

Startup, Commissioning, Turnover, Closeout – Objective and Table of Contents

Objective

The Startup and Commissioning objective provides the Owner's operational team a facility that is mechanically complete with no exceptions, ready for product introduction, in a systematic approach reducing the product to market time. The Turnover/Closeout process objective is to properly begin and execute the project in a manner that has the end in mind enabling the maintaining of project lessons learned, historical data, and an auditable documentation record.

Key Steps

- Assemble project records for archiving
- Closeout of Vendor and Subcontractor Agreements
- Develop and integrate startup schedule by system
- Develop of startup procedures
- Financial closeout of subcontracts and vendors
- Financial closeout of the prime contract
- Issue completion report
- Obtaining system documentation
- Preparation of closeout documents
- Preparation of record drawings
- Record retention preparation
- Training of Owner Operators
- Verification of Startup and Commissioning Scope
- Verification of Trained Operators and Maintenance Personnel

Key Deliverables

- Closeout documents
- Documentation for Owner acceptance of systems for turnover
- Final invoicing to [Client]
- Integrated Startup & Commissioning Schedule – by system
- Notice of completion letter
- Project completion report
- Record drawings
- Records for archiving
- Startup & Commissioning procedures
- Startup, Commissioning and Turnover documentation
- Transfer care, custody and control letter
- Turnover packages
- Warranty administration

Startup, Commissioning, Turnover, Closeout – Objective and Table of Contents

Checklists

- Closeout and Turnover – Administration
- Closeout and Turnover - Benchmarking Automated Systems
- Closeout and Turnover - Benchmarking Change Management
- Closeout and Turnover - Benchmarking Constructability-Value Engineering
- Closeout and Turnover - Benchmarking Construction
- Closeout and Turnover - Benchmarking Cost and Schedule
- Closeout and Turnover - Benchmarking Design
- Closeout and Turnover - Benchmarking General
- Closeout and Turnover - Benchmarking HSE
- Closeout and Turnover - Benchmarking IT Practices
- Closeout and Turnover - Benchmarking Materials Management
- Closeout and Turnover - Benchmarking PDRI (Project Definition Rating Index)
- Closeout and Turnover - Benchmarking Startup & Commissioning
- Closeout and Turnover - Benchmarking Teambuilding Practices
- Closeout and Turnover - Benchmarking Transportation – Logistics
- Closeout and Turnover – Changes
- Closeout and Turnover – Design
- Closeout and Turnover – Documentation
- Closeout and Turnover – Financial
- Closeout and Turnover – Owner
- Closeout and Turnover – Procurement
- Closeout and Turnover - Project Completion Report Construction
- Closeout and Turnover - Project Completion Report Cost
- Closeout and Turnover - Project Completion Report Design
- Closeout and Turnover - Project Completion Report General
- Closeout and Turnover - Project Completion Report Materials Management
- Closeout and Turnover - Project Completion Report Quality
- Closeout and Turnover - Project Completion Report Schedule
- Closeout and Turnover - Project Completion Report Scope of Work
- Closeout and Turnover - Project Critique
- Closeout and Turnover – Turnover
- Closeout and Turnover – Warranty
- Closeout and Turnover Final Acceptance and Subcontract Checklist
- Closeout and Turnover Project Critique Checklist
- Closeout and Turnover Purchase Order & Subcontract Checklist
- Closeout Checklist
- Startup and Commissioning – Administrative Checklist
- Startup and Commissioning – Building Envelope Checklist
- Startup and Commissioning - Communications Checklist
- Startup and Commissioning - Construction Checklist
- Startup and Commissioning - Definitions Checklist
- Startup and Commissioning - Design Checklist
- Startup and Commissioning - Documentation Checklist
- Startup and Commissioning – Ductwork Prefunctional Commissioning Checklist
- Startup and Commissioning - Electrical Checklist
- Startup and Commissioning - Equipment Checklist
- Startup and Commissioning - Functional Performance Testing Checklist
- Startup and Commissioning - Heat Pump Condensor Prefunctional Checklist
- Startup and Commissioning - HVAC Checklist
- Startup and Commissioning - Instrumentation Checklist
- Startup and Commissioning - Insulation Checklist
- Startup and Commissioning – Life Safety Checklist
- Startup and Commissioning - Listings Checklist
- Startup and Commissioning - Owner Checklist
- Startup and Commissioning – Piping & Plumbing Checklist
- Startup and Commissioning – Pre-Commissioning Checklist
- Startup and Commissioning - Process Checklist
- Startup and Commissioning - Procurement Checklist
- Startup and Commissioning – Protocols Checklist
- Startup and Commissioning - Punchlists Checklist
- Startup and Commissioning – Roles and Responsibilities Checklist
- Startup and Commissioning - Safety Checklist
- Startup and Commissioning - Specifications Checklist

Startup, Commissioning, Turnover, Closeout – Objective and Table of Contents

- Startup and Commissioning – TAB Plan Review Checklist
- Startup and Commissioning - Team Checklist
- Startup and Commissioning - Temporary Utilities & Services Checklist
- Startup and Commissioning – Testing Checklist
- Startup and Commissioning - Training Checklist
- Startup and Commissioning – Warranty Checklist
- Startup and Commissioning Process Checklist
- Turnover Process Flow Checklist
- Startup and Commissioning System Acceptance Report
- Startup and Commissioning System Commissioning
- Startup and Commissioning System Description Form
- Startup and Commissioning System Exceptions List
- Startup and Commissioning System Status Report
- Startup and Commissioning System Walkdown Notice
- Subcontractor Vendor Agreement Closeout
- Transfer of Care, Custody and Control Letter Template
- Turnover Letter Template
- Turnover Package Table of Contents Sample

Education and Training

- Closeout Process Flow
- Startup and Commissioning Case Study
- Startup and Commissioning Exam
- Startup and Commissioning Exam Answers Training
- Startup and Commissioning Process Flow
- Startup and Commissioning System Turnover Process Flow
- Turnover Closeout Case Study
- Turnover Closeout Exam
- Turnover Closeout Exam Answers

Forms

- Asset Registry
- Benchmarking Budgeted and Actual Costs Worksheet
- Benchmarking Field Rework Worksheet
- Benchmarking Planned and Actual Project Schedule Worksheet
- Benchmarking Program Closeout
- Benchmarking Project Development and Scope Changes
- Benchmarking Project Participants Worksheet
- Closeout Final Payment Release
- Completion Report Template
- Construction Complete Certificate
- Contract Completion Summary
- Invoice Correction Request Form
- Notice of Project Completion Letter
- Startup and Commissioning Instrument Punchlist Form
- Startup and Commissioning Plan Template
- Startup and Commissioning Progress Summary

Policies and Procedures

- Care, Custody and Control Procedure
- Closeout Procedure
- Closeout Process Flow Steps – Instructions
- Project Critique Procedure
- Record Retention Procedure
- Startup and Commissioning Master Punchlist Procedure
- Startup and Commissioning Pre-Commissioning Procedure
- Startup and Commissioning Procedure
- Startup and Commissioning Process Flow Steps and Instructions
- Startup and Commissioning System and Equipment Test Area Control
- Turnover Procedure