

**Lab-Wide Earned Value
Management System Project
Core Team Kickoff Meeting**

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Agenda

- 1) Project Overview [Dean]
 - a) History
 - b) Definitions
 - c) Requirements
 - d) Work Scope
 - e) Project Participants
 - f) Reference Material
 - g) Schedule
- 2) Oversight Committee's Role [Dean]
- 3) Progress of Core Team [Elaine]
 - a) FRA Earned Value System Description Document
 - b) Implementing Procedures
- 4) Pending issues [Dean, Elaine]
 - a) How to treat Collaborator effort in the schedule (like Fermi Labor or Subcontractor M&S)
 - b) Contingency & Management Reserve (definitions and which to use)
- 5) Next Meeting

Lab Earned Value History

- EV has been performed at some level since the Main Injector Project in the 1990s.
- In 1998 the Lab purchased Welcom's (now Deltek) Cobra software tool for managing project costs, measuring earned value, and analyzing budgets, actuals and forecasts. The software was purchased to support the NuMI Project.
- The Cobra software was made the Lab's standard software for measuring and reporting EV for projects that were required to report EV to DOE.
- Even though there was the Lab's standard software tool for EV, there was not a Lab standard for the EVMS process. Each new project has created their own version of an EVMS.

Definitions

- Earned Value (EV) – The value of completed work expressed in terms of the approved budget assigned to that work for a schedule activity or work breakdown structure (WBS) components.
- Earned Value Management (EVM) is a management methodology for integrating scope, schedule, and resources, and for objectively measuring project performance and progress.
- Earned Value Management System (EVMS) is a documented integrated set of processes to implement Earned Value Management.

Requirements

- DOE O 413.3A & DOE M 413.3-1 “Program and Project Management for the Acquisition of Capital Assets”
 - At CD-2, projects with a TPC $< \$20M$ are not required to utilize an EVMS, but an alternative performance management system must be described in the respective Project Execution Plan.
 - At CD-2, projects having a TPC $\geq \$20M$ and $< \$50M$ are to have a self-certified EVMS that is compliant with ANSI/EIA-748-A.
 - At CD-2, projects having a TPC $\geq \$50M$ are required to have an ANSI/EIA-748-A compliant system certified by the DOE Office of Engineering and Construction Management (OECM).

Requirements (continued)

- ANSI/EIA-748-A/B “Earned Value Management Systems” and Intent Guide
 - Standard provides basic guidelines to establish and apply an integrated EVMS utilizing 32 Criteria that are grouped into 5 major categories
 - Organization (5 criteria)
 - Planning, Scheduling and Budgeting (10 criteria)
 - Accounting Considerations (6 criteria)
 - Analysis and Management Reports (6 criteria)
 - Revisions and Data Maintenance (5 criteria)

Work Scope

- We are developing a Self-Certified EVMS that we are then requesting OECM to certify.
- Both a Certified and Self-Certified EVMS have to meet the same requirements, ANSI/EIA – 748.
- There are two parts that have to be accomplished to obtain a Certified system.

Work Scope (continued)

- Part 1 – Development and Implementation of a Lab-Wide EVMS Process
 - EVMS Management Policy
 - Lab-Wide EVMS Description Document
 - Implementing Procedures
 - Implementation Guides/Desktop Instructions
 - CAM Notebooks
 - Supporting Tools
 - Training
 - External Assessment

Work Scope (continued)

- Part 2 – OECM EVMS Certification Preparation Process
 - Readiness Assessment Site Visit
 - Certification Review
 - Corrective Action Plan (CAP)
 - Follow-up Review

Project Participants

- Project Co-Sponsors
 - Hugh Montgomery (Peter Garbincius)
 - Steve Holmes

Project Participants (continued)

- Core Team

- Steve Dixon
- Ken Domann
- Harry Ferguson
- Bill Freeman
- Dean Hoffer
- Marc Kaducak
- Rob Kennedy
- Dale Knapp
- Elaine McCluskey
- Wyatt Merritt
- Suzanne Saxer
- Rich Stanek

Project Participants (continued)

- Oversight Committee
 - Bill Boroski
 - Peter Garbincius
 - Nancy Grossman
 - Dave Harding
 - Steve Holmes
 - Tom Lackowski
 - Mike Lindgren
 - Pat Lukens
 - Hugh Montgomery
 - Ann Nestander
 - Ed Temple
 - Connee Trimby

Reference Material

- Material used by Core Team
 - EVMS documents from existing Lab Projects
 - EVMS documents from other Labs (PNNL, BNL, JLab, LBNL, SLAC-LCLS, LANL and SNL)
 - DOE and ANSI requirement documents

Schedule

- MSP Schedule based on work to be accomplished,
- Key Activities/Projected Dates
 - Documents ready for Readiness Review – 08-Oct-2008 (Old 27-Aug-2008)
 - Readiness Review by OECM – 05-Dec-2008 (Old 24-Oct-2008)
 - OECM On-Site Review – 02-Mar-2009 (Old 23-Jan-2009)

Oversight Committee's Role

- Represent the Lab as a whole and is the communication pipeline back to your individual Division/Section
- Give guidance on the EVMS Process and Document development activities
- Additional level of review of the EVMS documents developed by the Core Team

Communication Tools

- Project Webpage
<http://www.fnal.gov/directorate/OPMO/Projectsns/EVMS/home.htm>
- WelcomHome

Core Team Progress

FRA EVM System Description Document

- Current document drafted from original Fermilab EVM System description written by Suzanne Saxer
- Combines information from other labs' documents
- Being reviewed by Core Team as associated procedures are written
 - For example, Change Control chapter has been edited with parts moved to the procedure

Core Team Progress Procedures

- Established procedure list – similar to other labs
- Began work with 2 assigned writers & reviewer
- Using other labs' procedures as starting points
- Assignments have been adjusted as staffing changes and other work efforts limit availability of some team members
- Much discussion on how work is done at Fermilab, versus what it takes to pass review, versus how we want to do work here
- Several issues raised, now being brought to Oversight Committee

Core Team Progress Procedures

PROCEDURE	PROPOSED WRITING ASSIGNMENTS	PROPOSED REVIEWER ASSIGNMENTS	STATUS 11 JUNE 2008
PM-1 Project WBS, OBS, RAM	Rich, Rob	Dean	Drafted, needs appendices, working on procedure/chapter interface
PM-2 Control Accounts, Work Packages, Planning Packages	Elaine, Steve	Bill	Beginning drafting
PM-3 Work Authorization and Funds	Elaine	Dean	In internal review
PM-4 Project Scheduling	Bill, Ken	Dean	Final drafting, almost ready for internal review
PM-5 Project Cost Estimating	Marc, Steve	Harry	Under internal review
PM-6 Monthly Status and Reporting	Harry	Suzanne	To be sent for internal review this week
PM-7 Change Control	Rob, Elaine	Ken	Internal review completed
PM-8 Surveillance	Harry, Elaine	Wyatt	Under internal review

Pending Issues

- How to treat Collaborator effort in the schedule (like Fermi Labor or Subcontractor M&S)
- Contingency & Management Reserve (definitions and which to use)

Collaboration Effort

- Like Fermi Effort
 - Pros
 - Have details of work to be performed in schedule
 - Higher confidence in estimate
 - Easier to move work to another institution or bring into Fermi if Collaborator is not performing
 - Cons
 - Effort to resource load the schedule w/rates
 - Difficulty in statusing accurately

Collaboration Effort (continued)

- Subcontractor M&S
 - Pros
 - Less activities and milestones in schedule because only using M&S resource instead of multiple Labor type resources
 - Easier to status
 - Cons
 - Do not have details of work to be performed so it would be harder to move work to another institution or bring into Fermi
 - Less confidence in estimate from Collaborator

Contingency Definitions

- ANSI EIA-748
 - No reference or definition in 748
- DOE O 413.3a
 - Contingency is the portion of the project budget that is available for risk uncertainty within the project scope, but outside the scope of the contract. Contingency is budget that is not placed on the contract, and is included in the Total Project Cost.

Contingency Definitions (continued)

- DOE M 413.3-1
 - Contingency is the portion of project budget that is available for uncertainty within the project scope but outside the scope of the contract. That is, contingency is budget that is not place on contract.
- DOE G 413.3-10 (EVMS)
 - In establishing the TPC, DOE should account for technical and programmatic risks. It is important to account for these technical and programmatic risks by establishing a DOE contingency which would be used for providing additional budget should the need arise.

Management Reserve Definitions

- ANSI EIA-748
 - An organization may establish a schedule and/or cost reserve to be used for management control purposes in accordance with organizational policy. Management reserve is held for unexpected growth within the currently authorized work scope, rate changes, risk handling, and other program unknowns. Generally, reserve is held for current and future needs and is not used to offset accumulated overruns or under runs. Reserve may be held at the total program level or distributed and controlled at lower management levels. In any case, an organization should be able to account for all of its management reserve. Management reserve is not a contingency that can be eliminated from prices during subsequent negotiations or used to absorb the cost of program changes. The budget being held in reserve must not be viewed by a customer as a source of funding for added work scope.

Management Reserve Definitions

(continued)

- DOE O 413.3a
 - An amount of the total contract budget withheld for management control purposes by the contractor. Management Reserve is not part of the Performance Measurement Baseline.
- DOE M 413.3-1
 - An amount of the total allocated budget withheld for management control purposes by the contractor. Management Reserve is not part of the Performance Measurement Baseline.

Management Reserve (continued)

- DOE G 413.3-10 (EVMS)
 - Contractors should be encouraged to establish a challenging PMB. However, it must be understood that there will be risk events within the contractor's defined scope of work. A proper balance of challenge versus risks and managing risks can be the key to project success. Many of these risk events may happen and the contractor should be allowed to have a budget reserve that they can use to better plan future work. This budget reserve or MR should not be used to budget newly directed work scope.

Contingency and MR Discussion

- Special Core Team Meeting on 28-May with additional attendees of John Cooper, Pat Lukens, Pepin Carolan and Peter Garbincius.
- **Semi-consensus:** the term management reserve could be eliminated from the Fermilab usage since we're able to meet the intent (project manager-controlled fund) via our change control thresholds. We would need to define both terms so that there's no murkiness on the matter, even if it's to say that management reserve is not being used.

Next Meetings

- Monthly regular meetings (estimate 6-8 meetings)
- Ad hock meetings only if needed guidance would impact key milestone dates