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VOLUME 9 OF 15

MANAGEMENT CONTROL SYSTEM

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MANAGEMENT CONTROL SYSTEM

I. BACKGROUND

Well planned work is the key to success in managing a project or facility. Many large or small projects have management systems that are excellent in collecting history, such as monthly costs or shipments, while other systems produce spectacular plans for estimated costs and schedules. However, one of the tools for making management decisions is a control system that describes authorized work, schedules near term small increments of the work and identifies all resources that are needed to accomplish the work. That is the planning phase. Then, as the work is in process, the system periodically reports the status of the schedule and the cost. Then a comparison of plan to actual is analyzed and any significant variances are identified for management action, should it be required.

The WMCO/DOE contract has included the requirement to implement a management control system known as Cost and Schedule Control System Criteria (C/SCSC), which is a system defined by DOE Orders. Thus, the intent of Task 9 of the WMCO Transition Plan was to study the management control system in place at FMPC and to prepare a plan that would enhance the system. The objective of the revised management control system would be to provide a usable management tool to measure accomplishments to plans and to identify problem areas where management attention is needed. The system would also satisfy C/SCSC.

During the first several weeks of the transition, the FMPC budget and cost systems were studied. Several FMPC Divisions manually maintain time sheets that list each individuals hours being applied to specific jobs. The total hours collected for any job provides a guide for planning future work. Other than the planning and scheduling group that is responsible for production operations, each Division or Section (for purpose of this report, the first line managed group) develop and use management systems as preferred by the appropriate manager. All official budgets and actual costs are the responsibility of the Controller's Division where the level of control is at the Cost Center (to be discussed in a later paragraph).

Discussions were held with NLO Advanced Planning and Controller personnel regarding financial and accomplishment reporting. Currently the Controller's Division prepares and submits the monthly cost report to DOE. Incurred costs are reported at the predetermined DOE Budget and Reporting (B&R) classification. The cumulative costs for the fiscal year are compared to the Financial Plan. Also the estimated percent of the financial plan expended is shown on the report.

Over the past year or so, DOE Oakridge Engineering had requested detail budget and cost information on the major construction line item projects. Since this reporting request was in a lower degree of detail than the accounting system, Projects (WMCO Engineering) has developed a data base computer program that distributes budgets on a monthly basis and collects incurred costs. The first reports have been issued directly to DOE Oakridge Engineering and the system checkout is nearly completed. This system is a combination of a manual and automated reporting system. Time sheets are maintained for all personnel working on the Projects construction line items. At the end of the month, the total hours are entered in the Engineering computer system and hourly rates, provided by the Controller, are applied. Procurement data is entered from Controller information and a variance of budget to cost is calculated for each of the line items reported.

The main reason that the above system was developed is because the approved accounting system at FMPC collects incurred costs at a Cost Center level, not at the task level. The Cost Center is, in most cases, the collection point of both direct and indirect costs. Usually the Cost Center is identified for a specific FMPC organization. In some cases this is a Division level organization and in other cases at a first line or production plant level. The Cost Center is defined in the Accounting Manual Section 304.04. Administrative organizations and other organizations (Cost Centers) that support work for a variety of FMPC activities i.e.: controller, program planning, etc. have the associated incurred costs allocated to the B&R classification. The allocation process is identified in the "Uniform Accounting System" document.

The planned work tasks in conducting the management control system studies and the report on these tasks is listed below.

II. WORK TASKS

A. EVALUATE COST & SCHEDULE CONTROL SYSTEM SOFTWARE AND HARDWARE CURRENTLY IN PLACE AT FMPC. INTRODUCE, IF REQUIRED, FAMILIARIZATION WITH HEWLETT-PACKARD PC, AND STANDARD LOTUS SOFTWARE

1. Findings - The memory capability of the Hewlett-Packard personal computer is very limited. Use of the Lotus software for budget preparation could not be accomplished, as the memory capability of the HP was exceeded
2. Recommendations - Both the personal computer and main computer systems need to be improved. Refer to Work Task 9.C.

3. Corrective Action - IBM hardware and software is changing daily. Therefore, two IBM PC's with expanded memory capability need to be purchased during the 9-month plan. Currently, an IBM PC is being leased for planning the 9-month program. A scheduling system will be included in the plan to implement an integrated management control system, reference Work Task 9.D.

B. REVIEW EXISTING ORGANIZATION'S STAFFING, POLICIES, PROCEDURES, AND EQUIPMENT RELATED TO MANAGEMENT CONTROL SYSTEMS AND EFFECT CHANGES AS REQUIRED

1. Findings - The management control system at FMPC is a recently developed and implemented system which is used to report financial data for selected projects. The data is collected separately from the normal budgeting process, as the report is used to satisfy a specific DOE request. There is no management system in place that plans, budgets and collects actual costs for use in managing all the work. Each division or lower level manager has established his own internal management system either in memory, manual or on HP personal computers.
2. Recommendations - Implement a new management control system that can be used by all managers.
3. Corrective Action - Refer to Work Task D.

C. EVALUATE EXISTING COST AND SCHEDULE CONTROL SYSTEM FOR COMPLIANCE WITH DOE CRITERIA AND EFFECT CHANGES AS REQUIRED

1. Findings - Work Task 9.B. describes the control system that exists at FMPC. It was the intent during the transition phase that this task would be completed. However, the milestones have slipped to January, 1986, as a scheduled meeting date mutual to all members of the peer review group was not possible in December as planned.
2. Recommendations - The peer review group report will be factored in Work Task 9.D.
3. Corrective Action - The peer review group meeting is scheduled for January. Their findings and recommendations will be considered in preparing the management control system plan which is now scheduled for February, 1986. Refer to Work Task 9.D.

D. DEVELOP A PLAN, WITH MILESTONES, FOR IMPLEMENTING A
VALIDATED C/SCSC SYSTEM AT WMCO

1. Findings - The preparation of this management control system is dependent on the recommendations made by the peer review group as referenced in Work Task 9.C. Therefore, the plan preparation must be moved to a date later than January, 1986.
2. Recommendations - The issuance date is proposed to be revised to February, 1986.
3. Corrective Action - Change the completion date of the task to February 28, 1986.

E. REVIEW, STUDY, AND UNDERSTAND THE DOCUMENT "FY 87
INFORMATION TECHNOLOGY RESOURCES, LONG-RANGE SITE
PLANS" DATED 01/25/85, WHICH REFLECTS ADP SYSTEM AT
FMPC

1. Findings - The reviews provided information and a data base regarding the planned work for future years.
2. Recommendations - The review was for information only.
3. Corrective Action - Not applicable.

F. INITIATE PLANNING OF A WORK BREAKDOWN STRUCTURE. THIS
PLANNING WILL BE SYNCHRONIZED WITH
DEVELOPMENT/IMPLEMENTATION OF C/SCSC SYSTEM

1. Findings - No project work breakdown structure has been established for FMPC.
2. Recommendations - WMCO will propose a contract work breakdown structure during the planning phase of implementing a C/SCSC system. Refer to Work Task 9.D.
3. Corrective Action - Not applicable.

G. STAFF REQUIREMENTS FOR PROGRAM CONTROL & INTEGRATION

1. Findings - The FMPC organization has program control and integration responsibilities separated into several different areas.
2. Recommendations - Transfer qualified FMPC personnel to Program Control and search for additional assistance outside of FMPC.

3. Corrective Action - Staff levels will be designated in the 9-month Program Plan and upon WMCO management approval of the plan, WMCO will initiate interviewing for job openings.

H. DEVELOP INTEGRATED MANAGEMENT CONTROL PLAN

1. Findings - This work task was identified in the original Transition Plan in the Operations and Maintenance Section 1.F. However, the work is included in Task 9 and this was added as Work Task 9.H.
2. Recommendations - Work is included in Work Task 9.D.
3. Corrective Action - Not applicable.

III. SUMMARY STATEMENT

The FMPC management control system will be designed from the beginning to satisfy C/SCSC. It is anticipated that the implementation plan will recommend that a sub-contracting service be obtained to develop and implement the management control system that integrates budget/cost and schedule data. The sub-contractor will be expected to provide manager training and assistance during validation.

In addition, continuous coordination will be required with the Controller's division to assure that the management control system is compatible with the improvements planned for the accounting system.