

Commissioning - Commercial Office Renovation Natural Resources Defense Council New York, New York

Program

NYSERDA New Construction Program

Scope of Services

- Project Scoping
- Design Assistance
- DOE-2.1E Whole Building Modeling
- Cost Benefit Analysis
- Incentive Calculation & Reporting
- LEED Optimize Energy Performance
- LEED Fundamental Commissioning
- LEED Enhanced Commissioning

Level of Involvement

NCP Technical Assistance Provider
LEED Commissioning Authority

Facility Size

9,000 sq. ft.

Facility Type

Commercial Office

Project Results

Achieved LEED-CI Platinum

The Natural Resource Defense Council (NRDC), owns and operates the building located at 40 West 20th Street. The project consisted of the renovation of the 8th floor of the NRDC building with a gross floor area of 9,000 sq. ft. The exterior façade consists of brick, masonry concrete and window wall construction. Common area lighting will consist of T5 fluorescent fixtures and compact fluorescent fixtures. Heating and cooling for the 8th floor will be provided by perimeter steam radiators and an air handling unit, respectively. Occupancy sensors and daylighting controls were implemented on the 8th floor.

Throughout the later stages of the construction process, beginning Summer 2007 and ending in early 2009, EME Group executed a building commissioning process based on 2005 *ASHRAE Guideline 0- The Commissioning Process*. This commissioning process included documenting the installation of the equipment via the completion of construction checklists, verification of proper system operation by witnessing the testing of the system operation, and verification of staff training and record documentation.



NRDC Headquarters

The primary goal of commissioning is to deliver a fully functional, fine-tuned building with complete documentation and an adequately trained operating and maintenance staff. This commissioning process is a quality control based approach to document the installation of the equipment via the completion of construction checklists, verification of proper system operation by witnessing the testing of the system operation, and verification of staff training and record documentation. Commissioning is a systematic process to ensure that building systems are designed, installed and perform interactively according to the owner's programmatic and operational needs and the design intent. Commissioning is thus the owner's means of verifying that the planning, design, construction, and operational processes are achieving their goals and ensuring the delivery of a high quality building with maximum asset value. Commissioning is recognized by organizations such as ASHRAE, USDOE, and the USGBC to promote consistently successful construction projects.

The commissioning activities include verifying that the proper project documentation had been delivered and that personnel were properly trained on the equipment. We ensured that the start-up reports and TAB reports were done and followed by functional testing that demonstrated that the equipment and systems were performing in accordance with the design intent.