Programs for the Anaheim Meeting (January, 2004):

Seminar 13
Sunday, January 25, 10:15 AM - 12:15 PM

Commissioning Is More than Functional Performance Testing
Sponsor: *TC 07.09 Building Commissioning*
Chair: *Richard M. Rose, Member, Mechanical Technology Inc., Billings, MT*
APC Liaison: *Jeff J. Traylor, PWI Consulting Engineers, Durham, NC*

While successful commissioning requires many steps, there is an industry misconception that the only step necessary for a successfully commissioned project is to perform the functional performance test (FPT). In reality, there are additional prior critical steps. This seminar addresses these forgotten steps and their significance.

1. Commissioning for Project Value
Tim Corbett, Member, Social Security Administration, Baltimore, MD

2. FPT: The Big Easy
William J. McCartney, Member, Isotherm Engineering Ltd, Mississauga, ON, Canada

3. Functional Performance Testing Starts With Owner's Project Requirements
Gerald J. Kettler, P.E., Member, Air Engineering & Testing, Dallas, TX

4. Commissioning Is More Than FPT
Jeff J. Traylor, Member, PWI Consulting Engineering, Durham, NC

Seminar 21
Sunday, January 25, 1-3 PM

Commissioning 20 Years Later
Sponsor: *Standards Committee GPC-1*
Chair: *Carl N. Lawson, Member, PWI Consulting Engineers, Durham, NC*
APC Liaison: *Jeff J. Traylor, PWI Consulting Engineers, Durham, NC*

The ASHRAE commissioning process started in 1984 addressing only HVAC systems. Over time, the process has expanded into the total building and other systems. Future use may include commissioning with special tools and electronic processes. This seminar looks at the process' past and future applications.

1. Commissioning the Beginning
Carl N. Lawson, Member, PWI Engineering, Durham, NC

2. How 20 Years of Commissioning Affected Systems Operation and Maintenance
T. David Underwood, Member, Isotherm Engineering, LTD, Mississauga, ON, Canada

3. The Tools and Electronics for Future Commissioning
Chad Grindle, Member, Farnsworth Group Inc., Madison, WI

4. Why Electrical Systems Commissioning
Jeff Traylor, Member, PWI Engineering, Durham, NC

5. Total Building Commissioning
Paul Tseng, P.E., CH2M Hill, Herndon, VA

Seminar 44
Tuesday, January 27, 10:15 AM - 12:15 PM

Interoperable Computer Applications
Sponsor: *TC 01.07 Business, Management & General Legal Education*
Chair: *Michael C. Connor, P.E., Member, P. Eng, Connor Engineering Solutions, Alpharetta, GA*
APC Liaison: *Joy Altwies, Farnsworth Group Inc., Madison, WI*

This seminar offers information about commissioning, including marketing, attracting clients, negotiating contracts, meeting client expectations, and identifying common pitfalls and avoidance strategies. It focuses on what commissioning authorities believe should be incorporated in design-intent documents and identifies common technical disagreements between designers, contractors and commissioning authorities as well as suggestions to resolve them. It also addresses the legal risks and liabilities of commissioning authorities and people who deal with them and offers tips on how parties involved in the commissioning process can protect themselves.

1. Business Issues Relating to the Commissioning Process
Carl N. Lawson, Member, PWI Consulting Engineers Inc., Durham, NC

2. Management Issues Relating to the Commissioning Process
Michael C. Connor, P.E., Member, Connor Engineering Solutions, Alpharetta, GA

3. Technical Issues Relating to Commissioning
W. David Bevirt, P.E., Fellow, National Environmental Balancing Bureau, Tuscon, AZ

4. Legal Issues Relating to Commissioning: Relationships, Risks and Potential Liabilities
William G. Frey, Wolf Block Schorr & Solis-Cohen, L.L.P., Philadelphia, PA

Seminar 58
Wednesday, January 28, 10:15 AM - 12:15 PM

Automated Commissioning Tools
Sponsor: *TC 07.05 Smart Building Systems; TC 07.03 Operations and Maintenance Management*

Chair: *Maria Corsi, Associate Member, Iowa Energy Center, Ankeny, IA*
APC Liaison: *Michael R. Brambley, Ph.D., Pacific Northwest National Laboratory, Richland, WA*

Building commissioning is a labor intensive and costly process that requires specialized expertise. Tools that automate parts of the commissioning process, such as verification of design, functional testing of HVAC systems, data analysis and reporting, have the potential to reduce initial commissioning costs and ensure persistence of proper operation throughout the life of the building. This seminar describes international efforts to develop and implement automated commissioning tools. Tools that use the energy management and control system to assist in commissioning HVAC systems are described and examples of their application in real buildings are presented.

1. Commissioning HVAC Systems for Improved Energy Performance: An International Research and Development Project
Hossein Vaezi Nejad, Ph.D., Centre Scientifique et Technique du Bâtiment, Marne la Vallée, France

2. Using the Building Control System in Commissioning: Needs and Examples from Japan
Harunori Yoshida, Ph.D., Member, Kyoto University, Kyoto, Japan

3. Commissioning Constant Volume Air Handling Units using Automated Tools
Natascha S. Castro, Member, National Institute of Standards and Technology, Gaithersburg, MD

4. EMCS Assisted Commissioning Tool for Variable Air Volume Systems
Daniel Choinière, P.E., Associate, Natural Resources Canada, Varennes, QC, Canada