HUMPHREYS & ASSOCIATES

Primavera (P6) Scheduling in the Earned Value Environment 16-Hour

Workshop Agenda

Part 1 (12 hours)

Introduction & Framework

- Overview and Objectives
- Schedule Development Process
- Reference Documents
- Planning & Scheduling Excellence Guide (PASEG)
- Workshop Structure and Methodology

Laying the Groundwork

- Definitions
- P6 User Interface
- P6 Navigation
- Toolbars, Icons & Help
- User Preferences and Options

Hierarchical Structures & Projects

- Enterprise Project Structure (EPS)
- Organizational Breakdown Structure (OBS)
- Work Breakdown Structure (WBS)
- Building a WBS in P6
- Make a new Project in P6

Project Layouts and Settings

- Modifying and Saving Project Layouts
- Displaying and Modifying Project details
- Calendars

Network Fundamentals

- Precedence Diagramming Method (PDM)
- Activities & Milestones
- Activity Names and IDs
- Activity Durations

Activity Layouts and Settings

- Modifying and Saving Activity Layouts
- Displaying and Modifying Activity Details
- Customizing the Gantt chart

Code, Filter, Group, and Sort

- Overview
- Project Codes
- Activity Codes
- User Defined Fields (UDFs)
- Filtering, Grouping, and Sorting Activities

Activity Relationships

- Relationship Types
- Forward Pass Calculations
- Backward Pass Calculations
- Relationships in P6

Critical Path Method

- Definitions & Fundamentals
- Total Float
- Free Float
- Precedence Diagramming Method (PDM)
- Calculating Total Float, Free Float and Critical Path in PDM
- Critical Path Methodology in P6
- Critical Path Analysis

Project Modeling Techniques

- Lags & Leads
- Schedule Visibility Tasks (SVTs)
- Constraints
- Anticipating the Impact of Lags and Constraints
- Adding and Modifying Lags and Constraints in P6
- Templates

User Defined Fields (UDFs)

- Overview of UDFs
- Creating and using UDFs in P6

Resources

- Resource Type
- Adding resources in P6
- Assigning resources
- Resource Analysis
- Resource Profiles

Baselining

- Definition of Baseline
- Creating the Baseline in P6
- Maintaining, Assigning and displaying baselines
- Displaying baseline bars in the Gantt chart

Activity Attributes

- Percent Complete Type
- Activity Type
- Duration Type

Statusing

- Statusing overview: Completed, in-progress and future activities
- Data Date
- Step-by-step schedule update process in P6
- Critical path analysis

Additional Topics for self-guided exploration (provided to attendees, but not covered by instructor:

- Customizing Tool Bars
- Making a New Calendar
- Activity Attributes – A Deeper Dive

Part 2 (4 hours)

Earned Value & the IMS

- Earned Value 101
- Budgeted Cost for Work Scheduled (BCWS) & the IMS
- Budgeted Cost for Work Performed (BCWP) & the IMS
- Estimate to Complete (ETC) and Estimate At Complete (EAC) & the IMS
- Variances and Indexes
- Earned Value Techniques
- Steps in P6

The Example Project

- Project Statement of Work
- The WBS
- The Transmission design Control Account
- Control Account Work Authorization

Critical Path Method in the EV Environment

- Definitions – Critical Paths & Driving Paths
- Methodology for finding Critical & Driving Path Paths
- Calculating and Coding Critical and Driving Paths in the Example Project
- Negative Float

IMS Requirements

- Guidelines
- Requirements for Structures
- Requirements for Milestones
- Requirements for Attributes
- Requirements for Optional Content (Lags, Leads, Constraints, SVT, SM)

Schedule Traceability

- Horizontal Traceability
- Vertical Traceability
- Hands-on analysis in the P6 example project

WBS/Milestones/EVM Structures

- WBS
- WBS Dictionary
- Categories of Milestones
- Elements of Cost
- Statement of Work
- Hands-on analysis in the P6 example project

Integrated Master Schedule (IMS) Data Fields

- Requirements
- Codes
- Compliance Matrix
- Data Dictionary
- Custom Fields
- Hands-on analysis in the P6 example project

Project Status Analysis

- Hands-on Analysis of Initial Status in the P6 Example Project
- Hands-on Analysis of Second Status in the P6 Example Project

Forecasting the Estimate-to-Complete (ETC) in the IMS

- Best Practice Forecasting
- Remaining Duration and Remaining Labor
- Hands-on analysis in the P6 Example Project

Scheduling Health, Analysis and Best Practices

- DCMA 14-point and DECM tests for Schedule Health
- Review of DECM Tests for the IMS

Additional Topics for self-guided exploration (provided to attendees, but not covered by instructor:

- More DECM Test Metric Examples
- Case Study #22 – Perform an Audit of an IMS
- Budget and Forecast Fields in P6

Adjourn