

# Leading the Commissioning Process: Step-by-Step Strategies for New Construction Projects Daily Agenda

# MONDAY

## **Course Introduction**

# Winning the Work-An Overview of the Business Side of Commissioning

- Business aspects of commissioning
- Ways to attract clients
- Key selling points
- How to identify target markets

## You're Hired!

• Introduces the "Class project" that will take participants through every stage of the commissioning process during the five-day course

# Determining the Owner's Needs–Developing the Owner's Project Requirements

- What the OPR includes
- Why it's important
- Methods available for creating the OPR
- Experience an OPR workshop

# **Creating the OPR Document**

- Summarizing workshop results
- Creating narratives, performance criteria, measurable goals
- "Red flags" when reviewing OPRs

# Forming the Commissioning Team

- How and why to form a commissioning team
- Roles and responsibilities
- How to help an owner select an architect/engineer
- How to develop a communication plan

# Pulling It All Together–Formalizing Commissioning Using a Commissioning Plan

- Purpose of a CxPlan
- How to develop the CxPlan
- Example CxPlan

# TUESDAY

#### Meet Your Architect and Engineer

• Addition of the A/E to the "class project" team

# What's a Basis of Design and Why Do We Need One?

- Purpose and content of the BoD
- Example BoD discussion

# Helping the Design Team Deliver High Quality

- Tools to help the design team
- Checklists
- Design reviews

## Workshop Design Review

• Workshop design review of the "class project" plans

## Preparing for the Construction Phase, Part I

- Pre-construction phase activities
- Preparing for verification checks

# Preparing for the Construction Phase, Part II

- Functional test procedure development
- Planning for O&M requirements

Note: A one-hour orientation session for the UW commissioning exam is held at the end of class Tuesday.

## WEDNESDAY

## **Test Procedure Group Project**

• Participants develop a basic test procedure using information available at this stage in a project

# How to Make Your Job Easier–Integrating Commissioning into the Process

- Commissioning specifications and their role in the overall process
- How to develop and integrate Cx specifications
- Purpose and benefit of integrated specs

#### Requesting, Reviewing, and Using Submittals

- Role of submittals
- Why submittal review is important
- How to request and review submittals
- How submittals play a role in upcoming commissioning activities

#### Tracking Checklist Completion

- Value of tracking
- What information tracking provides
- How tracking checklists aid in scheduling construction phase activities

#### **Team Meetings and Conflict Resolution**

- Techniques for effective team building
- Conflict avoidance and resolution
- Commissioning team meetings

#### Site Visit Procedures

- Tools and skills necessary to plan and execute a commissioning site visit
- Importance of regular site visits
- Knowledge that is gained
- Effect on other members of the project team

## THURSDAY

## Integrating Commissioning with TAB Activities

- Providing value to the owner
- Understand the distinction between TAB and the commissioning process

#### Performing Test Procedures

• Testing techniques for a variety of system types

#### Testing Real Systems-Hands-On Exercises; Test Intro

- Group activity session
- Hands-on testing experience at the course location

#### **Reporting Techniques**

- Why and how to maintain regular, organized reports
- Ways to resolve issues

## FRIDAY

#### Assuring Quality O&M Documentation and Training

- Importance of quality documentation and training
- Features that identify documentation or training as high-quality

## **Occupancy and First Year of Operation**

- Commissioning authority's role
- What types of issues or problems to expect
- How to maintain involvement with the owner and project
- Developing and executing seasonal tests
- Preparing and executing the warranty review

### Continuous Commissioning, Recommissioning, and Retro-Commissioning

- Differences between these concepts
- Implications of each

#### Spreading the Word–Final Report and Case Studies

- Value and importance of the final report and case studies
- Elements that go into the final report
- Audience report
- Value of the report to the life of the building and project

#### Planning a "Lessons Learned" Meeting

- Meaning and purpose
- Benefits available to all team members