

## **Programs for the Orlando Meeting (January, 2010):**

### **Seminar 12 (Intermediate)**

Sunday, January 24, 11:00 AM - 12:30 PM

#### **Writing and Executing Functional Performance Tests**

*Sponsor: 7.9 Building Commissioning*

*Track: Commissioning*

*Chair: Mike Eardley, P.E., Member, Cannon Design, Boston, MA*

Functional performance testing is a major activity of the commissioning process and is required to ensure that high performance design leads to a high performance building. Commissioning and functional testing typically focuses on the HVAC system because this system is one of the most complex and highest energy using in the building, often requires fine tuning to achieve the objectives of the designer, and the sequences or intent is often misunderstood by the installer or operator. Functional performance testing begins by ensuring that the equipment, components, and accessories specified and submitted for a project are installed in a building and operating correctly. Seemingly straightforward concepts such as heating, cooling, and air-side economizer can have a series of associated complex tests to verify the system reacts in the correct manner and with the proper sequence of events to achieve the intended energy efficient operation.

#### **1. Functional Performance Testing for Energy Efficiency**

Mike Eardley, P.E., Member, Cannon Design, Boston, MA

#### **2. Functional Testing: From Basics to Critical Facilities**

Reinhard Seidl, P.E., Member, Taylor Engineering, Alameda, CA

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### **Forum 4 (Intermediate)**

Monday, January 25, 11:00 AM - 12:00 Noon

#### **Systems Manuals: What should be included in ASHRAE Guideline 1.4 on Developing Systems Manuals for the Commissioning Process?**

*Sponsor: GPC 1.4, TC 7.09 Building Commissioning*

*Track: Commissioning*

*Moderator: Gerald J. Kettler, P.E., Life Member, AIR Engineering and Testing, Dallas, TX*

ASHRAE Guidelines 0-2005 and 1.1-2007 require the preparation of a systems manual during the commissioning process. An outline of the systems manual process is included in each publication but few details. This forum is intended to gather information for the development of a guideline on Systems Manuals to strengthen the Commissioning documentation process and information transfer to the operation and maintenance staff.

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### **Seminar 66 (Intermediate)**

Wednesday, January 27, 9:45 - 10:45 AM

**LEED Pre-requisite vs. LEED Enhanced: Is it Really Enough?**

*Sponsor: 7.9 Building Commissioning*

*Track: Commissioning*

*Chair: Sarah E. Maston, P.E., Member, RDK Engineers, Andover, MA*

Different case studies that utilized both LEED Pre-requisite and LEED Enhanced processes are presented.

**1. LEED Pre-Requisite vs. Enhanced Cx: Is this Really Enough? Library Case Studies**

Raj Setty, P.E., Member, Setty and Associates International, Washington, DC

**2. Differences between Fundamental and Enhanced Commissioning**

Harry J. Enck, Member, Commissioning & Green Building Solutions, Buford, GA