Programs for the Long Beach Meeting (June, 2017):

Seminar 14

Sunday, June 25, 2017, 1:30 PM-3:00 PM

Commissioning of Commercial Kitchen Ventilation Systems, Including Examples of Real World Successes and Failures

Sponsor: 5.10 Kitchen Ventilation, 7.9 Building Commissioning

Room: 201B

Track: Commissioning: Optimizing New and Existing Buildings and their Operation

Chair: Francis Kohout, P.E., Member, Cyclone Energy Group, Chicago, IL

This seminar features presentations describing some of the unique and challenging situations that must be considered as part of the commissioning process for Commercial Kitchen Ventilation (CKV) systems.

1. What Is Commercial Kitchen Ventilation Commissioning?

Donald Fisher, P.Eng., Life Member, Fisher Consultants, Danville, CA

2. Overall CKV Commissioning and the Critical Role of Testing and Balancing Jason Brown, Associate Member, Melink Corp., Milford, OH

3. Commercial Kitchen Ventilation Operation and Performance: Reality Check from the Field

Michael Morgan, Associate Member, Captive Aire Systems, Inc., Allentown, PA

Seminar 18

Monday, June 26, 2017, 8:00 AM-9:30 AM

Bridging the Information Gaps to Operation Management

Sponsor: 7.3 Operation and Maintenance Management, 7.9 Building Commissioning, 7.8

Owning and Operating Costs

Room: 102AB

Track: Commissioning: Optimizing New and Existing Buildings and their Operation **Chair:** Robyn Ellis, Associate Member, City of Hamilton - Public Works, Hamilton, ON,

Canada

This seminar describes innovative approaches to bridging the information gaps that often occur throughout the project cycle, obscuring system intent, critical operating information (set-points, flow rates, etc.), performance history, training materials. Case studies include commissioning with a tablet-based information portal on the owner's cloud, semi-automated data-logging for FDD messaging and searchable information archiving. Impacts include improved energy efficiency and reduced operating costs. This seminar provides diverse perspectives from the owner, the consulting engineer and the researcher.

1. Bridging the Information Gap during Commissioning and Project Turnover to Operations

Chuck Dale-Derks, P.E., Member, McClure Engineering, St. Louis, MO

2. Commissioning Documentation for Operations Management

John Gibbemeyer, P.E., Member, George Mason University, Fairfax, VA

3. Building Re-Tuning with Automated Data-Logger Networks

Paul Reale, Building Performance Lab, City University of New York, New York, NY

4. Commissioning in the Cloud

Kris Kinney, Member, Highwoods Properties, Raleigh, NC

Seminar 27

Monday, June 26, 2017, 11:00 AM-12:30 PM

Best Practices for Employing VRF Systems

Sponsor: 8.7 Variable Refrigerant Flow (VRF), 7.9 Building Commissioning

Room: 201A

Track: HVAC&R Systems and Equipment

Chair: Lee Riback, Member, McKinstry, Dallas, TX

With the increased popularity of Variable Refrigerant Flow systems, it is easy to often overlook the complex nature and nuances of this unique equipment, which may lead to difficulties after acceptance of the systems and equipment. This presentation reviews the best practices of engineers whose involvement spans the full project scope from design through continuous system operation. Lessons learned from various stages of different projects will be discussed to prepare professionals for future work with these systems.

1. Best Practices and Quality Control Considerations for VRF Projects

Bill Artis, Member, Daikin, New York, NY

2. Lessons Learned through Commissioning

Thomas Conn, Horizon Engineering Associates, New York, NY

Forum 4

Monday, June 26, 2017, 11:00 AM-12:30 PM

What the FPT Is Commissioning for Design Build Projects?

Sponsor: 7.9 Building Commissioning, 7.2 HVAC&R Construction & Design Build

Technologies **Room:** 103AB

Track: Commissioning: Optimizing New and Existing Buildings and their Operation

Chair: Will Mak, P.E., Member, Cyclone Energy Group, Chicago, IL

Methods for commissioning building projects with traditional design-bid-build delivery methods are well established. However, projects using the design build delivery method have become more popular and require a different approach for implementing the commissioning process on these types of projects. This forum opens the discussion between engineers, architects, contractors and owners on how design build projects should be commissioned. The goals after the forum are to develop a guideline on commissioning for design build projects and to conduct a seminar / workshop on the guideline at a future ASHRAE conference.

Seminar 40

Tuesday, June 27, 2017, 9:45 AM-10:45 AM

Delivering a Successful Critical Facility/Data Center Project by Fostering a Healthy Relationship between the Owner, Engineer and Commissioning Agent

Sponsor: 9.9 Mission Critical Facilities, Data Centers, Technology Spaces and Electronic

Equipment, 7.9 Building Commissioning

Room: 201A

Track: Commissioning: Optimizing New and Existing Buildings and their Operation

Chair: Nick Gangemi, Life Member, Northern Air Systems, Rochester, NY

The presentations in this session discuss the independence as well as interdependencies between the Engineer of Record (EOR) and the Commissioning Agent (CxA) in partnering with the Owner to deliver a successful critical facility project. The presentations address both Greenfield and new construction projects as well as upgrades and renovations to existing facilities. The session presents both the EOR and CxA perspectives and discusses what information each requires from the other as well as what ecisions and information both require from the Owner. The presentations will address all project phases of the project.

1. The EOR's Perspective on Delivering a Successful Critical Facility/Data Center Project By Fostering a Healthy Relationship with the Owner and Commissioning Agent

Vali Sorell, P.E., Member, Sorell Engineering, Charlotte, NC

2. The CxA's Perspective on Delivering a Successful Critical Facility/Data Center Project by Fostering a Healthy Relationship with the Owner and Engineer Terry Rodgers, Member, Primary Integration Solutions Inc, Charlotte, NC

Seminar 44

Tuesday, June 27, 2017, 11:00 AM-12:30 PM

Optimization of Existing Buildings Is Much More than Retro Commissioning

Sponsor: 7.9 Building Commissioning, 7.6 Building Energy Performance

Room: 202AB

Track: Commissioning: Optimizing New and Existing Buildings and their Operation **Chair:** Wade H. Conlan, P.E., Member, Hanson Professional Services, Orlando, FL

Optimization of the building systems through the Retro Commissioning Process starts well before the CxP interrogates the BAS system and doesn't end when the report is issued. This seminar starts by working through the creation of an energy roadmap for your building or campus to plan your savings. A case study on a 30,000 ton chiller plant serving a campus expands on that optimization process and shows real implementation and results of the RetroCx process. Finally, the seminar discusses the process on finding, and more importantly, implementing energy savings measures with buy-in from the Owner and Operators.

1. Campus Energy Management: You Need a Plan

Nathaniel Boyd, P.E., CPMP, Member, Hanson Professional Services, Orlando, FL

2. How to RetroCommission a 30,000 ton Chiller Plant

Joshua Harwood, P.E., McKinstry, Denver, CO

3. Taking the "Retro" out of Retro-Commissioning

Benjamin Skelton, P.E., CPMP and BEMP, Member, Cyclone Energy Group, Chicago, IL