ES Commissioning Overview
Sandia National Labs
Dan Borneo. Jaci Hernandez, Ben Schenkman, David Rosewater, Victor Chavez

Introduction
Commissioning is a process designed to verify and document that a device, system(s), or facility, meets defined safety and performance specifications.

Significance
Commissioning is the convergence of design, construction, and a functioning electro-mechanical system. The greatest value of commissioning is that it helps to insure that the system is installed as designed, is safe, and it operates as intended. Some component behaviors, assemblies, or system conditions cannot be discovered through normal installation, building, or contracting check.

Process
Through testing - Commissioning demonstrates, measures, evaluates and records component and system performance. It is a process that incorporates design review/verification, system specifications, safety, construction inspection, factory witness test and start-up and testing procedures to validate performance and to discover and correct problems before the system is “online”.

Key Players
The successful commissioning team is composed of design, construction, operation and vendor personnel who understand the project and performance requirements and can verify that the system:
• Is properly designed and safely installed according to manufacturer’s specifications
• Is operational and functional in the intended application

The COMMISSIONING process starts in Design and is implemented throughout the project
Reliability and safety are the overriding focus of the Commissioning process.

COMMISSIONING

Operational Acceptance Test (OAT)

Apply YELLOW Tag

Start-up

Functional Acceptance Test (FAT)

Apply GREEN Tag

Shakedown

NOTES on Tags
Tags help keep track of where the system is in the process:
(Pick a Color)
YELLOW TAG: Owner-Operated, Not Transitioned from construction to operations.
GREEN TAG: Work completed and transitioned from construction to operations.

Note: The yellow tag is removed once a green tag is applied.
The green tag may be removed at the owner’s discretion AFTER the project is completed.

Interested in more information or want to help please contact Dan Borneo
drborne@sandia.gov