

WEEE BREAKOUT SESSION TOPICS & SPEAKER INFO – 9:15 Session

Topic: *Effective Energy Management*

Description: This presentation highlights Wisconsin energy success stories, weaving together Energy Management principles of ASHRAE Handbook Chapter 36 (2011), Energy Star Guidelines, and practical experience of successful energy managers. Specific illustrations are provided, to take advantage of the Energy Star "Portfolio Manager" for documented performance tracking and national recognition as an "Energy Star."

Speaker Information: Richard J. Pearson, P.E., is an ASHRAE Fellow, and Principal, Pearson Forensic Engineering. He has been awarded the membership grade of Fellow for his pioneering work with building automation systems, and has received the Distinguished Service Award from ASHRAE. In ASHRAE, he has been Chairman of the Energy Management and Environmental Health Committees. He has served on the Board of Directors and Technology Council, as well as the Finance, Professional Development, and TC 7.6 Committees. Mr. Pearson is a principal contributor to an ASHRAE publication "Procedures for Commercial Building Energy Audits" (2011). He is also a co-author of the Energy Use and Management Chapter (36) in the 2011 ASHRAE Handbook and is a regular presenter at professional development courses at the University of Wisconsin and at many ASHRAE events.

Topic: *LEED v4 – Major Revision to Rating System*

Description: Sustainable Building Solutions will present a comprehensive overview of LEED v4. Introduced at Greenbuild in late 2013, LEED v4 is the first major overhaul of LEED since its debut in 2000. Discover what it will mean for your projects and the state of sustainability in Wisconsin. Earn 1.5 USGBC LEED AP CEU's for LEED AP's with Specialty and USGBC Green Associates.

Speaker Information: Phil Vetterkind is the Director of Sustainable Building Solutions, a LEED AP O&M that has worked on over 30 LEED projects including LEED-NC, LEED-CI, LEED EB: O+M, LEED-ND and LEED for Homes. Phil has co-authored two LEED case studies in the Journal of Green Building, given over 150 presentations on sustainability and was named 2008 Educator of the Year by WI Builder Magazine. Frank Falsetti is in charge of business development at Hunzinger Construction and is responsible for the establishment of new business opportunities as well as improvement of existing client relations. Frank has been extensively involved in LEED projects and in LEED training.

Topic: *Real Economics of Heat Recovery and Thermal Energy Storage*

Description: Many heat recovery opportunities exist, however engineering and organizational pitfalls exist in the path towards implementation. This presentation will explore the realities including cost of capital, variable energy prices, and the impact of production and manufacturing scheduling issues.

Speaker Information: Mike Rohde is the President of Rohde Brothers, an industrial and commercial engineering solutions provider. His passion for engineering innovation stems from his earlier experience developing robots and rocket motors for NASA and serving in the U.S. Army as a Cobra and Blackhawk pilot. Today he works with industries closer to his Wisconsin roots and has developed several innovative heat recovery and thermal energy storage systems. Mike holds a Master's of Mechanical Engineering degree from the University of Wisconsin-Madison. He is a Wisconsin Registered Professional Engineer and is also a Certified Geothermal Designer.

Topic: Major Energy Trends

Description: This presentation will cover the major energy trends and news highlights of 2014 that each energy manager needs to know, including: electricity, natural gas, water, wind, solar, global warming, biofuels, fossil fuels, cleantech, energy storage, and LNG exports. Come discover what is and will move energy markets in 2014 and beyond.

Speaker Information: Rick S. Swiontek, Senior Energy Manager, Johnson Controls, Inc. provides energy management support of Johnson Controls Inc.'s (JCI) global energy portfolio. Rick works with leaders of two business units in various departments to support energy procurement, rate analysis, energy efficiency initiatives, risk management, sustainability, energy cost planning, forecasting and budgeting for JCI facilities in the Americas. From the utility billing data, builds and maintains a scorecard summarizing key energy metrics for reporting to the Executive Procurement Council. Works with utility companies, energy marketers and internal teams to collect data, perform analyses and solicit pricing on behalf of the plants.

WEEE BREAKOUT SESSION TOPICS & SPEAKER INFO – 10:30 Session

Topic: Effective Energy Management (continuation of 9:15 session – see previous page)

Topic: LEED v4 (continuation of 9:15 session – see previous page)

Topic: Catalytic Retrofits of Straight-Through and Recuperative Thermal Oxidizers to Reduce Natural Gas Consumption

Description: This presentation will cover how adding a catalyst to a thermal oxidizer will reduce natural gas consumption at the oxidizer. Past and current projects will be presented along with an ROI for a typical project.

Speaker Information: Matthew Laurin, Sales Engineer works closely with company president, Gary Masonick, who is an expert and thirty year veteran of the catalytic pollution control business. Matthew currently provide troubleshooting and engineering services as well as catalysts, housings and silencers to the stationary engine market, and catalysts, oxidizers, and a variety of components to companies that produce VOCs as a part of their manufacturing process (i.e. coffee roasters, bakeries, printing companies, paint manufactures, etc.)

Topic: Heat Pipe Technology

Description: Heat pipes are thermal transfer devices capable of transferring heat and energy several hundred times faster than conventional methods. This presentation will include a discussion of what are heat pipes, heat pipe applications, psychometrics, the effect of various parameters on paybacks, plus case studies of 100% outside air and mixed air systems.

Speaker Information: Mazen M. Awad is the Senior Vice President at Heat Pipe Technologies, Inc. pioneered the design and applications of heat pipes in HVAC systems, including dehumidification and energy recovery systems. He was a project engineer for an experimental purge A/C unit for the Space Shuttle. Robert Feind is a mechanical engineer who has worked for Vyron Corporation since 2004 specializing in dedicated outside air systems, dehumidification and energy recovery systems for the commercial/industrial market.

Topic: Reducing Outside Air Infiltration

Description: This presentation will concentrate on air barrier testing and air barrier repair and will include a discussion of potential energy savings and the methodology for calculating savings.

Speaker Information: Jeff Knutson, president of A-A Exteriors, has been in the construction field since 1970 and in particular the area of energy conservation. Jeff is a member of MREA and has served on the board of directors. He is a frequent speaker at energy efficiency conferences.

WEEO BREAKOUT SESSION TOPICS & SPEAKER INFO – 1:30 Session

Topic: Beyond ASHRAE Energy Code: Tools and Strategies for Operational Cost Savings

Description: Facilities meeting the prescriptive requirements of energy code is a goal of the past. This presentation will discuss a set of increasingly popular tools to attain energy saving beyond ASHRAE 90.1 requirements such as energy modeling, advanced building systems, intelligent building design, continuous commissioning, advanced control systems, long term metering, verification, benchmarking plans, and the advanced energy conservation measures that go along with them.

Speaker Information: Shana Scheiber, PE, CEM, LEED® AP, is Sustainable Design Consultant at Affiliated Engineers. She specializes in sustainable design involving energy simulation, long-term building system planning related to operational costs, capital budgets, measurement and verification, benchmarking, carbon footprint, detailed rate analysis, heat recovery work and on-site energy audits.

Topic: Wisconsin's Political and Regulatory Energy Trends

Description: An overview of current political and regulatory trends and changes in recent decades. Key statistics regarding Wisconsin's economy, generation resources, supply/demand and rate comparisons along with upcoming federal, regional and state regulations and how that may impact Wisconsin's ratepayers will be presented.

Speaker Information: Todd Stuart is executive director of the Wisconsin Industrial Energy Group, Inc. (WIEG). WIEG is a non-profit association of large energy consumers that advocates for policies that drive affordable and reliable energy. WIEG testifies before the Legislature, the Public Service Commission and the Department of Natural Resources in order to control costs for large ratepayers.

Description & Topic: Panel Discussion - Who is Watching Your Energy Spend?

Speaker Information: not finalized - more information coming

Topic: Chilled Beams, The New Systems of Choice?

Description: Chilled beam systems, which are prevalent in Europe, are emerging in the US as an alternative to conventional systems, such as VAV. This presentation will provide an overview of the benefits, drawbacks, and common applications of chilled beam technology, with case studies in university and healthcare settings.

Speaker Information: Kevin Pope is Associate Vice President at HGA Architects and Engineers and is responsible for directing the design, specification and construction administration of mechanical solutions for a range of building types. He supports an integrated team approach with a commitment to sustainable design that extends throughout his more than 30-year career. Kevin is the author of "New Tech, Old Buildings," *Environmental Design and Construction Magazine*, November 2011 and co-author of "Ventilation Leads Kerry's Recipe for Success," *Engineered Systems*, May 2011 and "Geothermal Success in the Midwest," *Engineered Systems*, December 2010.

Topic: *Integrated Information Management and Smart Buildings*

Description: Successful systems integration and implementation of data analytics is only the first step in the creation of an intelligent building. This presentation will describe how the process of engaging all stakeholders to act on the valuable data that has been uncovered can deliver exceptional energy and operational savings. The presentation will feature a case study of successful implementation at 50 high profile government buildings.

Speaker Information: Brian Oswald is Vice President of Operations for Environmental Systems, Inc. (ESI). Brian is an 11 year veteran in the building automation and smart building technology space. Specializing in multi-site application and implementation management, Brian recently served as the ESI Project Executive to IBM on the successful deployment of an enterprise integration and data analytics application. Brian's well-rounded understanding of existing control systems and a practical approach to system integration helped create an optimum solution with uncompromised results.

WEEE BREAKOUT SESSION TOPICS & SPEAKER INFO – 2:45 Session

Topic: *New Frontiers in LED Lighting – Today and in the Coming Decade*

Description: LED lighting adoption has accelerated rapidly in the past several years, however total overall conversion is still less than 1% of available sockets. Most the adoption that is occurring today is a one to one replacement of incumbent technology, however, LED lighting is positioned to go well beyond this. Real world application case studies of LED lighting installations will show how the technology is being rapidly adopted in categories that were once considered impossible for LED lighting. The presentation will explore what the future may hold for LED lighting if we challenge the industry to rethink the value and function of lighting and find new ways to deliver lighting. What else is possible by 2020 if existing paradigms are challenged?

Speaker Information: Eric Haugaard is Director of Product Technology at Cree Lighting; Eric has a career that spans 27 years including previous positions of Engineering Manager of New Product Development & Mechanical Design and Product Development Engineer. Over the past decade Eric has presented lighting technology programs to diverse audiences throughout the world, including a strong focus on LED technologies. He holds 48 US and 14 foreign patents related to lighting technology.

Topic: *The Power and Traps of Trend Data in Commissioning (Cx) and Recommissioning (RCx)*

Description: Building automation has put valuable information in the hands of commissioning providers and owner/operators, but how good is this information and how can we use it to make our building's equipment run most efficient. This presentation will cover potential pitfalls of trend data information, how to properly use trend data in diagnosing issues, and the benefits of good trend information.

Speaker Information: David Guberud, QCxP, has over 25 years of experience in design, installation and commissioning of HVAC control systems; eight of those years with Ring & DuChateau performing commissioning and retrocommissioning work at various facilities throughout the country. Dave also teaches part time for the MATC for the EST apprentice program. Rachel Rueckert, PE, QCxP, has over 17 years of experience in design, project management, coordination and commissioning of HVAC systems; the last four years with Ring & DuChateau. Rachel has a master's degree in Engineering Building Energy Systems from MSOE and is an adjunct professor at MSOE serving the AE department.

Topic: Optimizing Boiler Room Efficiencies – Matching Supply with Demand

Description: Many boiler room improvement projects can lead to cost savings such as economizers and high efficiency burners. However, the highest level of savings is achieved by taking a systems approach: optimizing the boiler equipment and controls to match the demand of the system. This presentation will detail how to best determine facility hot water or steam demands and then determine how to ensure burner and controls selection will match this demand in the most cost effective, energy efficient means possible.

Speaker Information: Kyle Thomas is the Engineering Manager for Combustion Systems Inc. (CSI); a graduate of Rose-Hulman with a degree in Chemical Engineering. Kyle is a Department of Energy Qualified Steam System Specialist and leads CSI's energy survey division. Anthony Johnson is the third generation in his family in the boiler business and he has spent his career in the field of designing and implementing efficient hydronic systems. He has been a featured presenter at ASHRAE Chapters across the country and is currently leading the Engineered Solutions division of Wells Boiler Works.

Topic: Data Center Energy Efficiency

Description: This presentation will provide information on how the design of data centers, corporate requirements, equipment configurations and cooling systems affect energy use. Learn how to implement measures that will significantly reduce energy use in data centers.

Speaker Information: Rich Cotton is Preconstruction Manager for Faith Technologies with over 30 years of experience in data center design that supports current mission-critical requirements and anticipates future growth and technology enhancements. He has worked with several prominent companies including Rockwell, Epic, Journal Communications and American Family Insurance.

Topic: Power Quality and Energy Intelligence

Description: Power Quality is related to fluctuations in electricity, such as momentary interruptions, voltage sags or swells, transients, harmonic distortion and electrical noise. Learn how to eliminate unplanned downtime & lost productivity and more fully understand & quantify the impact power quality has on a facility and prevent these events from happening. Energy Intelligence is adding the energy information into the overall organization. This term, based on Manufacturing Intelligence, allows users and operators to easily access data and correlate information between separate systems eliminating "islands of information".

Speaker Information: Dale Anderson is a Power Control Area Manager at Rockwell Automation with over 30 years of experience in the field of variable speed drives and power electronics. Dale has presented educational information at many events including WAEE meetings.