Programs for the Las Vegas Meeting (January, 2011):

Seminar 25-2 (Intermediate)
Monday, January 31, 9:45 - 10:45 AM

Commissioning the World's Largest LEED-Certified Building: The Palazzo
Sponsor: *7.9 Building Commissioning*
Track: *Integrated Design*
Chair: *Bill McGuire, P.E., Member, X-nth, Inc., Maitland, FL*

At the time of its grand opening the Palazzo was the largest LEED-certified building in the world when it achieved LEED Silver Certification. The sheer size of the facility created some interesting challenges for the commissioning efforts, and overall construction process and schedule. In addition, the eco-friendly objectives of this facility posed many challenges and lessons learned for engineers, owners and the commissioning authority. Issues such as balancing indoor air quality, scheduling, space pressurization, and demand controlled ventilation, and others are discussed.

1. Commissioning Large Facilities
Bill McGuire, P.E., Member, X-nth, Inc., Maitland, FL

With thousands of fan coil units, hundreds of air handling units and connecting to the exiting utilities of the casino the commissioning team encountered unique challenges on the Palazzo. The building automation system programmer's needs are magnified with larger facilities and the interaction with the commissioning and design team will be reviewed. A simple but multifarious demand control ventilation strategy for the casino and hotel will be highlighted. These experiences, and others, will be utilized to discuss creative solutions and lessons learned for commissioning large facilities..

2. An Owner's Perspective on Large Hotel Resort Casinos and Their Challenges
John Hess, P.E., Las Vegas Sands Corp., Las Vegas, NV

Large hotel resort and casinos have extremely large floor spaces (gaming, restaurants and stores) that appear compartmentalized but are truly open to each other and can present interesting integration complications between the air systems. Their potential for avoiding energy costs is exacerbated by their ever-changing occupancy and continuous operation. Also, constructing large additions to these communicating spaces can present schedule and unforeseen risks for owners. Learn firsthand the challenges of schedule, balancing indoor air quality, space pressurization and implementing energy effective strategies.

Seminar 26 (Intermediate)
Monday, January 31, 2011, 11:00 AM - 12:00 PM

Design, Commissioning and Verification Considerations for Net-Zero Energy Buildings
Sponsor: *7.9 Building Commissioning*

Track: *Net Zero Energy*
Chair: *Mike Eardley, P.E., Member, Cannon Design, Boston, MA*

Net-zero energy buildings require clear performance goals and clear communication between different parties that have varying levels of involvement from early design through building operation. The design process is critical in putting the elements and specified interactions in place that allow the building to function in a net-zero energy manner. Commissioning is essential in defining functional and performance goals and verifying that they are met during the different project phases and operation. This session defines and details critical elements of both designing and commissioning net-zero energy buildings.

1. Design and Energy Modeling for Net Zero Energy
John Swift Jr., P.E., Member, Cannon Design, Boston, MA

A net-zero energy building is the culmination of a partnership between design and client needs, driven by performance ideals pushing the boundaries of our creative and technical abilities. Success is dependent on establishing achievable goals to be held as a standard throughout the building life-cycle. Once goals are established, strategies such as lv2011able energy systems, cogeneration, and high performance mechanical/electrical/envelope systems may be considered and integrated into a commissioning process. The presentation will detail different design considerations for NZEBs as well as a case study to illustrate the challenges and lessons learned during the rigorous process of designing a NZEB.

2. Commissioning as Quality Assurance for Net-Zero Energy Buildings
Manus McDevitt, P.E., Member, Sustainable Engineering Group, Madison, WI

A successful quality assurance program is essential to the success of any building project—without commissioning a finished building is at risk of not meeting the owner's objectives. The concepts and systems used in low- to net-zero energy buildings are unfamiliar to a majority of building designers and contractors so the possibility for misinterpretation is significant. The commissioning process is essential to define a clear and agreed-upon set of criteria for design and construction of the building and to ensure that the often unconventional building systems are designed, installed and operated correctly.

Forum 5 (Intermediate)
Tuesday, February 1, 2011, 9:45 - 10:45 AM

The Commissioning Process ASHRAE Standard: What Should Be Included? Track: Codes and Standards in the HVAC&R Industry
Sponsor: *7.9 Building Commissioning, SGPC 0*
Track: *Codes and Standards in the HVAC&R Industry*
Chair:*Gerald Kettler, P.E., Life Member, Air Engineering and Testing, Dallas, TX*

ASHRAE has published Commissioning Process Guidelines for over 20 years. The development od a Commissioning Standard was approved by the Board of Directors as Standard 202, Commissioning Process for Buildings and Systems. This forum discusses the potential contents in the new standard. Also of importance is the application of the Commissioning Process Standard to other standards, documents, programs and the code language variations.