Continuing Education Programs
The Total Building Commissioning Process – What It Is and What It Is NOT! (1 day)
Instructor: J. Woody Thompson, PE, CBCP, CPMP, CEM – RS&H, Inc.
Sponsored by Society of American Military Engineers

WHY YOU SHOULD ATTEND

- Understand the Total Building Commissioning (Cx) Process for Public and Private Sector facilities.
- Learn what the process is for Commissioning and Retro-Commissioning and how they are different.
- Understand the overall Objectives and Benefits of Cx.
- Distinguish the myths from the reality of this process to include examining stakeholder expectations through Case Studies.
- Discuss Cx role in Sustainability (LEED).

PROGRAM OVERVIEW

Commissioning (Cx) and Re- or retro-commissioning (RCx), or the process of ensuring that a new or existing building’s performance continues to meet or exceed its design over time, is increasingly the target of government policy and the beneficiary of market forces. New Federal, State and Local mandates, in conjunction with voluntary, market-based standards, are poised to transform the Cx/RCx marketplace.

What began as a tool to ensure that commercial building owners get their money’s worth from design and construction professionals, commissioning is now known to be the most cost-effective measure available for reducing energy use, lowering operating costs and mitigating greenhouse gas emissions in buildings. A recent meta-analysis by Lawrence Berkeley National Laboratory found that Re/Retro-commissioning yields a median 16% energy savings with a payback time of 1.1 years for a cash-on-cash return of 91%.

The public sector, in an effort to both promote and secure the environmental, social and economic benefits of energy efficiency, are incorporating Cx/RCx into new policies. Increasingly, Cx/RCx is the direct focus of government policy aimed at boosting energy efficiency in the built environment. Over the past decade, a series of Federal laws, executive orders and other regulations have resulted in requirements for commissioning and retro-commissioning in all Federal buildings. The results of these policies have been to improve Federal energy management, while providing an instance of leadership-by-example that has increased the profile of Cx/RCx elsewhere. As a result, Cx/RCx is now the beneficiary of government or utility financial incentives or even the force of law. Ultimately, Cx/RCx has the potential to save building owners and operators more than $30 billion a year in energy costs by 2030. Continuing to underutilize this cost-effective quality assurance tool could not only be unlawful, but bad business.

This course shall describe the Total Building Commissioning Process. Case studies that followed LEED Fundamental and Enhanced Commissioning guidelines for newly built and renovated facilities for the Departments of Defense and Homeland Security shall be presented and analyzed. Perceptions and expectations of the Cx process from the perspective of all stake-holders; owners, designers, contractors, and commissioning specialists shall be presented and discussed. The purpose is to illustrate that there are varying levels of agreement on “What Commissioning Is and Is Not.” Through the use of audience interaction, the instructor will illustrate that LEED Commissioning does not establish the final boundaries and benefits for the overall Total Building Commissioning process. The overall potential energy conservation and utility cost-saving benefits that could be captured go beyond LEED and enhance our country’s ability to achieve the goal of energy independence.

Through lecture, written material, class discussion and interactive activities, students will learn the following material:

- Definitions of Commissioning (Cx) and Retro-Commissioning (RCx)
- The Cx & RCx Process – Similarities and Differences
- Objectives & Benefits
- Requirements & Attributes of a Certified Cx Provider
- Cx Standards, Regulations & References
- LEED and Cx
- Myths, Reality & Managing Expectations (Case Studies)

WHO SHOULD ATTEND

- Facility Owners, COO’s, CFO’s and Contracting Officers
- Architects and Engineers
- Construction Managers
- DPW, CE & Facility Managers
- Energy Managers
INSTRUCTOR BIOGRAPHY

J. Woody Thompson, PE, CEM, REP CBCP, CPMP, LEED AP - RS&H, Inc.

Mr. Thompson’s position with RS&H, Inc. is a Regional Service Group Leader and Project Manager for Commissioning, LEED, and Energy projects. He has been in the construction industry for over 20 years; 11 with an AABC certified Test and Balance firm and the last nine in Project Management, Mechanical Systems Design, Total Building Commissioning, Energy Audits, LEED Administration, and Energy Management. He holds commissioning credentials as an American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Commissioning Process Management Professional (CPMP), and Association of Energy Engineers (AEE) Certified Building Commissioning Professional (CBCP). He is also an AEE Certified Energy Manager (CEM) and Renewable Energy Professional (REP), as well as a LEED Accredited Professional (LEED AP). The nature of his public and private sector project experience covers a wide range of facility types from Office, Medical, Training, Educational and Retail facilities to unique projects such as Natatoriums, Secure Facilities and specialized studies in Net-Zero construction. Mr. Thompson held the inaugural chair for Sustainability for the Alamo Chapter of ASHRAE and was the chapter’s Treasurer in 2013. Mr. Thompson holds a Bachelor of Science in Mechanical Engineering and a Bachelor of Arts in Criminal Justice from the University of Texas at San Antonio. He has given numerous presentations to groups concerning the Commissioning and Retro-Commissioning process, to include the 2010, 2012 and 2013 AEE World Energy Engineering Congress (WEEC), 2013 Energy Conference, 2011 GovEnergy Conference, ASHRAE, CMAA, and DoD. He has written technical papers presented at WEEC, to include “Re/Retro-Commissioning: The Best Kept Secret You Can’t Afford Not To Know” and “The Commissioning Process for Federal Facilities: Case Studies of Varying Expectations”. He has been published in the technical journal “Strategic Planning for Energy and the Environment”. Mr. Thompson is recognized by the Association of Energy Engineers as a “Legend in Energy”, conferred in 2010.

COURSE POINT OF CONTACT

Woody Thompson, woody.thompson@rsandh.com

---


2Ibid.