

Commissioning Team

Roles & Responsibilities



These are typical roles and responsibilities of the Commissioning Team.

It is important to define these early in the project prior to transitioning to the pre-commissioning and commissioning phase.

Helpful Hint: You may have to help the project team to understand the transition to the commissioning phase and the changing roles. Sometimes groups that have been heavily involved in the project and have had the decision-making authority struggle to transition authority to the commissioning team. It is helpful to have these discussions very early in the project and to continually have these discussions to ensure the transition from construction to commissioning goes smoothly.

Commissioning Manager

- Oversee the Owner's Commissioning Process.
- Review the Owner's Requirements and Basis of Design.
- Prepare a Project Commissioning Plan.
- Review design documents. Ensure that the project specifications are written to support the Project Commissioning Plan including detailed review and comment of trade specific commissioning sections particularly, the Mechanical Commissioning Agent's specification section.
- Hold or attend regular design stage and construction phase commissioning meetings as required.
- Ensure that the commissioning process is implemented by the trades as per the project specification requirements.
- Review and comment on commissioning schedule (The Commissioning Manager may prepare the commissioning schedule).

Commissioning Team

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- Oversee equipment pre-functional tests and start-ups.
- Oversee systems functional testing.
- Oversee training.
- Oversee seasonal testing.
- Prepare a final commissioning report for the Owner.
- Assemble the Systems Manual (if required).

Commissioning Lead

- Discipline lead managing and coordinating all electrical or mechanical or automation commissioning activities on-site
- Supervise and approve commissioning plans in accordance with project guidelines
- Review designs and supervise onsite commissioning activities.
- Monitor installation, submittals and usage of engineering tools adhering to project and commissioning guidelines.
- Track and review progress through meetings.
- Evaluate contractual commissioning milestones and instruction guidelines in accordance with the needs of the project.
- Schedule and supervise operational reviews in association with functional staff.
- Create an empowering and inspiring work culture with the commissioning team.

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Commissioning Engineer

- Manage smooth commissioning of the project by coordinating between the Owner and the Contractor.
- Supervise and approve commissioning plans in accordance with project guidelines.
- Review designs and supervise onsite commissioning activities.
- Prepare and maintain commissioning records of site observations, testing processes and checklists.
- Outline procedures, norms and details for writing the Systems Manual (if required).
- Monitor installation, submittals and usage of engineering tools adhering to project and commissioning guidelines.
- Guide testing processes and motivate specialists to achieve standard results.
- Assist with identification and rectification of commissioning deficiencies.
- Track and review progress through meetings.
- Evaluate contractual commissioning milestones and instruction guidelines in accordance with the needs of the project.
- Compile commission report data for summarizing.
- Assist in summarizing and updating commission records.
- Schedule and supervise operational reviews in association with functional staff.
- Create an empowering and inspiring work culture with the commissioning team.

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- Attain customer satisfaction through adhering to owner guidelines with the entire project team.

Electrical Engineer

- Reviews the installed electrical work to determine if it is in accordance with the design documents.
- Reviews electrical testing forms completed by the Contractor to ensure they appropriately documented and signed off.
- Assists with the coordination of electrical commissioning.
- Performs periodic inspections of the commissioning progress.
- Maintains a deficiency list of electrical issues identified during the site visits.
- Reports to the Commissioning Manager.
- Witnesses commissioning.

Mechanical Engineer

- Reviews the installed mechanical/HVAC work is complete and accurate for commissioning activities and is in accordance with the design documents.
- Oversees all mechanical/HVAC testing to ensure that testing is fully completed and supports the overall commissioning schedule.
- Verifies all mechanical/HVAC is properly documented and signed off as necessary.

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- Develops mechanical/HVAC punch lists and assists in rectifying commissioning critical punch list items for immediate resolution.
- Reports to the Commissioning Manager.
- Witnesses commissioning.

Automation Engineer

- Reviews the installed automation work to determine if it is in accordance with the design documents.
- Reviews functional testing checklists completed by the Contractor.
- Assists with coordination of the automation commissioning.
- Assists with shutdown planning for automation migration (if required).
- Performs periodic inspections of the commissioning progress.
- Reports to the Commissioning Manager.
- Witnesses commissioning.

Consultant Representative

- Interfaces with the Commissioning Team regarding questions related to design.
- Connects and interfaces with the relevant offsite designers.
- Provides design solutions during the commissioning phases.
- Reports to Commissioning Manager.

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Owner's Representative

- Assign a person to be responsible for overall system knowledge.
- Organize personnel to be demonstrated to and trained.
- Sign-off “Demonstration to the Owner”.

Operations Representative

- Manages the O&M activities within the interface between the Commissioning Team and Plant Operations according to PCP and procedure.
- Defines the O&M personnel training requirements.
- Coordination of training attendance.
- Provision of operations crew(s) as resources for the Commissioning Team.
- Review planned commissioning activities with respect to operating requirements.
- Providing operations input into the commission process as a whole.
- Take charge of plant operations.
- Providing all management and operations personnel for running performance tests under varying operating conditions.
- Attend and participate in relevant Commissioning Team meetings.

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General Contractor

- Quality Control of their scope.
- Provision of O&M documentation of Contractor supplied equipment..Submitting vendor equipment start-up and testing procedures with safety information.
- Preparing system/equipment specific installation checklists (ICL).
- Submit completed Installation Checklists and Performance Verification forms.
- Performing start-up, testing and performance verification activities with input/participation of major manufacturer's representatives within Commissioning Team activities.
- Submission of field and classroom lessons, plans and training instructors.
- Provision of training on Contractor supplied equipment and systems for commissioning and for operations and maintenance.
- Provide skilled craft labor and supervision to undertake commissioning activities during and beyond supplied equipment contractual total performance as per procedures and under the Commissioning Manager's Leadership.
- Provides field mechanical support as identified during commissioning to correct defective work or implement design clarifications as necessary to support the overall commissioning schedule.
- Attend and participate in relevant Commissioning Team meetings

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Construction Manager

- In charge of coordination of all site construction activities.
- Verifying Contractor/Supply Contractors provide commissioning requirements (documents, manpower, ancillary provisions, etc.) as stipulated in their contract documents.
- Keep Commissioning Team informed on construction progress with respect to scheduling Management and arrangement of mechanical completion.
- Issuance of Performance Certificates, as recommended by the Commissioning Team.
- Leader, for construction and supply contracts.
- Administer any contractual changes in scope to facilitate commissioning.
- Incorporate commissioning costs into project cost control system c/w forecasting final commissioning costs.
- Direct contractors to make remedial measures for construction deficiencies.
- Verify contractor submittals are appropriately reviewed, accepted and incorporated into the DMS.
- Attend and participate in relevant Commissioning Team meetings.
- Assists in developing and tracking deficiency logs and in ensuring timely rectification of those deficiencies through pre-commissioning or equipment warranty conditions.

Commissioning Team Roles & Responsibilities



All Commissioning Team Members

- Attend commissioning meetings.
- Act promptly on items of work indicated in commissioning meeting minutes.
- Work with other team members to derive a realistic commissioning schedule.
- Ensure commissioning schedule is maintained.
- Provide required documentation promptly.
- Cooperate with the other commissioning team members to complete the project as efficiently as possible (this is to everyone's benefit).