

Commissioning Process Assessment Checklist

1. Project Planning & Requirements (OPR)

Criteria	Description	Rating (1-5)
Owner's Project Requirements (OPR) Definition	Are the project requirements clearly defined and documented?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Stakeholder Involvement	Are all relevant stakeholders actively involved in the planning process?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
OPR Review and Update Process	Is there a regular process to review and update the OPR throughout the project?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

2. Documentation & Reporting

Criteria	Description	Rating (1-5)
Documentation Standards	Are all inspections, tests, and commissioning results standardized and documented?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Automated Report Generation	Is report generation automated to ensure accuracy and efficiency?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Traceability and Compliance	Is the documentation fully traceable and compliant with industry standards (e.g., ISO 9001, IEC, NFPA)?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

3. System Testing & Performance Verification

Criteria	Description	Rating (1-5)
Test Protocols & Procedures	Are test protocols and procedures clearly defined and followed?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
System Performance Verification	Is there a robust process for verifying the performance of all systems and components?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Deficiency and Issue Management	Are deficiencies identified, documented, and resolved in a structured manner?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

4. Automation & Integration

Criteria	Description	Rating (1-5)
Process Automation	Are key commissioning processes automated to reduce errors and increase speed?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
System Integration	Are commissioning systems integrated with other business systems (e.g., ERP, BIM, CMMS)?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Real-Time Monitoring	Is real-time data monitoring in place to track commissioning progress and system performance?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

5. Employee & Training Management

Criteria	Description	Rating (1-5)
Training Program	Is there a structured training program for all relevant employees?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Access to Training Resources	Are training resources (manuals, videos, certifications) easily accessible and up-to-date?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Training Effectiveness	Is the effectiveness of training regularly evaluated and improved?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

6. Final Acceptance & Handover

Criteria	Description	Rating (1-5)
Formal Acceptance Process	Is there a formal process for the acceptance of completed commissioning activities?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Handover of Documentation	Are all relevant commissioning reports, manuals, and warranties handed over to the owner or operations team?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
System Handover Process	Is there a structured handover process for transferring systems to the operations team?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

7. Post-Commissioning Optimization

Criterion	Description	Rating (1-5)
Maintenance Plan	Is there a comprehensive post-commissioning maintenance and optimization plan?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Continuous Improvement	Are feedback loops in place to continuously improve the commissioning process?	☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Instructions

1 . Self-Assessment

Review each criteria and rate your organization on a scale from 1 (Initial) to 5 (Optimizing).

2. Average Score

Add up the scores for each category and calculate the average.

1-2: Initial Stage – Significant improvements needed.

3-4: Defined/Managed Stage – Process is structured but room for more automation and integration.

5: Optimizing Stage – Fully optimized, automated, and continuously improving processes.

Conclusion and Recommendations

Average Score 1-2: Focus on establishing basic documentation and standardized procedures. Start by automating reporting and improving stakeholder involvement.

Average Score 3-4: Further integrate systems and automate key processes. Consider adopting real-time monitoring and performance verification tools to reduce manual interventions.

Average Score 5: Continue to optimize and automate further. Look for advanced analytics and predictive maintenance opportunities to further enhance performance and reduce costs.

Standards and Compliance

ISO 9001: Quality Management Systems

ISO 50001: Energy Management Systems

IEC 61508: Functional Safety

NPTA 7 DE: Electrical Safety in the Workplace

ASME (ANSI) Codes: Equipment, Piping, and Pressure Systems Standards

These steps will guide your organization through the maturity stages, aligning it with industry standards and ensuring continuous improvement.