



PDHonline Course P104C (8 PDH)

Project Cost Management

Instructor: William J. Scott, P.E.

2012

PDH Online | PDH Center

5272 Meadow Estates Drive
Fairfax, VA 22030-6658
Phone & Fax: 703-988-0088
www.PDHonline.org
www.PDHcenter.com

An Approved Continuing Education Provider

PROJECT MANAGEMENT ASSOCIATES, INC

*2100 Southwinds Circle
Birmingham, Alabama 35244*

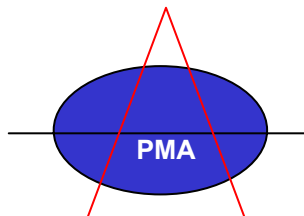
Presents

Project Cost Management

Via

WEB BASED LEARNING

Author: William (Bill) J. Scott, PMP, PE



Module 5

Project Financial Reporting

Periodically, we as project managers must report to company management all of the vital statistics of our projects. For our purposes here, we will refer to such meetings as PSRs (Project Status Review) meetings. Most companies require project financial reporting monthly, some weekly. This reporting should not be feared or viewed with any trepidation, but rather should be welcomed as an opportunity to provide input to upper management, to boost confidence in the project and the project team, and to share in the overall performance of the company. This also provides a good opportunity to ask upper management for help with project issues. Project performance and company performance are merged on a financial level on a periodic basis. This is never more evident than at a PSR meeting.

In this Module, we shall review the characteristics of good reports and meetings as well as the essentials of a good Project Status Report.

Characteristics of Good Reports

1. **Target Audience** – The reported information should be targeted at a specific group and should be appropriate for the group.
2. **Usefulness of Information** – *All* of the information in the report should be useful. Any superfluous information should be eliminated. Not all information must be useful to all members of the audience, but it should all be useful to somebody in the audience.
3. **Structure/Organization** – Organization of the report cannot be overemphasized. Proper structure should lead the audience to the desired conclusions in a logical and progressive manner.
4. **Graphics, Pictures** – Graphical tools allow us to present large amounts of data and ideas with a minimum of words. Assimilation and comprehension of complex ideas is much more readily accomplished through graphical means than through text. If you don't believe me, simply compare the previous sentence with the picture of a smiling infant.
5. **Bullets and Icons** – Use bullets and icons whenever possible.

Characteristics of Good Meetings

1. **Facilitator** – A meeting without a facilitator is like a project without a project manager. It's chaotic and unproductive. Somebody must be in control of the meeting.
2. **Agenda** – A meeting without an agenda is like a project without a plan. It is doomed to failure. It must be in writing and must be provided to the audience prior to the meeting (not at the door). Proper notice should be given.
3. **Timeliness** – Two simple rules: start on time, and finish on time. This is vital, even if it means tracking the time of each agenda item. People like knowing

where they stand; and, the never-ending meeting sees people reaching bold, new levels of non-productivity.

4. Target Audience – Only the appropriate people should be invited to the meeting. No more, and no fewer. A meeting should not waste anybody's time.
5. Interactivity – The audience should be allowed into meeting discussions and activities.
6. Adherence to Subject – This is quite helpful to maintain timeliness. If breakout sessions are necessary to further discuss off-topic items, then these sessions should *only* be *scheduled* during the meeting. Often meetings identify the need for other meetings. Simply schedule the new meeting, and move on.
7. Environment – The environment should be comfortable so as to encourage attentiveness. The room should be arranged to promote eye contact among participants. Coffee, water, mints, and small food items are often appropriate. Breaks should be scheduled if the meeting lasts more than 1½ hours. Facilities should be identified.
8. Equipment – If any special equipment is required for presentation purposes, the equipment should be available and should be tested prior to the meeting. It is a good idea to have spares on hand (for instance, projector bulbs, batteries for remote controls or even markers or chalk).

Characteristics of Good Presentations

1. Establish your objectives wisely:
 - What do you want the audience to know?
 - Why do you want them to know it?
 - What do you want them to do about it?
2. Know your subject thoroughly. Don't try to fake it. This never works.
3. Know your audience:
 - Learn as much as possible about your audience in advance.
 - Relate the subject material to them as much as possible.
 - Anticipate their questions, and be prepared to answer them.
4. Prepare an outline to help keep the presentation flowing in a planned, logical sequence.
5. Don't try to cover too much material for the allotted time.
6. Be natural and sincere.
 - Speak conversationally; don't just read lengthy material.
 - Scan the audience, making eye contact with audience members.
7. Start with an "ice-breaker" or an "attention-getter" that leads into the subsequent material.
8. Exhibit confidence – Be enthusiastic about your subject and eager to share.
9. Tell your audience what you are going to say, say it, and then briefly summarize what you've said.
10. Change your pace; vary the delivery, rate, pitch, and volume.
11. Use pictures, props, graphs, illustrations, and anecdotes to drive home your key points. Present to both sides of the brain.

What is the Purpose of Project Status Reports (PSR's) and PSR Meetings?

1. To communicate the project status, the progress during the period, and the financial health / outlook with upper management, with accounting, and with other functional groups.
2. To communicate potential risks that could adversely affect project outcome and hence cause financial impact to the company.
3. To communicate potential opportunities that could positively affect project outcome and hence cause a financial impact to the company.
4. To request upper management's involvement with project resource issues.
5. To provide feedback to functional groups.

Who is involved in PSR Meetings?

1. Project Manager
2. Upper Management
3. Accounting Group
4. Functional Managers

Format for a Strong PSR

The following is a basic format for a PSR. It shows an effective layout for both reporting and presentation purposes. It should be noted however that there is no "correct" format. Reporting requirements and formats vary from company to company and also vary according to the types of projects executed.

Page 1: Introduction

1. Identification of the Project:
 - Project Number
 - Client
 - Brief Description of the Project
2. Important Project Information:
 - Application
 - Warranty and Commercial Terms
 - Date of Order (or Project Start Date)
 - Project Manager
 - Project Value (Contract Price)
 - Scope of Supply
3. Summary Schedule:
 - Only a rolled-up schedule should be shown.
 - Should be good at a glance.
4. Presentation Notes:
 - Since this information changes very little from month to month, presenting the introduction does not require much time.
 - The purpose of this introduction is merely to acquaint the audience with the project.

- The introduction is important as it brings the audience to the project.

Page 2: Executive Summary

1. The keys to a good executive summary are:
 - Brevity
 - Content
 - Organization
 - K.I.S.S. (Keep It Simple Stupid)
2. Major task groups are addressed in a logical manner.
3. Current status and progress for the reporting period are stated.
4. Issues are addressed:
 - Setbacks or improvements during the period.
 - Potential risks or opportunities.
5. This is also a good opportunity for recognition of project team accomplishments. A one-liner on such a report gives visibility to a job well done, and promotes confidence in the project team.
(Note: As a general rule, rebuking should be done in private whereas praise may be done in public.)
6. Presentation Notes:
 - The executive summary should provide a good structure for presenting the current status of the project. It should be a good crutch for keeping your presentation on track.
 - If there is nothing new to report on a task group, then don't spend much time on the item. Simply state the lack of change, and move on.

Page 3: Invoicing and Receivables Summary

1. This report shows the plan versus actual performance for Cash In:
 - Invoicing schedule – plan v. actual
 - Invoicing amounts – plan v. actual
 - Client payments – plan v. actual
 - Receivables aging performance
2. Changes from plan should be noted and explained (bold, italics, asterisks, etc.)
3. The math *must* be correct. It may sound silly, but this is not the place for mistakes. Having someone check the report is not a bad idea.
4. Presentation Notes:
 - Know the numbers.
 - Present only the changes during the reporting period.
 - Anticipate and be prepared to answer questions based on the data presented.

Page 4: Financial Summary

1. Rolled-up financial analysis of revenue, cost, and cash flow.
2. Row Categories:
 - Contract Value EAC – Total value of the contract.

- Total Cost EAC – Total costs required to execute the project.
 - Contingency Reserve – Reserve (estimated cost) to cover project problems that are unanticipated.
 - Gross Margin EAC (\$ and %) – Difference between contract value and total cost.
 - Cash In – Total of payments received from client.
 - Cash Out – Total of payments made to vendors and internal costs posted to the project.
 - Cash Flow – The difference between Cash In and Cash Out.
3. Column Categories:
- Original Budget – Values that were determined at the start of the project based on the original contract.
 - Current Budget – Values that include any booked changes to the original contract.
 - Last Month EAC – The Estimate at Completion values that were reported in the previous month or reporting period.
 - Current Month EAC – The Estimate at Completion values reported for the current month.
 - Change – Current Month EAC minus Last Month EAC
(Note that this is not the progress from month to month. Rather it is the expected change to overall project outcome from month to month.)
4. The math *must* be correct.
5. Presentation Notes:
- Know the numbers.
 - Investigate any suspect data prior to the reporting. The PSR meeting is a bad and embarrassing place and time to find mistakes, whether the mistakes are yours or not.
 - Report only the real numbers and only the best of estimates. Remember that *bad information* is worse than *bad news*.
 - Anticipate and be prepared to answer questions based on the data presented.

Sample PSR

The following pages show a sample PSR according to the above format. Note the following:

Page 1: Introduction

1. Reporting date is shown.
2. Project title is large, bold, and clear.
3. Introduction to the project is short and simple. Pertinent project information is shown, but without any complete sentences.
4. Summary schedule is rolled up to most basic level.
5. The information is not too detailed or overwhelming.
6. Potential Questions:

- Is the project on schedule? If asked, this provides a perfect lead into the Executive Summary.

Page 2: Executive Summary

1. Example of short and simple – Engineering and Purchasing are long since complete. Any more description of these task groups would probably be a waste of time and effort.
2. Use of bullet items for reported items.
3. Identification of issues (setbacks, risks, opportunities, etc.):
 - Crane break-down
 - Vendor sign-off on ID fan installation
 - Possible delay to start-up
4. Reporting of change order approval (\$42,000 adder)
5. Recognition of exceptional work by a project team member (construction superintendent)
6. Potential Questions:
 - Any possible cost recovery from crane vendor?
 - What is impact of a small lay-down area?
 - Potential impact due to delay of start-up?

Page 3: Invoicing and Receivables Summary

1. Invoicing has generally been according to plan.
2. Invoice for change order was submitted to client during the period (\$42,000 dated 6/4/99).
3. One payment was received during the period (\$150,540 on 6/1/99).
4. Potential Questions:
 - Why did it take 91 days to collect the last payment from the client? This is a tough but obvious question. Research must be done prior to the meeting in order to provide an answer.
 -

Page 4: Financial Report

1. Contract Value EAC – Current Budget and Current Month show the impact of the \$42,000 change order. Further, Current Month and Current Budget are the same value; this indicates that no further changes to contract value are anticipated at this time.
2. Total Cost EAC – While Current Month EAC Cost has increased from Last Month EAC Cost, it is evident that the increase is due to the change order.
3. Contingency Reserve – None of the contingency reserve has been used to date. This is a very good sign.
4. Gross Margin (\$ and %) – The increase in Gross Margin reflects the impact of the change order on the bottom line. The change order was booked at slightly higher margin than the original project.
5. Cash In – This row reflects the \$150,540 payment received in the period.
6. Cash Out – The cash out has increased dramatically.

7. Cash Flow – As a result of the large increase in Cash Out, cash flow for the project has gone slightly negative. This is bad.
8. Potential Questions:
 - The first question will most likely be related to Cash Flow.
 - Why is the project cash flow negative?
 - When will it go back to positive?
 - Are receivables going to be under control in the future?
 - Is contingency level still appropriate for the potential risks remaining in the project? Or can it be reduced?

**APC Project #0174
Month Ending 30 June 99
PSR Date 9 July 99**

CLIENT: CHURN 'N' BURN, INC.

8-MODULE BAGHOUSE WITH ACCESSORIES

APPLICATION
Waste Oxide Reclamation

WARRANTY / GUARANTEES
Equipment: 12 months after Start-up
or 18 months after Delivery

DATE OF ORDER
07 January 1999

GAS FLOW RATE
570,000 acfm @ 280°F

COMMERCIAL TERMS
10% With Contract
10% Upon Drawing Submittals
10% Upon Receipt of Material at Shop
30% Upon Delivery of All Major Equipment Items
30% Upon Completion of Construction (Mech. & Elec.)
10% Upon Successful Start-up & Acceptance
Payment Due: Net 30 Days

PROJECT MGR
P. Managerski

CONTRACT PRICE
\$ 1,505,400 U.S.

SCOPE OF SUPPLY

Supply of eight-module baghouse, structural support steel, dust handling equipment, ID fan, exhaust stack, interconnecting ductwork, and system instrumentation.

SUMMARY SCHEDULE

	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99
Engineering	██████████		██████████						
Purchasing		██████████							
Fabrication			██						
Delivery						████████████████			
Construction						██			
Start-up								██████████	
Close-out									██████████

EXECUTIVE SUMMARY

APC Project #0174

Month Ending 30 June 99

PSR Date 9 July 99

ENGINEERING	Engineering is complete.
PURCHASING	Purchasing is complete.
FABRICATION	<ul style="list-style-type: none">• All structural steel and ductwork have been completed.• Seven of eight modules are complete.• Number seven is awaiting final inspection.• Exhaust stack is 80% complete
DELIVERY	<ul style="list-style-type: none">• Deliveries to site started early in June. Structural steel and most ductwork have been delivered.• Modules 1 – 5 were delivered in June. Module 6 is in transit.• ID fan and dust handling buy-outs were delivered in June.
CONSTRUCTION	<ul style="list-style-type: none">• All structural steel has been erected. Access is 40% complete.• Modules 1 – 4 were erected in June. Crane break-down delayed module 5 erection. Problem fixed, but 3 lost days.• ID fan was set. Vendor signed off on mechanical installation.• Ductwork and dust handling equip in lay-down area. Space is tight.
START-UP	Scheduled for late August; however, client may delay system tie-in by one month. Client has been notified of potential impact.
WARRANTY	Equipment: 12 months after start-up or 18 months after delivery.
COMMENTS	<ul style="list-style-type: none">• Change order for additional structural steel and access has been approved by client and billed (\$42,000).• Change order for potential delay has been discussed with client. Decision to be made sometime in mid-July.• Construction Superintendent performance is exceptional.

INVOICING / RECEIVABLES SUMMARY

APC Project #0174
Month Ending 30 June 99
PSR Date 9 July 99

<u>INVOICING DETAIL</u>						
INVOICE DATES		INVOICE AMOUNTS		CLIENT PAYMENTS		Days to Collect (invoice to receipt)
Plan	Actual	Plan	Actual	Date	Amount	
01/07/99	01/07/99	150,540	150,540	01/29/99	150,540	22
02/18/99	02/14/99	150,540	150,540	03/12/99	150,540	26
03/01/99	03/02/99	150,540	150,540	06/01/99	150,540	91
07/12/99		451,620				
08/15/99		451,620				
08/31/99		150,540				
Adder	06/04/99	42,000	42,000			
Totals		1,547,400	493,620		451,620	

FINANCIAL REPORT
APC Project #0174
Month Ending 30 June 99
PSR Date 9 July 99

(Values in \$000)

	Original Budget	Current Budget	Last Month	Current Month	Change
Contract Value <u>EAC</u>	1,505	1,547	1,505	1,547	42
Total Cost <u>EAC</u>	1,174	1,202	1,174	1,202	28
Contingency Reserve (Included in Total Cost)	30	30	30	30	0
Gross Margin \$ <u>EAC</u>	331	345	331	345	14
Gross Margin % <u>EAC</u>	22.0	22.3	22.0	22.3	0.3
Cash In (Actual Receipts)			301	452	151
<u>Cash Out</u> (Actual Cost to Date)			102	475	373
<u>Cash Flow</u>			199	-23	-222