

**Fermi Research Alliance
Corrective Action Plan
for
Department of Energy - Office of Engineering and Construction Management
EVMS Certification Review Performed May 11-15, 2009**

CAR #1

Subject:

Accounting for Scientist Labor (uncosted)

Requirement:

ANSI/EIA-748, Guideline 9 requires the following: "Establish budgets for authorized work with identification of significant cost elements (labor, material, etc.) as needed for internal management and for control of subcontractors."

Guideline 22 requires the following: "At least on a monthly basis, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system:

- 1) Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance.
- 2) Comparison of the amount of the budget earned and the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance."

Guideline 23 requires the following: "Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance, and provide the reasons for the variances in the detail needed by program management."

OECM/Tecolote Observation/Finding:

The FRA EVMS is not tracking the labor of its scientists and science post-graduate students who support its NOvA project. This represents approximately 18 percent of the labor hours budgeted (163k/883k) for the project. In its execution, the NOvA project has budgeted scientists' labor hours in the schedule, but there are no labor rates related to the hours. Further, the actual hours worked by scientists are not being recorded and entered into the EVM system. As a result, cost variances cannot be determined for the work being performed. Further, where scientists' labor is included in work packages performed by others who record their hours and have associated labor rates, the cost and schedule variances for such work packages cannot be correctly calculated because costs do not include the scientists' labor costs.

Since scientists' hours are budgeted, schedule variances for this work could be determined using hours rather than dollars. However, the team did not find that this is currently being done. The EVMS standard allows cost and schedule performance to be measured using either dollars or hours. Therefore, planned, earned, and actual hours could be used for determining schedule and cost variances. Because FRA does not capture actual hours worked by its scientists, this is not possible.

It is recognized the unique nature of the support being provided by scientists at the various universities and that the science community culture at many places does not include accounting for their labor hours worked on projects. However, accurate project status and projections of project completion schedule and costs cannot be determined without accounting for scientists' labor.

FRA Corrective Action: The FRA EVMS will track all budgeted labor on projects. Because labor requirements for projects are established in hours, tracking of labor "costs " can be done either in hours or in dollars. The FRA EVMS will track all costed labor in dollars and uncosted (scientist) labor, as applicable, in hours.

- FRA will perform EV in hours for uncosted Scientist effort budgeted on a project.
- A process will be established for the recording of scientist hours worked on a project where uncosted scientist effort is included in the hours budgeted.
- A process will be established for the collection of scientist hours worked on a project for comparison to budgeted hours.
- For non-FRA uncosted Scientist from other institutions, agreements will be made on the recording and reporting of hours worked on a project. These agreements will be documented in the Memorandum of Understanding (MOU) with each institution for new projects.
- The following documents will be revised to reflect the process for performing EV with hours
 - FRA Earned Value Management System Description
 - Procedure 12.PM-002 (Control Accounts, Work Packages, Planning Packages)
 - Procedure 12.PM-003 (Work Authorization)
 - Procedure 12.PM-005 (Cost Estimating)
 - Procedure 12.PM-006 (Monthly Status Reporting)
 - Procedure 12.PM-007 (Change Control)
- Training on these processes will be provided to CAMs, project office, senior management, and collaborating institutions.
- This corrective action will be implemented on the NOVA Project. Implementation will include modifying existing MOUs with collaborating institutions on agreement to record and report scientist effort.

CAR #2

Subject:

No Process/Provision for UB as Holding Account

Requirement:

ANSI/EIA-748, Guideline 14 requires the following: Identify management reserves and undistributed budget.

OECM/Tecolote Observation/Finding:

The EVMS description does not address provisions for undistributed budget or processes/procedures for managing such. Para 3.5.2 of the FRA EVM system description states "At the present time, Fermilab projects do not employ undistributed budget as described in the NDIA Intent Guide. The team could find no process that addresses the tracking, use, distribution, and accounting for undistributed budget. While there is a UB Log that shows funds in a UB status, that status is instantaneous, as it is negated in the next line by a debit or credit to management reserve.

The FAR has provisions for contract letters of authorization to proceed which authorize additions/deletions of scope and budget. Should DOE issue a letter of authorization to proceed pending the preparation, review, and approval of a BCP, the FRA projects currently have no process for managing such budget until the BCP is approved. Contract authorizations to proceed could direct additional scope and budget or the removal of scope and budget. Without a provision for UB, the projects have no process for segregation and management of such budget into a temporary holding account. The EVMS description should have a provision for UB and a process for the managing a UB holding account.

FRA Corrective Action:

- FRA will revise the FRA Earned Value Management System Description to provide for the possibility of utilizing undistributed budget, as well as a description of processes for tracking, use, distribution, and accounting of such budget.

CAR #3

Subject:

Direct Cost for Exempt Labor

Requirement:

ANSI GL # 16: Record direct costs in a manner consistent with the budgets in a formal system controlled by the general books of account.

OECM/Tecolote Observation/Finding:

FRA is not in compliance with ANSI Guideline #16 because there is not an auditable trail beyond submitted employee time records that would validate whether salaried exempt employees' efforts are allocated to multiple projects proportionate to their actual effort. Hours recorded may or may not represent total hours actually worked.

Through review of FRA policy and procedures documentation and interviews with both accounting department and project personnel it has been determined that the FRA timekeeping system/process does not capture total hours worked. Also, there are no detailed procedures regarding recording of time worked and there is no adequate guidance to support consistent/accurate recording of time when charging to more than one project/task. Timekeeping is accomplished using two different methods; 1) manual timekeeping records (paper based) and 2) electronic timekeeping through the Fermi Time and Labor System (FTL).

The timekeeping systems/processes (for exempt employees working more than one project or charges time to more than one task within a project) as defined creates an internal control weakness allowing for unnecessary inaccuracies in how exempt employees record their time in relation to work assignments.

FRA Corrective Action:

- All hours worked for exempt FRA employees will be recorded on a weekly basis.
- The FRA Fermilab Time and Labor system will be fully implemented for exempt employees for this purpose.
- Standard FRA policy and procedures have been developed. A revised Labor Capture and Distribution Policy, with specific guidance for employees regarding tracking and recording of effort, was posted on the Finance Section website on May 26, 2009. A memo was distributed from the Fermilab Director, Dr. Pier Oddone, directing employees using the FTL system to read and adhere to the new policy, which will be implemented as of June 15, 2009.