



BEYOND
SMART CITIES



LEARN.BEYONDSMARTCITIES.IN

WELCOME TO ADVANCED NEW BUILDING CONSTRUCTION COMMISSIONING - NBCX

ONLINE TRAINING

KRISHNAJI PAWAR - CEO & FOUNDER





6. OCCUPANCY AND OPERATIONS PHASE

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
COMMISSIONING SPECIALIST CURRICULUM



NEXT



Learning Objectives

- Introduction
- Objectives
- Occupancy and Operations Phase Activities
- Commissioning Team

With considerable completion, the building is turned over to the owner, but some construction activities may continue. In the occupancy and operations phase, project closeout activities are completed and long-term building performance processes are designed and implemented (ongoing maintenance and performance activities).



Overview

- At project substantial completion and after conducting operations and maintenance training by the design team (if applicable), contractors, and suppliers, the Owner assumes operational responsibilities for the facility or project.
- The commissioning process is not complete until the off-season testing is completed and the systems manual is completed and transferred to the Owner.
- At that time, a final commissioning report is developed including the final issue logs with any open items as accepted by the Owner.



Objectives

- Facilitate the continued engagement of the Cx team and verify the completion of outstanding Cx issues.
- Complete any seasonal and deferred functional testing and O&M staff training and occupant orientation.
- Complete systems and commissioning documentation.
- Evaluate project success.
- Optimize building performance.
- Develop and begin implementation of a plan for commissioning the building over time (Ongoing Commissioning).
- Survey occupants, formally check in with operations staff and assess issues.
- Benchmark energy performance and evaluate and track performance over time.

Commissioning Team

- Owner/ Owner's Representative
- Operation Personnel



Occupancy and Operations Activities

1. Completion of Project Closeout Activities

- Resolve performance issues and incomplete Cx Problems Log items quickly. The CxP encourages Owner project managers and contractors to discuss concerns before the project loses momentum to successfully address them.
- Complete and verify O&M personnel training. The Contractor defers O&M training, per the contract. CxP or Owner personnel evaluate the effectiveness of the training program and make a recommendation as to the need for supplemental training.
- Test seasonal and postponed functions. Because initial functional testing cannot fully test loading, staging, and capacity, testing is postponed to the proper season or load situation during occupancy. CxPs oversee this testing.



Occupancy and Operations Activities +

1. Completion of Project Closeout Activities +
 - Conduct periodic check-ins with Operation and Maintenance staff.
 - Optimize systems.
 - Conduct an occupant survey.
 - Perform a Building Operations Review.
 - Compile a Final Commissioning Report.
 - Evaluate project success.
 - Update the Project Documentation Systems Operations Guide.



Ongoing Performance and Persistence Activities

Ongoing performance activities are strongly recommended and help building performance persist.

- Occupant User's Guide. The Guide describes the building's unique features. Provide user instructions for these systems. When included in the Cx scope, cover lighting controls (schedules, occupancy sensors, daylighting controls, user overrides), thermostats and user adjustments, comfort complaint procedures, time of day HVAC schedules by floor, night set back impacts on temperature, overrides, occupancy sensors tied to HVAC, air diffuser design, special room pressure controls, automatic window shades, energy dash board, etc. Show occupants building systems and assemblies.
- Develop a preventive maintenance plan.
- Develop and begin implementation of the Ongoing Commissioning Program.
- Implement new construction commissioning when appropriate. As changes or additions are made to the building the new construction commissioning process is applied.
- Update the OPR and Systems Operations Guide. Throughout the life of the building as alterations are made or as building usage changes, the OPR and Systems Operations Guide may need to be updated in order to reflect current conditions and requirements.

-





Thanks

Learn From Beyond Smart Cities
Online professional courses led by
the world's top specialists


KRISHNAJI PAWAR
SUSTAINABILITY SPECIALIST



LEARN.BEYONDSMARTCITIES.IN