COMP313 Project Management

Project Cost Management

Exercise 6

1. Describe the general purpose of the reserves in a project budget planning. Distinguish the two types of reserves used in Project Cost Management in terms of when they are determined, in what situations the funds should be deployed and who has the authorization of deploying them.

   - Reserves are dollars included in a cost estimate to mitigate cost risk by allowing for future situations that are difficult to predict.
   - There are Contingency reserve and Management reserve.
   - Contingency reserve is determined in "Estimate Cost" process whereas Management reserve is determined in "Determine Budget" process.
   - Contingency reserve allows for future situations that may be partially planned and Management reserve allows for future situations that are unpredictable.
   - The use of Contingency reserves can be approved by project manager whereas Management reserves must be authorized by management.

2. As a project manager, you work on a one-year project with total budget of $120,000. By the end of the 3rd month, you are asked to present your project current status and performance to the top management with the information given below. You measure the necessary figures of the project as below. Answer the following questions.

PV=$23,000; EV=$21,000; AC=$25,000

(a) What is the Cost Variance, Schedule Variance, Cost Performance Index (CPI) and Schedule Performance Index (SPI) for the project?

CV = EV – AC = 21000 – 25000 = -4000
SV = EV – PV = 21000 – 23000 = -2000
CPI = EV / AC = 21000 / 25000 = 0.84
SPI = EV / PV = 21000 / 23000 = 0.91

(b) Is the project ahead of schedule or behind schedule? Is it under budget or over budget? How do you get this indication?
Behind schedule because SV < 0 or SPI < 1
Over budget because CV < 0 or CPI < 1

(c) Calculate the Estimate At Completion (EAC) for this project.

EAC = BAC/CPI = 120,000/0.84 = 142,857

(d) Use the Schedule Performance Index (SPI) to estimate how long it will take to finish this project.

ETC = 12 months / SPI = 12/0.91 = 13.81 months

(e) Draw a chart to illustrate the PV, EV and AC to reflect the situation of budget spending and work progress schedule as of the end of the 3rd month.

(refer to PPT for answering this question)