

**EVMS Training Snippet Library:
DOE EVMS Review for Cause**



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

Achieving Management and Operational Excellence

This EVMS Training Snippet, sponsored by the Office of Acquisition and Project Management (OAPM), covers the DOE Earned Value Management Systems Review for Cause process.

Types of EVMS Reviews



Page 2

- **Pre-Certification**
 - Certification Review
- **Post Certification**
 - Surveillance
 - Implementation
 - Review for Cause



There are four types of EVMS reviews conducted by the OAPM. The Pre-Certification review is the Certification Review. Post Certification Reviews include Surveillance, Implementation, and Review for Cause.

Governing Procedures



Page 3

- **American National Standards Institute / Electronic Industries Alliance (ANSI/EIA) 748 standard consists of 32 guidelines**
- **Contractually required**
 - Department of Energy (DOE) Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, 11/29/2010
 - Use of EVMS compliant with ANSI/EIA 748 required prior to CD 2
 - Certification as compliant required prior to CD 3
 - EVMS not required for firm fixed-price contracts
 - FAR clause 52.234-4, *Earned Value Management System*

The American National Standards Institute/Electronic Industries Alliance, ANSI/EIA-748, consists of 32 guidelines for an Earned Value Management System.

Requirements for certification and surveillance of a contractor's EVMS are contained in DOE Order 413.3B. Certification and surveillance requirements are also in Federal Acquisition Regulation (FAR) clause 52.234-4. Either one or both form the contractual basis.

DOE Order 413.3B requires that, except for firm fixed-price contracts, contractors employ an ANSI/EIA-748 compliant EVMS prior to critical design (CD) 2 for projects with a TPC greater than or equal to \$20M, and that if not already in place, that the contractor's EVMS be certified as compliant prior to CD 3. Therefore, efforts need to be made to plan and execute the certification process on a schedule that can meet this requirement.

RFC Purpose and Causes



Page 4

- **Purpose**
 - Assess whether the output of the EVMS processes:
 - Continues to meet the intent of the guidelines
 - Provides reliable and accurate project information
- **'Cause' examples**
 - Surveillance indicates significant concerns
 - Output of the EVMS may no longer meet the intent of the guidelines; not reliable for management decision-making
 - Repeat findings indicating previous corrective action was inadequate to prevent reoccurrence
 - Failure to cooperate in reviews or to adequately address or remedy identified findings

A Review for Cause (RFC) is conducted after EVMS surveillance identifies significant concerns pertinent to whether the EVMS may still be relied upon to provide reliable and accurate project information. The purpose of an RFC is to provide the contractor with an opportunity to demonstrate that a fully integrated and compliant EVMS exists, is implemented, and has been maintained. Considerations should include the contractor's progress against corrective actions plans and accuracy of the performance data generated. The decision to initiate an RFC may occur after Stage 2, however much more frequently as a result of Stage 3 surveillance.

The decision to initiate a Review for Cause usually occurs after Stage 2 or Stage 3 surveillance. The "cause" for warranting this type of a review may include:

- Can the EVMS still be relied upon to provide reliable and accurate project or program information to the FPD or other DOE elements?
- Did the surveillance uncover non-compliances to a significant number of ANSI/EIA-748 guidelines?
- Is the contractor making adequate progress to remedy previously identified Corrective Action Requests (CARs) issued during EVMS surveillance?
- Is the team discovering the same findings repeatedly. This indicates poor root cause analysis or failure to prevent reoccurrence?
- Did the contractor fail to cooperate with the surveillance review, impeding the team's ability to conduct surveillance?



- **Scope**
 - Discretion of Certifying Authority
 - May focus on specific system processes
 - May include all 32 Guidelines, processes, procedures
- **Review Team**
 - Led by DOE; assisted by contract support personnel
- **Length of Review (depends on scope)**
 - One to two weeks on site
 - Follow-on depends on results and decisions regarding system status

Before proceeding into the steps defined for the RFC, the basic scope and assumptions warrant discussion. At the discretion of the certifying authority, the scope may focus on those system processes where concerns were identified or it may encompass all EVMS guidelines, contractor's surveillance and maintenance efforts, and re-evaluation of the contractor's EVM System Description and supporting procedures.

In a review for cause, as in a certification review, the focus is to assess compliance. Therefore, it is the responsibility of the contractor to demonstrate compliance with objective evidence.

The review team is led by DOE employees, assisted by contract support personnel. Depending on scope, the review may take one to two weeks on site. Depending on the results of the review and decisions regarding system status, a follow-on review may be necessary to conduct CAP closeout actions.

- **Expectations:**

- Team

- Arrives on time
- Well prepared
- Professional

- Contractor

- Safety/security
- Facilities
- Responsive
- Available



MUTUAL TRUST AND RESPECT

In order for the on-site review to go smoothly, there are expectations for both the team and the contractor. To allow the team to conduct its work efficiently with minimal disruption to the contractor, the team must be prompt, well prepared and ready to get started. The team should also be polite and professional at all times.

The contractor is expected to provide for the team's safety and security by ensuring the team is briefed, security procedures are handled in advance of arrival to the extent possible, and facilities are provided to allow the team to operate comfortably with access to computers, printers and copiers, etc. The contractor must be responsive to requests for directions and any additional materials and available for scheduled meetings and interviews. The team's mission can be conducted smoothly by working together with a positive spirit of cooperation, open and honest communication, and mutual trust and respect.

Typical On Site Review Format



Page 7

- **Welcome/Introductions/Safety**
- **In Brief by Government Review Director**
- **Contractor Presents**
 - Brief Overview
 - Scheduling and Cost Engines Demonstration
 - Process flow via EVMS Storyboard
- **Interviews Conducted**
 - Control Account Managers (CAMs)
 - Project Controls
 - Contractor Management
 - Government Federal Project Director and CO
- **Final Out Brief by Government Review Director**

On the first day following the welcome, introductions, and safety briefing, the Government Review Director will provide a formal In brief explaining the purpose, intent, and scope of the review. In a Review for Cause, the In Brief will also cover the circumstances behind why the RFC is occurring. The contractor then will provide a brief overview and a demonstration of its scheduling and cost engines. Typically a contractor will demonstrate how its EVMS operates via the use of a storyboard. A storyboard is a graphic organizer in the form of sample EVMS objects displayed in sequence for the purpose of demonstrating system integration, process flows and relationships.

Interviews will follow as previously scheduled by the Review Team.

At the end of each day, the Review Team will request any additional needs (facilities support, data, etc.). Toward the end of the review, the team will brief senior contractor personnel with a pre-brief regarding any significant issues discovered. This allows the contractor to come to the full out-brief with an understanding of what will be discussed. At the conclusion of the Review, the Review Director will conduct a formal Out Brief. After the review, the team allows approximately three days for the contractor to review the draft Corrective Action Requests for factual accuracy. Note that factual accuracy is limited to screenshots and references. Disagreements in principal, if any, are handled in the Corrective Action Plan (CAP) process.

What to Expect During Interviews



Page 8

- Contractor Management, Project Controls, and CAMs interviewed plus some DOE Site Personnel
- CAM interviews conducted where the CAM has **access to the cost and schedule tools** used to manage the effort
- Interviewees must be able to **show, prove, demonstrate** that they are using the system to manage their projects
- Interviewers **drill down, trace, analyze** to make sure the data is accurate
- The team **conducts a critical assessment** of the tools, procedures and processes, and how they are used to manage the work

The team conducts interviews during all on-site reviews, and may conduct some via conference call or VTC on desktop reviews. Interviewees include the contractor's management, Project Controls staff, and Control Account Managers (CAMs). Although the focus is on the contractor's compliance, DOE site personnel, such as the FPD, may be interviewed to assess the use of the EVM data.

The team's focus is to verify compliance. Therefore CAMs must have live access to the cost, schedule, and any other systems required to demonstrate, show and prove compliance. It also allows the interviewers to drill down, trace, and analyze data. CAMs must have access to MS Power Point or MS Word to copy and save screen shots from these systems, as requested by the review team, for review documentation purposes. Live access may be with assistance from project controls during the interview. However, the CAM needs to direct other company personnel in all aspects during the review.

The team conducts a critical assessment of the tools, procedures, and processes, as well as how the interviewee has implemented the processes and demonstrated management of the work using variances, trends, and projections.



- **Corrective Action Request (CAR):**
 - A CAR is a systemic or limited occurrence of an ANSI/EIA 748 non-compliance or a significant impact to reporting
 - A CAR requires a Corrective Action Plan (CAP), approval, and closeout
- **Continuous Improvement Opportunity (CIO):**
 - A CIO is a recommended improvement or expansion of good practices for wider application
 - CIOs do not require implementation or response; dialog is encouraged

Non-compliances identified during the Review for Cause are documented via a Corrective Action Request, also called a CAR. The purpose of a CAR is to formally notify the contractor of process or implementation deficiencies. All CARs require a documented course of action (i.e., corrective action plan) prepared by the contractor and approved by the Review Director.

All CARs will be documented and tracked to closure. Verbal CARs are not acceptable.

Continuous Improvement Opportunities (CIOs) may be issued to identify areas for process improvement. These may include suggested best practices, lessons learned, or other efficiency or effectiveness measures to streamline processes. CIOs do not require a written response from the contractor or approval by the team; however, contractors are encouraged to share their thoughts and plans pertaining to the ideas provided.



- **Decision to uphold or to withdraw certification of EVMS compliance, pending corrective actions**
 - Made by Certifying Authority; Formally communicated by CO
 - If certification upheld
 - Corrective actions must be taken for any cited non-compliances and surveillance of contractor's EVMS continues
 - If certification withdrawn
 - CARs and CIOs will be provided
 - Contractor responsible for complete system assessment
 - Certification review will be conducted when the contractor exhibits readiness

Upon completion, the Certifying Authority will determine if compliance has been demonstrated, and if not, determine the path forward which may include withdrawal of the Certification of compliance for the contractor's EVMS.

The Certifying Authority works closely with the Government Contracting Officer (CO) through this process given that the withdrawal puts the contractor in a position of non-compliance to the terms and conditions of the contract, and the possibility that sanctions or contractual remedies may result. Nonetheless, the Certifying Authority as the EVMS Subject Matter Expert has final determination on the compliance status of a contractor's EVMS and determination to grant or withdraw a system certification.

If the decision is to uphold the certification, then the DOE will work with the contractor through the normal Corrective Action Plan process, and final closeout procedures, once the CARs are ready for closeout.

If a decision is made to withdraw the contractor's certification, then a letter will be issued to the contractor. The CARs and CIOs are provided to the contractor for its use in preparing for their re-certification. The contractor is responsible for not only implementing corrective action on all DOE-identified CARs but also identifying any other issues that may preclude it from re-achieving Certification. Once the contractor exhibits it is ready for re-certification, a Certification Review will be conducted.

Documenting Review Results



Page 11

- **RFC report documents the review actions**
- **Contents**
 - Executive Summary Scope of Review
 - Health of the EVMS
 - Assessment and Findings
 - System deficiencies identified
 - Best Practices Identified
 - Conclusion
 - Attachments include CARs and CIOs

The Review Team documents the results of the Review for Cause in a written report that is issued by the OAPM Director. The CO will formally transmit the report along with any CARs and EVMS compliance determination to the contractor. The report includes the scope of the review, an overall assessment of the contractor's implementation of the EVMS, and findings of deficiencies or non-compliances that resulted in CARs. A report template is available from the OAPM or on the OAPM EVMS home page.

EVMS Review Reports should include at a minimum:

An Executive Summary of the Scope of Review with highlights of the overall health of the contractor's EVMS as assessed by the review team.

The report also includes an Assessment and Findings section which includes summarizations of trends and systemic issues identified during the review with a table of the Corrective Action Requests and Continuous Improvement Opportunities issued, as well as any Best Practices identified during the review.

The last section of the report is a Conclusion. In this case, the conclusion will support the ultimate decision made relative to upholding the certification or withdrawal and the path forward.

Attachments to the report include the CARs and CIOs. Supporting documentation from the review, such as the data trace documentation and PARS II reports, are kept on file at the OAPM.

DOE OAPM EVM Home Page



Page 12

ENERGY.GOV
Office of Management

SERVICES OPERATIONAL MANAGEMENT MISSION

SEARCH

About Us OFFICES

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
Program Management
Earned Value
Lessons Learned
Reviews and
Validations
Documents and
Publications
RCA and CAP

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

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

EVM TUTORIALS

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

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

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

Career Development
Program
Real Estate
History

For information relative to EVMS procedures, templates, helpful references, and training materials, please refer to OAPM's EVM Home page. New documents are added so check back periodically.