Commissioning Deliverables:
What to Expect for the Money

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Learning Objectives

1. Define commissioning deliverables for new construction and existing buildings

2. Understand how the Owner's Project Requirements and Basis of Design documents affect commissioning deliverables

3. Discuss which deliverables are required based on the goals and scope of the commissioning project.

4. Analyze what clients should expect at each phase of the commissioning process
WHATEVER
New Buildings – Design Phase

- Owner’s Project Requirements
- Basis of Design
- Specifications
- Initial Commissioning Plan
- Design Review
Commissioning Deliverables

New Buildings – Early Construction Phase

• Scoping Meeting
• Submittal Reviews
• Installation Validation Checklists
• Start up Checklists
• Initial Plan for Functional Testing
• Initial Training Plan
Commissioning Deliverables

New Buildings – Later Construction Phase

• Completed Validation Checklists
• Issue Logs
• Commissioning Process Reports
• Completed Start Up Reports
• Test and Balance Review
• Functional Performance Test Reports
Commissioning Deliverables

**New Buildings – Turn Over Phase**

- Systems Manuals
- Training Sessions and Reports
- Issue Log Completion
- Commissioning Process Summary Report
- Final Commissioning Report
- Lessons Learned Workshop and Report
NEW vs. EXISTING BUILDINGS: Similar but Different

**Similar**
- Set Requirements
- Design/Plan
- Construct/Remodel and Replace
- Test performance and Document

**Different**
- Scope May be Limited
- Information Sources Vary
- Commissioning Team May Have Different Skills
- Testing and Documentation Formats may be Different.
EB Commissioning Deliverables

Existing Building – Planning Phase

• Mission Statement
• Strategic Plan
• Current Facility Requirements
• Facility Initial Assessment and Report
• Initial Commissioning Plan
• Owner Acceptance Report
Existing Building – Investigation Phase

- Gather Building Design Documentation
- Gather Building Operating Data
- Update Commissioning Plan
- Testing Forms and Procedures
- Testing Reports
- Recommendations Matrix
- Owner’s Implementation Plan
Existing Building – Hand Off Phase

- Systems Manual
- Training Sessions and Report
- Systems Performance Verification
- Commissioning Report
- Owner’s Acceptance
- On-Going Commissioning Plan
Existing Building – On-Going Phase

• Updated Testing
• Corrective Action Reports
• Measurement and Verification
• Updated Training
• Update On-Going Cx Plan
• Update Systems Manuals
• Update Current Facility Requirements
COMMISSIONING DELIVERABLES: Comparison

New Buildings
- Owner’s Project Requirements
- Basis of Design
- Specifications
- Commissioning Plan
- Design Review

Existing Buildings
- Mission Statement
- Strategic Plan
- Current Facility Req.
- Facility Assessment
- Commissioning Plan
- Owner’s Acceptance
- Building Documentation
COMMISSIONING DELIVERABLES: Comparison

New Buildings
- Scoping Meeting
- Submittals
- Installation Validation
- Start-up Checklists
- Functional Testing Plan
- Training Plan

Existing Buildings
- Commissioning Mtgs.
- Operation Data
- Test Forms, Procedures and Reports
- Recommendation Matrix
- Training Plan
COMMISSIONING DELIVERABLES: Comparison

New Buildings
- Validation Checklists
- Issue Logs
- Commissioning Process Reports
- Start up Reports
- TAB Review
- FPT Reports

Existing Buildings
- Test Checklists
- Issue Logs
- Performance Verification
- Commissioning Process Reports
COMMISSIONING DELIVERABLES: Comparison

New Buildings
- Systems Manuals
- Training & Reports
- Issue Log Completion
- Commissioning Report
- Lesson Learned

Existing Buildings
- Systems Manuals
- Training & Reports
- Issue Log Completion
- Corrective Action Report
- Measurement & Verification
- Updates
## COMMISSIONING DELIVERABLES: Comparison

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<thead>
<tr>
<th>New Buildings</th>
<th>Existing Buildings</th>
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<tbody>
<tr>
<td>• Validation Checklists</td>
<td>• Test Checklists</td>
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Commissioning Deliverables

• WHATEVER
  • The Owner Wants
  • Is in the Contract
Commissioning Deliverables

- QUESTIONS?
- COMMENTS!
- DISAGREEMENTS!
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