAC$
 - $ACWP_{CUM} > EAC$
 - ACWP and/or EAC with no BAC
 - BCWP with no ACWP
 - Completed Work with ETC; Incomplete Work with No ETC
 - BCWS with no ACWP or BCWP

PARSII EV Data Validity (WBS Level)

Report



Negative SPA Values	Inc SPA > Cum SPA	BCWP > BAC and/or BCWS > BAC	Cum ACWP > EAC	CV < VAC	CPI <> TCPI ±0.05	EAC w/o BAC	ACWP w/o BAC	BCWP w/o ACWP	BCWS w/o A and P	Missing ETC	Extra ETC
					0.85			CUR			
					0.52		CUM				
										X	
		P									X
									X		
						X					
				(46,373)							
S											

Note: This shows the far right portion of the report only.



Data Validity Indicators

- **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)**
- **$BCWP_{CUM}$ and/or $BCWS_{CUM} > BAC$ (error)**
- **$ACWP_{CUM} > EAC$ (error)**

Data Validity Indicators



- **$ACWP_{CUM}$, $ACWP_{CUR}$, or EAC WITH NO BAC**
- **BCWP WITH NO ACWP**
- **COMPLETED WORK WITH ETC**
- **INCOMPLETE WORK WITHOUT ETC**
- **BCWS without BCWP and ACWP**

Purpose of Retroactive Change Indicator Report

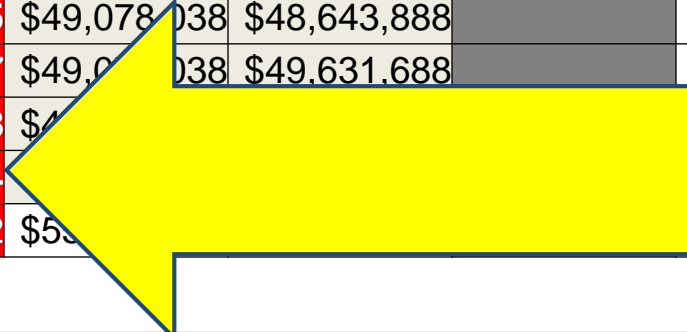


- **Identifies changes**
 - Changes to previously reported BCWS, BCWP, or ACWP (history)
 - Negative incremental BCWS values that are planned for the next six future periods
- **Retroactive changes must be made in the current period and reasons documented**
- **Valid changes:**
 - Negotiated rate adjustments
 - Clerical errors
 - Work/cost transfers
 - Descoping
 - Adjustments due to use of estimated actuals

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



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	\$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		\$54,795,440	\$49,078,038	\$50,237,764	
06/21/2009	\$4,834,514	\$49,078,038	\$51,945,311		\$55,317,179	\$55,554,891	\$51,945,311	
07/26/2009	\$5,337,752	\$49,078,038	\$54,512,317		\$55,843,138	\$55,853,136	\$54,512,317	



Enlarged portion of report (partial view) indicates changes were made to Cum BCWS between 3/25/2012 to 4/22/2012 for several months in 2009.

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?

Using the Retroactive Changes Report



- Cells highlighted in RED, LIGHT RED, YELLOW, or contain RED text on GRAY background are considered errors
- Estimate To Complete (ETC) in historical periods may adversely impact total EAC
- Negative BCWS values in future periods may be an indicator of a major re-plan/scope reduction effort

	Value for the performance period has been changed in historical period by more than 1%
	Value for the performance period has been changed in historical period by less than 1%
	Future reporting period contains negative incremental BCWS value
0.00	Historical period contains Estimate To Complete for future work
	Estimate To Complete value in historical period is not present
0.00	Cumulative value in the corresponding Performance Period as indicated by Status Date in report header



- **Project management relies on accurate data**
- **The Data Validity Report and the Retroactive Change reports provide insight into whether the data being reported is accurate**
- **Concerns highlighted on these reports should be discussed with the contractor and corrective action monitored**



Home » Operational Management » Project Management » Earned Value Management

EARNED VALUE MANAGEMENT

- Aviation Management
- Executive Correspondence
- Energy Reduction at HQ
- Facilities and Infrastructure
- Freedom of Information Act
- Financial Assistance
- Information Systems
- Procurement and Acquisition
- Project Management
 - Earned Value**
 - Lessons Learned
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 - RCA and CAP

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

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

EVM TUTORIALS

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

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

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

Career Development Program

Real Estate

History