

EXHIBIT 01 91 13 -1 COMMISSIONING ROLES AND RESPONSIBILITIES
 TEMPLATE

Abbreviation for the following Table of Responsibilities:

- Owner: Represented by U of I Project Manager
- AE: Architect / Engineer
- CxA: Commissioning Authority U of I (Commissioning and Inspections Group)
- CM: Construction Manager (if applicable)
- PM: Contractor's Project Manager
- FM: User's Facility Manager
- GC: General Contractor
- TAB: Testing and Balancing Contractor
- CC: Controls Contractor
- MC: Mechanical Contractor
- EC: Electrical Contractor

Commissioning Responsibilities Matrix

[Note to AE: This matrix is an example only. Responsibilities for the AE and Contractors will depend on project delivery and complexity.]

	Task
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Commissioning Plan

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
	X										Draft plan
											Review and approve
X											Transmit to AE at start of design
X											Provide to all Contractors at start of construction

Owners Project Requirements

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
	X										Prepare and update
	X										Coordinate input from involved parties
	X										Participate in development/updates
	X										Review and approve (include updates)
X											Provide to AE at start of design

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Basis of Design Document

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Prepare from OPR
											Coordinate input from involved parties
											Update during design
	X										Review and approve

Commissioning Specifications

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Modify Owner's template to project specific specifications
	X										Review and approve

Design Reviews for Commissioning

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Submit documents for review during design process
	X										Review and approve
											Incorporate comments

Pre-functional Checklists, Testing & Startup

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Coordinate schedule
	X										Review systems and equipment shop drawings
											Prepare pre-functional checklists
	X										Review and approve checklists
											Execute pre-functional tests and document results
	X										Witness pre-functional tests
	X										Verify pre-functional tests and startup are complete

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TAB

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Coordinate TAB schedule with construction schedule
											Prepare and submit TAB plan
	X										Review plan
											TAB/CC/MC/EC plan coordination

Controls Checkout

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Coordinate with construction schedule
											Prepare and submit plan
	X										Review plan
											TAB/CC/MC/EC plan coordination
											Verify controls are installed and ready for checkout

Functional Testing

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
	X										Coordinate schedule
											Develop functional test procedures
	X										Develop Testing Plan Overview
											Confirm that systems and equipment is ready of testing
											Execute tests
	X										Witness tests
	X										Document test results

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O&M Manuals & Warranties

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Include requirements in specifications
											Prepare submittals
	X										Review submittals
											Assemble approved submittals
X	X										Coordinate transfer to Facility Manager and CA

Owner Training

Owner	CxA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Prepare training plan
	X										Review training plan
											Conduct training
											Coordinate and document training
	X										Verify training completion
											Assemble training documents
X											Coordinate with FM

Commissioning Report

Owner	CA	AE	CM	PM	FM	GC	TAB	CC	MC	EC	
											Submit all required documentation to CA
	X										Prepare report
X											Coordinate transfer to Facility Manager, AE