

National Facilities Management & Technology Conference & Expo

A \$1,095 Value! Yours for FREE!

March 13-15, 2012
Baltimore Convention Center
www.nfmt.com/baltimore

NFMT2012

THINK OF NFMT AS YOUR OWN PERSONAL FM UNIVERSITY

NFMT is like college only better. Zero tuition and no pop quizzes. In three days you'll learn how to operate your facility smoother, cleaner and more cost-efficiently. Your investment is minimal and the payoff is huge.

NFMT promises to be the biggest gathering of building owners, facility managers, maintenance engineers, sustainability directors, heads of facility operations and management, and other facilities management professionals in the country. It's a dynamic, interactive educational and networking experience that delivers revolutionary ideas and career-boosting inspiration. You'll rethink your approach to facilities management, connect with like-minded colleagues, hear from industry visionaries, and discover new tools to make your job more satisfying and productive than ever before.

Mark March 13-15, 2012, on your calendar. You don't want to be tardy for the first day of class.

BUILD-IT-YOURSELF COURSE CURRICULUM

When you attend college, the educational powers that be tell you what classes you have to take. That's not the case with NFMT. Eleven topic-specific tracks collectively boast more than 120 different educational sessions. You can pick and choose from all of them to completely customize your NFMT experience.

NFMT MEMBERSHIP

For just \$99, you can take your NFMT experience to the next level and become a member! In addition to the standard access to the conference, networking opportunities and exhibitor floor you also receive:

- Access to exclusive conference sessions (\$49 value)
- The quarterly NFMT Member e-newsletter
- Elite VIP registration counter only for Members – saves you time
- Badge ribbon distinguish yourself from the pack
- NFMT shirt (\$25 value)
- Lunch coupon for each day of the event (\$15 value)
- Discount on pre- and post-conference workshops at NFMT (\$49 value)
- Access to NFMT 360 website providing exclusive content throughout the year
- Exclusive entry to Platinum Member Lounge in the Exhibit Hall, where you can grab a cup of coffee and relax

FORGET THE QUAD, COMMONS OR STUDENT UNION

The best networking and information exchanges occur at NFMT. With more than 5,100 attendees you have ample opportunities to discuss challenges, solutions and ideas with other like-minded professionals.

NFMT brings facility professionals together to learn the latest advancements, technologies and best practices in the facilities management industry.

Facilities management is a challenging occupation. It's never boring. And the work and opportunities to improve never end. As a facilities professional, you need tools and resources. To really succeed however, you need an advantage.

NFMT gives you what you need to help you operate your facilities effectively and efficiently, cut costs, and advance your career. It's free. It's your secret weapon.

GET ALL THIS FOR FREE:

- Immediate access to 120 world-class facility and maintenance experts
- 120+ educational sessions
- More than 400 vendors showcasing the latest products and technologies
- Earn CEUs and recertification credits toward various industry designations
- Access to the opening night networking party co-sponsored by Sodexo
- Free admission to the Solutions Exchange speed-learning event
- Exclusive general sessions available only at NFMT

YOUR ADVANTAGE. YOUR WAY.

- Build your own customized training program for FREE Choose from over 120 conference sessions presenting new information that boosts your job performance
- Network and exchange ideas with the best of the best Meet colleagues and peers who share your challenges. Discover new strategies and best practices that you can employ immediately.
- Stay ahead of the curve

The NFMT exhibit hall is filled with the latest products, services, technologies and solutions on the market. See equipment, components and demonstrations you won't find anywhere else.

THE NFMT BLUEPRINT

The robust show floor is organized so you can maximize your time with each of the vendors on your must-see list. Whether you need info and products that meet your operations, design, construction, safety & security, maintenance & engineering or sustainability needs, you'll find them at NFMT.



MONDAY, MARCH 12

Pre-Conference Workshops 1:00-5:00 p.m.

- Facilities Master Plan: Tools for Developing the Business Case*
- Measure What You Manage: How to Communicate Performance vs. Goals*

TUESDAY, MARCH 13

8:00 a.m.

TS.16 2011 FMXcellence: Adding Value to Your Organization

- T1.18 Reducing Energy, Water and Tax Bills for Buildings
- T1.21 Acoustical Impact and Green Office Design
- T1.24 First Things First: Improving Energy Efficiency in Existing **Buildings**
- T1.27 Demand Optimization with Lighting
- T1.37 Quick and Dirty: Early Grounds Projects from a Facilities
- T1.39 Building Enclosure Commissioning and Retrocommissioning
- T1.41 Improving Power Reliability
- T1.43 New Leader's Guide to a High Performing Facilities Organization
- T1.45 Is Technology Managing You or Are You Managing Technology?
- T1.47 Facility Assessments: From A to Z
- T1.49 Energy Harvesting Building Technologies & Tax Incentives for Commercial Buildings

10:00 a.m.

- T2.21 Renewable Energy and Sustainability in WBDG
- T2.24 Funding Energy Efficiency Improvements
- T2.27 Codes and Controls
- T2.39 Integrated Energy Efficient and Renewable Solar Retrofit **Roof Systems**
- Implementing NFPA 70E for Arc Flash Safety
- T2.45 Unraveling the Five Myths of On the Job Training
- T2.47 Finance 101 for Facilities Managers
- T2.49 Making it Run Right

11:00 a.m.

- T3.18 Greening Toward Your Bottom Line
- T3.21 Real Business Benefits for Green Cleaning
- T3.24 Proven Energy Saving Programs & Initiatives
- T3.27 Delivering Green Design with Testing Adjusting and Balancing a HVAC System
- T3.37 Pavement Management
- T3.41 Perfect Power; A Perfect Way to Grid Independence
- T3.43 Obtaining Capital Funding with Accurate Data and Analysis
- T3.45 The FM of Today versus the FM of Tomorrow
- T3.47 Energy Management and the Green Data Center
- T3.49 The Impact of Integrated Smart Controls on Building Design

Noon - 4:00 p.m. Exhibit Hall Open

4:00 - 5:00 p.m. Opening Day Networking Party (sponsored by Sodexo)

*Monday, March 12 Workshops require a fee. ADVANCE: \$99 for NFMT Platinum members, \$149 for Non-members

ONSITE:

WEDNESDAY, MARCH 14

7:45 a.m.

Solutions Exchange Networking Event

- W1.18 Selecting The Right Standard
- W1.21 High-Performance and Outcome-Based: An Emerging Market for Facility Services
- W1.24 ASHRAE's Building Energy Quotient (BEQ)
- W1.27 Bagging Conventional Indoor Lighting for LED
- W1.37 Communicating with the E-Suite
- W1.39 What Lies Beneath: An Analysis of Parking Lot Maintenance
- W1.41 Plug Load in Commercial Offices
- W1.43 The Do's and Don'ts of Fire Alarm/Suppression Inspection, Testing and Maintenance
- W1.45 The Eight Steps to Success for Maintenance Planning and Scheduling
- W1.49 Verifying Sustainable Roofing Assets with RoofPoint

10:00 a.m.

- W2.18 Transpare: A New Platform for Evaluating Environmental Preferability
- W2.21 Sustainable Commercial Landscape Management
- W2.24 Building Renovation Improves Energy Efficiency and Sustainable Performance
- W2.37 Metering, Measuring and Verification Strategies
- W2.39 Complying with the Federal Buildings Personnel Training Act
- W2.43 Legionella and Waterborne Pathogens: What's in Your Reclaimed Water?
- W2.45 Three Keys to Sustaining Organizational Change
- W2.47 Smart Buildings: Energy Optimization Technology for **Efficiency and Savings**
- W2.49 Linking End User Data to FM Solutions

11:00 a.m. - 3:00 p.m. Exhibit Hall Open

- W3.21 Sustainable Glass Solutions
- W3.24 Energy Efficiency in Commercial Real Estate Double **Bottom Line**
- W3.27 Lighting Efficiency or Effectiveness?
- W3.31 Doing Business with the GSA (Extended Session)
- W3.37 Your Building's Weather Barrier
- W3.41 Codes and Standards for Power Reliability
- W3.43 The Six Myths of Disaster Planning
- W3.45 Hot Topics in Labor and Employment Laws
- W3.47 A New Tiered Approach to Employing Facility Condition Assessments
- W3.49 2012 Edition of Women in Facilities Management Roundtable (Extended Session)

- W4.37 Data Centers: Scalable, Modular, Flexible, Efficient, Designs
- W4.39 Ensuring Fire Safety for Food Service Operations in Commercial Facilities
- W4.41 The ENERGY STAR Portfolio Manager Tool
- W4.45 Raising the Bar: Differentiating Yourself in the FM Market
- W4.47 Systems Integration Best Practices

THURSDAY, MARCH 15

RS.18 Engage in the Four C's of Leadership for Success

9:00 a.m.

- R1.18 The Formation of a Robust Recycling Program for Roofing Systems in North America
- Toxic-free, Chemical-free, Cleaning Strategies
- R1.24 Using EPAct to Make Energy Projects Possible
- Performing Effective Building System Re-Commissioning R1.27 Studies
- R1.37 | Survived: ADA & Safety Code Compliances in Pakistan
- R1.41 The Grid Behind the Meter
- R1.43 Implementing Video Image Detection for Life Safety and Intrusion Detection
- R1.45 Do you know your Peoples' Skill Gap?
- Identify and Quantify Mission-Critical Factors (How to Perform a Critical Audit)
- R1.49 Optimizing Energy Efficiency without Compromising Occupant Comfort

10:00 a.m.

- R2.21 Preparing to Lead Sustainability Initiatives: Roles, Responsibilities, Resources
- High Rate of Return Energy Efficiency Initiative May Be Hiding in Your Facility Mechanical Rooms
- Risk and Reward of LED Lighting
- R2.37 | Survived: FM Above the Arctic Circle
- R2.39 A Review of the Final ADA Regs
- R2.41 The Dollars and Sense of Power Reliability
- R2.43 Healthcare Compliance Issues
- R2.45 Developing A Leadership Style That Fits You and Leads To Success
- Important Factors to Consider to Avoid Low Sloped Roofing System Failure
- Seismic Assessment of the Washington Monument and the Washington National Cathedral

11:00 a.m. - 2:00 p.m. Exhibit Hall Open

- R3.18 Developing a Sustainable Program
- R3.21 To LEED or Not to LEED
- R3.24 Energy Reduction Planning
- R3.27 A Road Map for Lifecycle BIM
- R3.45 | Survived: Walter Reed Medical Center Behind the Scenes from the Investigator
- R3.45 Project Management 101
- R3.49 Monitoring-Based Commissioning Enhances Sustainability

- R4.37 Sustainable Infrastructure Assessments More Bang for the Buck
- R4.39 Unlocking Efficiency: Keys to a Successful Energy Management Program
- ASHRAE Standard 188P: Prevention of Legionellosis Associated with Building Water Systems
- R4.47 Acoustical Problem Solving for the Facility Manager



NFMT covers all aspects of the facilities profession through 11 different tracks: Energy Efficiency, Upgrades and Utilities; Green Standards; Greening an Existing Building; Leadership and Career Advancement; Maintenance and Operations; Power: Generation and Reliability; Safety and Security; Staff Training and Development; Strategic Planning; Systems; and Technology. See below to find out what educational sessions are offered under each track.

ENERGY EFFICIENCY, UPGRADES AND UTILITIES

PCT Facilities Master Plan: lools for Developing the Business Cas	PC1	Facilities Master Plan: Tools for Developing the Business Cas	e*
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- T1.18 Reducing Energy, Water and Tax Bills for Buildings
- T1.24 First Things First: Improving Energy Efficiency in Existing Buildings
- T1.27 Demand Optimization with Lighting
- T1.39 Building Enclosure Commissioning and Retrocommissioning
- T1.49 Energy Harvesting Building Technologies & Tax Incentives for Commercial Building
- T2.24 Funding Energy Efficiency Improvements
- T3.47 Energy Management and the Green Data Center
- W1.24 ASHRAE's Building Energy Quotient (BEQ): How Does Your Facility Stack Up?
- W2.47 Smart Buildings: Energy Optimization Technology for Efficiency and Savings W3.24 Energy Efficiency in Commercial Real Estate -- Double Bottom Line
- R1.24 Using EPAct to Make Energy Projects Possible
- R1.49 Optimizing Energy Efficiency without Compromising Occupant Comfort
- R3.24 Energy Reduction Planning
- R4.39 Unlocking Efficiency: Keys to a Successful Energy Management Program

GREEN STANDARDS

- T3.21 Real Business Benefits for Green Cleaning
- W1.18 Selecting The Right Standard
- W2.18 Transpare: A New Platform for Evaluating Environmental Preferability
- R1.18 The Formation of a Robust Recycling Program for Roofing Systems in North America
- R1.21 Toxic-free, Chemical-free, Cleaning Strategies
- R3.21 To LEED or Not to LEED

GREENING AN EXISTING BUILDING

- T1.18 Reducing Energy, Water and Tax Bills for Buildings
- T1.21 Acoustical Impact and Green Office Design
- T2.21 Renewable Energy and Sustainability in Whole Building Design Guide
- T3.18 Greening Towards Your Bottom Line
- W2.24 Building Renovation Improves Energy Efficiency and Sustainable Performance
- W3.21 Sustainable Glass Solutions
- R2.21 Preparing to Lead Sustainability Initiatives: Roles, Responsibilities, Resources
- R3.24 Energy Reduction Planning
- R4.37 Sustainable Infrastructure Assessments More Bang for the Buck

LEADERSHIP AND CAREER ADVANCEMENT

- TS.16 2011 FMXcellence: Adding Value to Your Organization
- T1.43 New Leader's Guide to a High Performing Facilities Organization
- T1.45 Is Technology Managing You or Are You Managing Technology?
- T2.47 Finance 101 for Facilities Managers
- T3.45 The FM of Today versus the FM of Tomorrow
- W1.45 The Eight Steps to Success for Maintenance Planning and Scheduling
- W2.45 Three Keys to Sustaining Organizational Change
- W3.45 Hot Topics in Labor and Employment Laws
- W3.49 2012 Edition of Women in Facilities Management Roundtable
- W4.45 Raising the Bar: Differentiating Yourself in the FM Marketplace
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- R2.21 Preparing to Lead Sustainability Initiatives: Roles, Responsibilities, Resources
- R2.37 | Survived: FM Above the Arctic Circle
- R2.45 Developing A Leadership Style That Fits You and Leads To Success
- R3.37 | Survived: Walter Reed Medical Center Behind the Scenes from the Investigator

MAINTENANCE AND OPERATIONS

- PC2 Measure What You Manage: How to Communicate Performance vs. Goals*
- T1.37 Quick and Dirty: Early Grounds Projects from a Facilities Master Plan
- T1.47 Facility Assessments: From A to Z
- T2.39 Integrated Energy Efficient and Renewable Solar Retrofit Roof Systems
- T2.43 Implementing NFPA 70E for Arc Flash Safety
- T3.37 Pavement Management
- W1.39 What Lies Beneath: An Analysis of Parking Lot Maintenance
- W1.45 The Eight Steps to Success for Maintenance Planning and Scheduling
- W2.21 Sustainable Commercial Landscape Management
- W2.37 Metering, Measuring and Verification Strategies
- W2.43 Legionella and Waterborne Pathogens: What's in Your Reclaimed Water?
- W3.37 Your Building's Weather Barrier What Every Facility Manager Should Know
- W4.39 Ensuring Fire Safety for Food Service Operations in Commercial Facilities
- R2.24 High Rate of Return Energy Efficiency Initiative May be Hiding in Your Facility Mechanical Rooms
- R2.39 A Review of the Final ADA Regs
- R2.47 Important Factors to Consider to Avoid Low Sloped Roofing System Failure
- R3.37 I Survived: Walter Reed Medical Center Behind the Scenes from the Investigator
- R4.43 ASHRAE Standard 188P: Prevention of Legionellosis Associated with Building Water
 - Systems

POWER: GENERATION AND RELIABILITY

- T1.41 Improving Power Reliability
- T3.41 Perfect Power; A Perfect Way to Grid Independence
- W1.41 Plug Load in Commercial Offices
- R1.41 The Grid Behind the Meter
- R2.41 The Dollars and Sense of Power Reliability

SAFETY AND SECURITY

- T2.43 Implementing NFPA 70E for Arc Flash Safety
- W1.43 The Do's and Don'ts of Fire Alarm/Suppression Inspection, Testing and Maintenance
- W3.43 The Six Myths of Disaster Planning: Lessons Learned in Turbulent Times
- R1.37 I Survived: ADA & Safety Code Compliances in Pakistan
- R1.43 Implementing Video Image Detection for Life Safety and Intrusion Detection
- R2.37 | Survived: FM Above the Arctic Circle
- R2.39 A Review of the Final ADA Regs
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- R4.43 ASHRAE Standard 188P: Prevention of Legionellosis Associated with Building Water Systems



NFMT is now certified by the International Association for Continuing Education and Training (IACET) to offer approved Continuing Education Units (CEUs) for all training programs. Attendees who complete educational sessions can use NFMT-issued CEUs to maintain professional designations from organizations such as The American Institute of Architects, IFMA, Association for Facilities Engineering and BOMI, as well as state and local licensing boards.

PRE-CONFERENCE WORKSHOPS* **Monday, March 12** 1:00-5:00pm

Energy Efficiency, Upgrades and Utilities, Strategic Planning

PC1 Facilities Master Plan: Tools for **Developing the Business Case***

Jim Turner, Senior Associate, AECOM

Budget pressures are nothing new to facilities managers. Whether they work in corporate, non-profit, or public sector, they need to create an effective business case for the facilities master plan that demonstrates to top management the assets' role in overall corporate strategic goals. This intensive workshop will emphasize core financial skills and how to apply them to establish and maintain the correct balance between major capital, deferred capital, and maintenance budgets in the context of the long-range facilities plan. Interactive exercises and case studies illustrate a five-step approach to prioritize operational and financial goals for any facility or property. Attendees will leave the workshop with the tools needed to create a successful business case for their own facilities master plan - whether for the first time or not. Learning Objective(s):

- 1. Learn how to collect and analyze comprehensive facilities data, compare it to relevant facilities benchmarks, and align the portfolio to strategic goals
- 2. Learn how to identify opportunities to minimize financial shortfalls by balancing the three expenditure types: maintenance, deferred capital, and major capital
- 3. Construct a business case model that can be used to pursue strategic opportunities and justify future facilities funding
- 4. Create a road map to implement the long-range facilities plan **AUDIENCE: INTERMEDIATE CEU 0.1**

Maintenance and Operations

PC2 Measure What You Manage: How to Communicate Performance vs. Goals*

Michael B. Cowley, CPMM, President, CE Maintenance Solutions

Are you able to logically manage and clearly communicate your past, current and future maintenance performance against established goals? Mike Cowley, one of Facility Decisions' premier speakers and industry consultant, will bring to light the importance and best practices of tracking the activities and performance of your maintenance organization during this four-hour interactive, entertaining workshop. Mr. Cowley will discuss the business case for measuring what you manage, outline the prerequisites of a proven scorecard approach, and detail the top 10 maintenance scorecards used in industry today. At the conclusion of the presentation Mr. Cowley will present methods for using these measurements along with the benefit to your facility and the maintenance organization.

Learning Objective(s):

- 1. Understand the purpose and use of maintenance scorecards
- 2. Comprehend the true cost of maintenance: labor, materials, contractor costs
- 3. Learn the top 10 maintenance measurements programs currently
- 4. Understand the benefits of scorecards including manpower adjustments, program justification, capital improvements and equipment overhaul

AUDIENCE: INTERMEDIATE CEU 0.1

* Fee applies to pre-conference workshops. Platinum Members: \$99 Non-Members: \$149 if you register by March 11, otherwise \$249 on-site

STAFF TRAINING AND DEVELOPMENT

T2.45	Unraveling the 5 Myths of On the Job Training
T3.45	The FM of Today versus the FM of Tomorrow

W3.49 2012 Edition of Women in Facilities Management Roundtable

R3.45 Project Management 101

STRATEGIC PLANNING

PC1	Facilities Master Plan: Tools for Developing the Business Case*
T1.39	Building Enclosure Commissioning and Retrocommissioning
T3.43	Obtaining Capital Funding with Accurate Data and Analysis
W1.37	Communicating with the E-Suite in Preparation for Economic Recovery
W2.49	Linking End User Data to FM Solutions
W3.31	Doing Business with the GSA
R3.45	Project Management 101

SYSTEMS

T1.27	Demand Optin	nization	with I	ighting
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T2 27 Codes and Controls

T2.49 Making it Run Right

T3.27 Delivering Green Design with Testing Adjusting and Balancing an HVAC System

Bagging Conventional Indoor Lighting for LED W1.27

W3.27 Lighting Efficiency or Effectiveness?

R1.27 Performing Effective Building System Re-Commissioning Studies

Identify and Quantify Mission-Critical Factors (How to Perform a Critical Audit) R1.47 R2.24 High Rate of Return Energy Efficiency Initiative May be Hiding in Your Facility

Mechanical Rooms

TECHNOLOGY

T2.49	Making it Run	Right

T3.47 Energy Management and the Green Data Center

T3.49 The Impact of Integrated Smart Controls on Building Design

W1.24 ASHRAE's Building Energy Quotient (BEQ): How Does Your Facility Stack Up?

W1.49 Verifying Sustainable Roofing Assets with RoofPoint

A New Tiered Approach to Employing Facility Condition Assessments W3.47

W4.37 Data Centers: Scalable, Modular, Flexible, Efficient, Designs

W4.47 Systems Integration Best Practices

R1.47 Identify and Quantify Mission-Critical Factors (How to Perform a Critical Audit)

R2.49 Seismic Assessment of the Washington Monument and the Washington National

Cathedral

R3.27 A Road Map for Lifecycle BIM

R3.49 Monitoring-Based Commissioning Enhances Sustainability

R4.47 Acoustical Problem Solving for the Facility Manager





General Session Tuesday 8:00-8:50 am

Leadership and Career Advancement

TS.16 2011 FMXcellence: **Adding Value to Your Organization**

Edward Sullivan, Editor, Building **Operating Management Magazine**

Building Operating Management's FMXcellence Recognition Program acknowledges FM departments that have added significant value to their organization by helping to achieve broader goals.

The NFMT 2012 conference will kick off with an overview of the 2011 honorees. Hear from a representative from each of the departments, while gathering great ideas you can take back to your department. Who knows, maybe next year you will be on the stage presenting a project?

2011 FMXcellence Honorees Incldue: Architect of the Capitol Crouse Hospital EMD Serono, Inc. Munich Reinsurance America, Inc

AUDIENCE: BEGINNER CEU 0.1

Tuesday, March 13 9:00 AM

Energy Efficiency, Upgrades and Utilities, Greening an Existing Building

T1.18 Reducing Energy, Water and Tax Bills for Buildings

Fraser Allport, CEO, Energy, Water and Taxes, LLC

Most facilities substantially over-pay three of their largest variable costs: energy, water and tax bills. Property managers can reduce these three expenses by utilizing 21st century green technologies and various tax incentives. You can optimize your property's efficiency, sustainability and profitability, thereby increasing its revenues, cash flow, market value and branding, while simultaneously reducing O&M. Learning Objective(s):

- 1. How to reduce utility bills for your property
- 2. Learn why implementing these efficiencies is so important to the future value and marketability of your building
- 3. Learn where and how to start the process of greening your building
- 4. Learn the process of getting a building certified AUDIENCE: INTERMEDIATE CEU: 0.1

Greening an Existing Building

T1.21 Acoustical Impact and **Green Office Design**

Jodi Jacobs, Marketing Director, Lencore Acoustics Corp.

With the driving goal to have green design accepted as a normal practice, it is critical that all components support an improvement in the space's functionality and comfort. However, many of the design changes have an adverse effect on acoustics and speech privacy, making it important to address proactively. This course will review the elements of green office design that impact the acoustics, how sound masking can be used effectively to balance the environment for increased comfort and speech privacy, and the existing and pilot credits for acoustics under LEED. Learning Objective(s):

- 1. Review the elements of green office design that impact the acoustics
- 2. Review how sound masking can be used effectively to balance the environment for a more comfortable space that meets the speech privacy needs of its occupants
- 3. Review the existing and pilot credits for acoustics under LEED AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

T1.24 First Things First: Improving Energy Efficiency in **Existing Buildings**

Jennifer L. Languell, PhD, President, Trifecta Construction Solutions

Success in reducing energy intensity depends on the ability to optimize the efficiency of existing facilities. This session will quantify the magnitude of energy wasted due to inefficiency and provide actionable steps to implement effective efficiency measures in our facilities. In particular, this session will demonstrate the impact of building envelope airtightness on energy savings, share real world case studies, and offer strategies to avoid diminishing returns that results from inadvertently heating and cooling the great outdoors.

Learning Objective(s):

- 1. Demonstrate how energy inefficient existing building are
- 2. Provide actionable steps to implement energy efficient design
- 3. Explain the importance of an airtight building envelope
- 4. How to measure and analyze energy savings in new and retrofit buildings

AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities, Systems

T1.27 Demand Optimization with Lighting

Scott Ziegenfus, Senior Applications Engineer, Lutron Electronics Co., Inc.

Demand Response (DR) is a requirement in many new energy standards and pertains to all types of energy, but most DR programs cover electricity. Two-thirds of building electrical load is HVAC and lighting. This presentation will cover industry basics: the players, state regulations, economic vs. environmental DR programs, Smart Grid. It will then compare the management and productivity issues of HVAC and lighting and will show why lighting should not be left out because it is the easier and the less intrusive of the two to implement. Learning Objective(s):

- 1. Overview and understanding of new energy standards requiring demand response
- 2. Overview of the electric industry landscape today and what might be tomorrow with demand response
- 3. What to think about when implementing a demand response program
- 4. Why lighting can be an easy "set it and forget it" DR strategy

AUDIENCE: BEGINNER CEU: 0.1

Maintenance and Operations

T1.37 Quick and Dirty: Early **Grounds Projects from a Facilities** Master Plan

Doug Sheredos, Registered Landscape Architect, Project Manager; Jonathan Ceci, Director of Landscape Architecture Studio; Ken Gignac, Registered Landscape Architect, Project Manager, Ayers Saint Gross

Landscape projects can be an attractive, costeffective way for cash-strapped institutions to begin realizing broader master planning goals. Successful landscapes can significantly upgrade the physical environment by creating positive first impressions and improving the quality-of-living for a fraction of the cost of a new building. This presentation will detail several master plans that were tailored to facilitate speedy implementation and profoundly transform institutions for the better, including projects at the University of Scranton, Johns Hopkins University Applied Physics Laboratory, and Lafayette College. Learning Objective(s):

- 1. Examine case studies of successful early implementation of master plans
- 2. Consider ways of packaging master plan recommendations that are tailored to the institutions' financial realities
- 3. Discuss ways of balancing expediency with quality of design and longevity
- 4. Understand the benefits of a quality designed and implemented open space AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities, Strategic **Planning**

T1.39 Building Enclosure Commissioning and Retrocommissioning

Paul Totten, Senior Project Manager; Jennifer Williamson, Staff I - Building Technology, Simpson Gumpertz & Heger

Building enclosure systems are critical components to separate the interior built environment from the exterior. If not evaluated correctly during new construction, long term operations and maintenance costs can increase and complaints from occupants due to issues related to an underperforming building enclosure can rise rapidly. Learn about the process used for building enclosure commissioning, the major aspects of the process using case studies, and retrocommissioning as it applies to continual evaluation of the enclosure for new and existing construction. Learning Objective(s):

- 1. Understand the process for building enclosure commissioning
- 2. Understand diagnostics and functional performance testing of the building enclosure
- 3. Understand the process used for retrocommissioning the building enclosure
- 4. Learn the importance of an air barrier system and the interaction between HVAC systems and the building enclosure

AUDIENCE: INTERMEDIATE CEU: 0.1

Power: Generation and Reliability

T1.41 Improving Power Reliability

Bhavesh Patel, Director, Marketing, ASCO Power Technologies

Electricity is a vital part of functioning as a society. One only needs to consider the consequences of a relatively short power outage - factories or offices close down, phones and computers go dead, food spoils in refrigerators, to name a few. Since every economy depends on continuous supply of good quality power, the desire for power reliability and continuity has evolved from a niche requirement to a mainstream need. Attend this session to learn key strategies for improving the reliability of power in a variety of facility settings.

Learning Objective(s):

- 1. Quantify the costs of Power problems
- 2. Discuss traditional and emerging methods of improving power reliability
- 3. Identify regulatory environment that drives these changes

AUDIENCE: CEU: 0.1

Leadership and Career Advancement

T1.43 New Leader's Guide to a High Performing Facilities Organization

Jim Turner, Senior Associate, AECOM

This session introduces a maturity model concept that managers of facilities management organizations can use to guide the development of their operations to success. Drawing from over 60 consulting projects, eleven facilities management competencies present themselves as key areas for assessment and development within the organizations. Whether it is the new leader's initial encounter with the organization, or a well-earned promotion has been granted, these competencies provide a framework for assessment and development that the new leader can use to elevate the department to a high-performing organization. Learning Objective(s):

- 1. Identify 11 strategic competencies for the facilities management organization (FMO)
- 2. Understand how to use these competencies for organizational assessment
- 3. Learn how to prioritize initiatives and incorporate the FMO competencies into your operation

AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement

T1.45 Is Technology Managing You or Are You Managing Technology?

Stormy Friday, President, The Friday Group Some FM managers have substituted technology solutions for those that involve hard-core decision making and face-to-face interaction with staff, colleagues and senior executives. Sometimes technology over-takes effective management and communication with others. The session focuses on utilizing technology appropriately and when technology should not be substituted for other approaches. It isn't merely "getting back to basics," but the ability to discern the right time and place for high-tech to be the tool of choice for an FM manager.

Learning Objective(s):

- 1. Identify the appropriate situations for a hightech solution
- 2. Determine what technology tools to use in certain situations
- 3. Solidify the role of and function of an FM manager in a technology-driven business environment

AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations

T1.47 Facility Assessments: From A to Z

Frank Kaleba, Senior Engineer, R&K Engineering

What is the value of assessments, and why

are they important to you? Times are tough, but facility assessments pay off. This presentation will describe the applications for a wide range of facility assessments, including ASTM protocol and internal methods that can save money and improve ROI.

Learning Objective(s):

- 1. Describe facilty assessment ASTM protocol
- 2. Discuss the range of methodologies available
- 3. Discuss the costs and benefits of a range of methods

AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

T1.49 Energy Harvesting Building **Technologies & Tax Incentives for Commercial Building**

Cory Vanderpool, Business Development Director, EnOcean Alliance

Energy harvesting building technologies represent cost effective solutions for retrofits and new construction. There are incentives that can help building owners cover the costs related to their implementation. This presentation aims to identify the importance of building sustainability and provides about existing state and federal incentives.

Learning Objective(s):

- 1. Understand the advantages of utilizing energy harvesting technologies for energy efficiency
- 2. Understand the Commercial Building Tax Deduction program
- 3. Understand the benefit of exploring state incentives for building retrofit initiatives
- 4. See real world examples of energy harvesting applications

AUDIENCE: INTERMEDIATE CEU: 0.1

10:00 AM

Greening an Existing Building

T2.21 Renewable Energy and Sustainability in Whole Building **Design Guide**

Richard Paradis, P.E., BSCP, Director, Advanced Materials Program, National Institute of Building Sciences

The Whole Building Design Guide is the premier resource for professionals, students and the general public to find building design information. WBDG is the largest online portal for building sciences in the world. WBDG advocates an integrated approach to the planning, design, construction, operation and maintenance of buildings. To meet today's stringent energy performance goals, building teams must look to new ideas in sustainability and renewable energy, while understanding the importance of O&M in maintaining performance over the long term. WBDG provides the resources to achieve these goals.

Learning Objective(s):

- 1. Understand the integrated approach to the building planning design construction, operations & maintenance process
- 2. Explore new renewable energy & sustainable design resources in WBDG
- 3. Understand the importance of O&M in achieving project design goals
- 4. Be aware of continuing education courses in WBDG

AUDIENCE: BEGINNER CEU: 0.1

Energy Efficiency, Upgrades and Utilities

T2.24 Funding Energy Efficiency Improvements

Brooke Bey Smallwood, Program Specialists, Pepco C&I

Today's facilities managers are constantly searching for innovative strategies to reduce energy consumption and operational costs. This session will address a number of funding mechanisms and programs which can assist facilities managers with finding ways to pay for energy and operational improvements. The session will cover demand response, energy efficiency programs, and tools which can escalate pay back, reduce operational costs and provide new streams of revenue. Learning Objective(s):

- 1. Identify funding mechanisms which support energy efficiency projects in facilities
- 2. Understanding of how demand response programs work
- 3. Learn how continuous M&V and enterprise energy management provide ongoing savings
- 4. Learn the role of energy efficiency programs in helping to fund projects

AUDIENCE: INTERMEDIATE CEU: 0.1

Systems

T2.27 Codes and Controls

Michael Jouaneh, Marketing Manager, Lutron Electronics

Bob Freshman, Marketing Manager, Leviton Lighting Management Systems Mike Houston, Sr. Product Line Manager, WattStopper

Lighting controls can eliminate a significant portion of wasted lighting energy in buildings while enhancing occupant comfort and productivity. This session will review the mandated current and future lighting control requirements in standards/codes such as ASHRAE 90.1 2010 and IECC 2012.

AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations

T2.39 Integrated Energy Efficient and Renewable Solar Retrofit Roof Systems

S. Mark James, President, RetroSpec, LLC Retrofit re-roofing technologies have been around for more than four decades and with the current focus on building envelope upgrades for energy-efficiency and renewable solar energy, you can now incorporate increased thermal resistance and solar hot air/water and electricity in re-roofing plans. Collectively, these integrated re-roofing technologies can heat your building, provide electrical power and can even provide landscape irrigation through rainwater collection all in a roof assembly that is LEED accredited and now subsidized by federal tax credits and other local incentives. Learning Objective(s):

- 1. Learn the benefits of metal roofing in general
- The issues with older roofing technologies and reasons to retrofit with metal
- 3. How retrofit systems are engineered to upgrade existing roofs to current code compliance
- How these assemblies play a major role in Energy Savings and LEED Certification AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations, Safety and Security

T2.43 Implementing NFPA 70E for Arc Flash Safety

Daryn Lewellyn, President/Founder, Lewellyn Technology

Want to know more about implementing 70E? Applying NFPA 70E to real-world situations can be confusing and at times overwhelming. This informative session equips attendees with the knowledge you need to keep your employees safe from electrical hazards. You will learn practical information you can begin to apply immediately at your workplace.

Learning Objective(s):

- 1. Learn how NFPA 70E and OSHA work together
- 2. Learn how to have an Arc Flash Hazard Assessment conducted at your facility
- 3. Learn proper use of personal protective equipment
- Learn how Arc Flash Hazard Assessment keeps workers safe

AUDIENCE: INTERMEDIATE CEU: 0.1

Staff Training and Development

T2.45 Unraveling the Five Myths of On the Job Training

Chuck Levine, EdD, President, Instructional Design Associates

On the Job Training (OJT) is everywhere; any time one person says to another "let me show you how to do this" they are doing OJT. The question is — what are they training? Is it correct, safe and does it follow procedure? Or is it "field folklore", a shortcut or an urban legend. In this session we will examine each of the five myths of OJT and discuss how they apply to today's workforce. The second part of the session we cover the six characteristics of excellent OJT training and you will have an opportunity to evaluate your own OJT training activities. Learning Objective(s):

- 1. Understand the five myths and apply them to your training needs
- 2. Use the myths as a management tool to improve the organization of the training
- Use the characteristics of OJT Training as an instructor training tool to help the trainers train more effectively

AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement

T2.47 Finance 101 for Facilities Managers

Jim Wilton, VP, Marketing and Solution Management, Planon Software

Understanding and communicating the fiscal importance of real estate and facilities projects to executive management and the office of finance has never been more important. This session will walk through the key areas covered by facilities management to help facilities managers understand their cost drivers, reduce expenses, and justify their investment and secure the resources required to be successful.

Learning Objective(s):

- 1. Understand your property level budget
- 2. Uncover cost drivers and what opportunities exist to reduce property-related expenses
- 3. The 10 Key Performance Indicators that every CFO wants to see
- 4. Connect FM plans to overall corporate

strategy and justify the investment in facilities management

AUDIENCE: INTERMEDIATE CEU: 0.1

Systems, Technology

T2.49 Making it Run Right

Steve Tom, P.E., PhD, Director of Technical Information, Automated Logic Corp.

There are many new products on the market that use less energy, provide more comfort, and conserve natural resources. Unfortunately they all cost money, and for many building managers that is an unnatural resource at the moment. Sometimes the most cost effective improvements simply involve getting things to work the way they're supposed to. This presentation will show how to use existing building automation tools to find problems that are wasting money. Stuck dampers, outdated schedules, locked points, and similar problems can go unnoticed for years or they can easily be spotted by a few simple troubleshooting techniques. The presentation will also unveil new tools that can make it even easier to spot these problems.

Learning Objective(s):

- 1. Understand how common problems can lead to huge energy losses
- 2. Learn how existing building automation tools can help spot common problems
- Learn simple programming tricks that can spot developing problems
- Become aware of emerging tools that can make troubleshooting even easier

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AUDIENCE: BEGINNER CEU: 0.1

11:00 AM

Greening an Existing Building

T3.18 Greening Towards Your Bottom Line

Craig Sheehy, CPM, LEED AP, President/ CEO, Envision Realty Services

After a property or facilities manager has become knowledgeable on sustainable tools, benchmarked their building, appointed the team, received approval for the initiative and figured out how to pay for the initiative it is time to start implementing these projects. This module will give participants the 30,000 foot view on different sustainable projects – from water to energy to waste management to indoor air quality – and provides effective sustainability project management strategies. Craig Sheehy, an expert in Green Operations will show you, in this lively discussion, low cost/no cost solutions for sustainability in your existing buildings.

Learning Objective(s):

- 1. Understand to best way to venture into sustainable projects
- Learn about the major sustainable areas including water, energy, waste and indoor air quality
- 3. Comprehend how to keep sustainable project implementation on track and on budget
- 4. Be able to communicate these implementation strategies to your internal team and external stakeholders

AUDIENCE: INTERMEDIATE CEU: 0.1

Green Standards

T3.21 Real Business Benefits for Green Cleaning

LeRoy Dock, President, GSI Eco Healthy Cleaning; Mark Petruzzi, Vice President of Certification & Strategic Relations, Green Seal, Inc.; Marion E. Stecklow, MT, CIE, CHCM, ICE, Executive Director Building Wellness Institute

Join experts in sustainability and health from Green Seal, the Building Wellness Institute, and GSI Eco Healthy Cleaning for a presentation and discussion on the business benefits of cleaning to protect health and the environment. Case studies will be presented for a major league baseball stadium, commercial office property management company and county school district

Learning Objective(s):

- 1. Understand the correlation between facilities maintenance and health
- Explore science-based certification for the green and healthy products processes and equipment required to protect health and the environment
- 3. Understand how staff and building occupants benefit from green cleaning practices
- Learn how to take your health and sustainability practices to the next level to differentiate your school office building or corporate facility

AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

T3.24 Proven Energy Saving Programs & Initiatives

Bob Holesko, CEM, CEA, Vice President, Facilities, HEI Hotel and Resorts

This session will target proven energy saving programs and initiatives that can be overlooked by even the most experienced facilities manager. Regardless of building type and company guidelines most buildings have yet to realize operational energy saving opportunities and may still have attractive capital projects that could deliver short pay back periods. The presenter will discuss and supply a list of specific operational and capital related energy saving items that tie to HEI Hotels & Resorts Award winning Energy Conservation program (ENERGY STAR Partner of the Year 2010 & 2011).

Learning Objective(s):

- 1. Identify proven low cost/no cost operational energy savings items
- 2. Demonstrate how a group of small easy to implement operational changes add up to substantial savings
- 3. Review select capital projects that may be worth revisiting as technology and pricing improve

AUDIENCE: INTERMEDIATE CEU: 0.1

Systems

T3.27 Delivering Green Design with Testing Adjusting and Balancing a HVAC System

John Hamilton, COO, ICB/TABB

This presentation will cover the final component to make a HVAC system meet green design requirements. The importance of the testing, adjusting and balancing of the HVAC system is the single most integral part

of a building truly being healthy inside. The topics covered in this presentation will touch on the dos and don'ts of commissioning/ retro commissioning and testing adjusting and balancing of HVAC systems, and the correlation between indoor air quality, energy consumption and commissioning.

Learning Objective(s):

- How writing a modern day spec can cost the occupant energy and how to avoid that waste of energy
- Increase audience's awareness of what it takes for a successful and optimal performing HVAC system
- How Division 23 specifications for construction and performance testing of HVAC systems are required to assure that they provide the proper airflow and outside air.

 AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations

T3.37 Pavement Management

Sergio E. Pagés, Vice President/Chief Information Officer, StructureTec This presentation will describe how to develop a pavement management program for multiple sites. By developing such a program facility managers can plan and forecast their maintenance, operational and capital budgets for each site. In addition to reviewing different pavement technologies, we will review pavement project management processes.

Learning Objective(s):

- 1. Understand asset management: complete replacement versus repairs
- 2. Learn proper ways of assessing the condition of pavement sites
- 3. Develop a prioritization rating scale by using a Pavement Condition Index (PCI)
- Become aware of sustainability programs for pavement and benefits of recycled product AUDIENCE: INTERMEDIATE 0.1

Power: Generation and Reliability

T3.41 Perfect Power: A Perfect Way to Grid Independence

Steve Bridgewater, Business Development Manager, Smart Consumption, Siemens Industry, Inc. Building Technologies

The integration of alternative power sources will transform the way buildings, building owners/operators, and consumers use energy. Once-passive energy consumers will become active 'pro-sumers' of energy with the combination of on-site energy generation, storage, two-way communication, and smart consumption applications. It's a balancing act to maximize energy efficiency of a building while maintaining full independence from the grid. In this presentation you will learn about the value proposition, practical applications, and the steps you can take today to prepare your building(s) for 'Perfect Power'.

Learning Objective(s):

- 1. Understand what exactly is Perfect Power
- 2. Learn about the role of Microgrids in delivering reliability and security to a building's ecosystem.
- 3. Highlight applications of net-zero and learn how you would prepare your building to achieve net-zero operation.
- 4. Gain insights into the new role for Building Automation to deliver functional components of the Smart Grid.

AUDIENCE: ADVANCED CEU: 0.1

IT PAYS TO ATTEND NFMT!

Some universities offer scholarships - NFMT offers cash on the spot. As an attendee you can enter to win daily cash prize giveaways. Each day of the event, during Exhibit Hall hours, there will be a drawing for \$1,000 cash.

Attendees spotted in the Exhibit Hall wearing their VIP pins - available onsite - could win \$50 cash on the spot.

\$1,000 Daily Drawing Co-sponsored by:







Solutions Exchange Wednesday, March 14 7:45-8:50am

Pratt Street Lobby

Have you heard of speed dating? NFMT is going to spice things up with its own version ...Solutions Exchange

Solutions Exchange is a round-robin interactive session that engages you through discussions on the critical topics in facilities management. Take your seat among your peers and join in an exchange of ideas, facilitated by some of the top manufacturers and experts serving the facilities industry. After 20 minutes, the discussion concludes so that the next batch of table discussions can begin. You will have the opportunity to participate in up to three table discussions. Topics include: energy efficiency, lighting, HVAC, doors, software and more. For a complete list of topics please go to the website.



Strategic Planning

T3.43 Obtaining Capital Funding with Accurate Data and Analysis

Ana Thiemer, Project Manager - Renovation and Renewal Program, Facilities Services, The University of Texas at Austin

In response to increasing budget challenges, the Budgetary Council at the University of Texas at Austin implemented aggressive policies to clamp-down on unnecessary budgetary drains. As a priority measure, the Facilities Department implemented a solution to track every project dollar allocated. By leveraging both detailed facility condition assessments and a web-based self-assessment tool, they established transparency into the process of making accurate and objective funding decisions. Attendees to this session will learn how the Facilities Department secured an increase in annual funding based on its ability to demonstrate concrete project data and the need for more funding. Learning Objective(s):

- 1. How UT Austin secured annual funding increases
- 2. Benefits of implementing a facilities management solution
- 3. Benefits of implementing a self-assessment solution
- 4. How to use concrete facility data to prove capital needs

AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement, Staff Training and Development

T3.45 The FM of Today versus the FM of Tomorrow

Dean Kashiwagi, PhD, P.E., Professor and Director of the Performance Based Studies Research Group, Arizona State University

What is the new FM role of the future? The FM who can deliver value and performance at a lower cost, heading a seamless organization of "in-house" and outsourced vendor personnel, which maximizes the profits of the vendors without increasing the cost. The FM will use a leadership based structure to create a transparent measured environment that minimizes the need to manage, direct, and control. The new organization will be a revolving door of the latest technology, with very little overhead, outstanding value, and providing the facility of the future. This session will share case studies from various industries.

Learning Objective(s):

- 1. Creating value and accountability in a transparent manner
- 2. Where the industry is headed and where you want to be
- 3. How to lead your team to success
- 4. Case study results on what other leaders have

AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities,

T3.47 Energy Management and the Green Data Center

Jim Fletcher, Distinguished Engineer, Chief Architect - Tivoli Green Datacenter, and SAPM, IBM

Data center energy management, sometimes referred to as "the green data center," is now one of the hottest topics in the IT industry. In this session we'll take a deeper look at the problems being faced by the IT industry around the globe, and the direction that is being taken to address the issues required for effective energy management. We will also discuss the emerging integration of the management of traditional IT and data center facilities, and share results from a recent client implementation. Learning Objective(s):

- 1. Learn about the underlying factors contributing to data center energy use doubling in the past five years
- 2. Understand how to achieve enhanced visibility and control to optimize power efficiency and enable clients to manage and maintain lifecycle of assets
- 3. Learn how one customer took action and implemented a solution to address these emerging IT energy-related issues AUDIENCE: ADVANCED CEU: 0.1

Technology

T3.49 The Impact of Integrated Smart Controls on Building Design

Jim Sinopoli, Managing Principal, Smart Buildings

While many designers and facility managers find the concept of integrated and connected building control systems persuasive and intuitive they struggle with moving from the concept to actual deployment. The learning that will occur in this session is about how they can make the move to specific design and deployment. Integrated building systems produce "wholes that are greater than the sum of the parts". This is reflected in greater functionality, efficiency and effectiveness. While Division 25 of the MasterFormat, Integrated Automation, formalized the use of integrated building systems as a standard part of building design, it is somewhat undervalued and misunderstood. Attendees will be able to understand its value and need, be presented with case studies and based on that understanding slightly changes their approach and thinking resulting in more awareness for integration and connectivity. Learning Objective(s):

- 1. Identify and describe the basic design foundations technology systems and management systems associated with smart controls
- 2. Develop a basic knowledge of the design and installation issues related to the infrastructure of a smart building including innovative energy and sustainable systems
- 3. Collect organize display and interpret the relationship commonalities and differences of smart and green buildings
- 4. Demonstrate and communicate the sustainable value of a smart building design to the building owner/operator and cost justify the smart building approach AUDIENCE: ADVANCED CEU: 0.1

Wednesday, March 14 9:00 AM

Green Standards

W1.18 Selecting The Right Standard

Bill Fellows, Green Cleaning Advisor, Bill Fellows Consulting

This session is an unbiased discussion of all three standards designed to assist cleaning organizations understand each line item and how an assessor handles the assessment for each. The discussion includes the advantages and disadvantages of each standard and recommendations on preparing for the official assessment, a question and answer session is included to reply to more specific questions. Learning Objective(s):

- 1. Understand the differences and similarities in ISSA's Cleaning Industry Management Standard (CIMS), Cleaning Industry Management Standard for Green Buildings and Services (CIMS-GB) and Green Seal's GS-42
- 2. Identify the advantages and disadvantages of each with recommendations on preparing for the official assessment
- 3. Select the standard(s) that brings the greatest benefits to the cleaning organization AUDIENCE: BEGINNER CEU: 0.1

Greening Existing Buildings

W1.21 High-Performance and Outcome-Based: An Emerging **Market for Facility Services**

Rick Walker, LEED AP, Program Leader, High-Performance Building Services, Trane In 1983, Harvard University professor Theodore Levitt made the observation that "People don't want quarter inch drills. They want quarter inch holes." This outcome-based approach has changed the way companies think of services and have helped transform many service industries from a wrench-based cost-driven commodity to a high-level, knowledge-based offering that delivers business using tools, technology and connectivity with client business systems. Through case studies, this session will demonstrate how, by thinking differently about the impact of their building on their business mission, building owners were able to focus on the desired outcome in individual problem areas and dramatically improve business performance. Learning Objective(s):

- 1. Understand the relationship between facilities and an organization's mission
- 2. Learn how high-performance buildings play a role in improving business performance
- 3. Define 'outcome based services' and the use of products and services to deliver desired outcomes

AUDIENCE: BEGINNER CEU: 0.1

Energy Efficiency, Upgrades and Utilities, Technology

W1.24 ASHRAE's Building **Energy Quotient (BEQ): How** Does Your Facility Stack Up?

James L. Newman, CEM, LEED AP, Managing Partner, Newman Consulting Group, LLC

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is the primary formulator of Energy, Ventilation and Thermal Comfort Codes for the building industry. These codes form the basis for many of the points in the US Green Building Council's LEED (Leadership in Energy and Environmental Design) certification of new and existing buildings. THE BEQ is a report card of a building's energy use, and will range from A+ to F. All other things being equal, if two buildings are up for sale or are looking for tenants, the building with the higher grade will likely be the winner, as a buyer or prospective lessee will realize their energy bills will be lower in that building. As a facility manager or owner, it is important you be aware of what kind of information goes into this report card - and how it can affect you.

Learning Objective(s):

- 1. Become familiar with the definitions in the BEQ
- 2. Have an awareness of how the BEQ is formulated
- 3. Learn what can be done to improve your
- 4. Learn how to use the BEQ to your advantage AUDIENCE: INTERMEDIATE CEU: 0.1

W1.27 Bagging Conventional Indoor Lighting for LED

Bill Ballweg, Product Development Manager, Lithonia Lighting

A 35,000-square-foot Supervalu property in Boston was the first grocery store in the nation to be entirely lit with LEDs. The grocery store chain is now beginning to install LED lighting across its portfolio. Supervalu's senior manager of electrical systems and a leading LED lighting expert, both of whom are working closely on the project, will present a step-by-step case study on the grocery store chain's conversion from conventional lighting to LEDs. Specifically, the speakers will guide attendees through the indoor ambient LED lighting specification process, testing criteria, installation process and best practices. Learning Objective(s):

- 1. Learn about a real-world application of indoor ambient LED lighting
- 2. Discover key performance criteria for selecting indoor ambient LED lighting including thermal management light output and color consistency
- 3. Learn how the installation process of LED lighting systems varies from conventional lighting systems
- 4. Discover best practices when specifying and installing indoor ambient LED lighting AUDIENCE: INTERMEDIATE CEU: 0.1

Strategic Planning

W1.37 Communicating with the E-Suite in Preparation for **Economic Recovery**

IFMA Chesapeake Chapter Panel

The current economic downturn has resulted in the deferral of replacements and/or upgrades of major equipment. As the economy continues through a slow recovery, the need to begin to fund projects to avoid catastrophic failures that will disrupt business continuity fast approaches. Facility Managers need to begin the process of effectively communicating with the E-Suite to

plan for the orderly investment in major project improvements over the next 24 months. Learning Objective(s):

- 1. Understand how to gain E-Suite approval for major replacements and/or upgrades
- 2. Learn how to effectively communicate with the E-Suite
- 3. Learn what the E-Suite looks for in a business proposal

AUDIENCE: BEGINNER CEU: 0.1

Maintenance and Operations

W1.39 What Lies Beneath: An Analysis of Parking Lot Maintenance

Mike Condon, Senior National Account Executive, Rose Paving

This interactive session will educate on the fundamentals of asphalt and how to maintain a safe and healthy pavement, even on a tight budget. Diagrams and other illustrations will help the audience to better visualize topics such as asphalt construction and failures as well as long-term budgeting for proper repairs. Learning Objective(s):

- 1. Understand the life-cycle of a parking lot
- 2. How to assess your pavement and understand primary causes of asphalt failure
- 3. How to prioritize repairs and determine the most cost-effective maintenance procedures
- 4. Understand factors unique to your property or properties that affect the timing of pavement maintenance both short and long-term AUDIENCE: INTERMEDIATE CEU: 0.1

Power: Generation and Reliability

W1.41 Plug Load in Commercial Offices

Michael Murray, CEO, Lucid Design Group Plug loads in commercial offices represent a significant challenge to achieving highperformance buildings, particularly net-zero energy buildings. As efficiency gains are made in lighting and HVAC, plug loads are the next big opportunity for conservation, but they require behavioral solutions in order to be effective. The first problem is understanding the magnitude of plug loads in a typical office. This session will present measured electricity end-use data for nine buildings, representing over 900,000 sq-ft with disaggregated lighting, HVAC and plug loads. Plug loads represent 30-50 percent of total building electricity use in these cases, much higher than previously thought. Learning Objective(s):

- 1. Understand the electricity consumed by end uses in commercial buildings through empirically measured data
- 2. Discuss the design and operational impacts of plug load energy consumption
- 3. Review strategies for utilizing real-time monitoring and web based feedback displays to engage building occupants to reduce plug load consumption between 5-35 percent AUDIENCE: INTERMEDIATE CEU: 0.1

Safety and Security

W1.43 The Do's and Don'ts of Fire Alarm/Suppression Inspection, Testing and **Maintenance**

Steve Carter, Vice President of Engineering, **ORR Protection Systems**

The NFPA standards along with local and state codes require your fire alarm/suppression system(s) be inspected and tested every year and in some cases multiple times in a year; do you know what is required for your system? This session is designed to help you understand what you must "do" to maintain your fire systems and what "not to do" which often leads to nuisance alarms and system problems. By the end of this session, you will have a solid understanding of how fire alarm systems work and what you can do to reduce those costly emergency calls. Learning Objective(s):

- 1. Understand how fire systems work and why
- 2. Understand the NFPA inspection and testing requirements
- 3. Learn what record keeping is required by law and how to make it easier
- 4. Prevention is the best medicine, learn what to do and when to do it

AUDIENCE: BEGINNER CEU: 0.1

Leadership and Career Advancement, Maintenance and Operations

W1.45 The Eight Steps to Success for Maintenance Planning and Scheduling

Ricky Smith, Principle Reliability Advisor, **GPAllied**

Maintenance planning is one of the key elements that influences the true success of any organization. Many times we have a planner, but do not know how to use him or her effectively or efficiently. When we talk about maintenance planning, we are talking about higher wrench time. At this time of economic uncertainty, a higher wrench time equals lower cost, which results in job security for all. Past studies have shown that most companies do not perform maintenance planning effectively thus impacting negatively on work effectiveness, wrench time, equipment uptime, equipment reliability, and cost. This is the one session that is all about the eight steps you can take in maintenance planning to become a true success, and the secret is that it is not that difficult.

Learning Objective(s):

- 1. Tips to make successful maintenance planning
- 2. How to get more effective work with the same
- 3. How to manage a proven planning and scheduling process
- 4. How to measure performance of planning and scheduling

AUDIENCE: BEGINNER CEU: 0.1

Technology

W1.49 Verifying Sustainable Roofing Assets with RoofPoint

James Hoff, DBA, Research Director, Center for Environmental Innovation in Roofing

Although the energy and environmental impacts of roofing footprints are enormous, few guidelines are available to help facility managers make energy-efficient, sustainable roofing choices. This session will discuss how the Center for Environmental Innovation in Roofing has developed RoofPoint, a sustainable roof system guideline to be a guide, validate the roof system selection process, and select a roofing system that aligns with well-defined building sustainability criteria. In addition, the session will discuss how RoofPoint's non-proprietary approach supports competition and choice for building owners. Finally, the session will review recent case studies demonstrating how RoofPoint can be integrated into almost any roofing project with minimal expense.

Learning Objective(s):

- 1. Recognize the contributions of commercial roofing systems in achieving a sustainable built environment
- 2. Understand the sustainability criteria and methodology incorporated in RoofPoint and how it may be used to assess roofing system alternatives
- 3. Obtain the tools needed to conduct a RoofPoint roof system evaluation and achieve certification for roofing assets AUDIENCE: INTERMEDIATE CEU: 0.1

10:00 AM

Green Standards

W2.18 Transpare: A New Platform for Evaluating Environmental Preferability

Bill Balek, Director of Environmental Services, ISSA - The Worldwide Cleaning Industry Association

Radical transparency, supply chain management, and sustainability reporting are shaping the way we evaluate and exchange information about the environmental, health and safety attributes of cleaning products. Transpare, developed by ISSA and Ecoform, is a web-based system that taps into these pervasive market trends by providing a comprehensive environmental profile of cleaning products in an open and transparent manner. This session will examine the evolving green marketplace and the benefits Transpare provides in evaluating the environmental, health and safety characteristics of cleaning products.

Learning Objective(s):

- 1. Learn about Transpare
- 2. Understand an overview of the state of the green marketplace:
- 3. Limitations of existing ecolabel systems and benefits of Transpare in light of the evolving marketplace
- 4. Functionality of Transpare and how it empowers facility managers to identify and select green cleaning products that are consistent with and supportive of their sustainability goals

AUDIENCE: BEGINNER CEU: 0.1

Maintenance and Operations

W2.21 Sustainable Commercial **Landscape Management**

Richard Restuccia, Director for Water Management Solutions, ValleyCrest Companies, Inc.

Beautiful landscapes drive value but managing this important asset is sometimes an afterthought when so many other things compete for your attention on a daily basis. Find out how other facility managers have implemented sustainable changes and what you should expect from your landscape partner from cost saving ideas to enhancements that build strong curb appeal. Your landscape partner should be creative, proactive and committed to your property's success. We'll identify specific areas you should focus on to create a landscape that is functional, beautiful, sustainable and cost-effective. And we'll help clarify facility managers' role in developing landscaped areas that complement new construction or the renovation of existing buildings. Learning Objective(s):

- 1. Learn best management practices implemented on commercial properties that include developing a water conservation program, irrigation efficiency, soil stabilization, plant health and waste reduction
- 2. Learn water management secrets with the largest impact on ROI
- 3. How to integrate your landscape with your overall property objectives including reducing its ecological footprint
- 4. Learn vendor best practices for a financial and landscape perspective AUDIENCE: INTERMEDIATE CEU: 0.1

Greening an Existing Building

W2.24 Building Renovation Improves Energy Efficiency and Sustainable Performance

Tom A. Pedersen, Director of Sustainability,

CDM's Cambridge Massachusetts global headquarters, the largest commercial single tenant occupied building in the city, was identified by the Cambridge Energy Alliance as a prime candidate for their newly instituted building energy efficiency improvement program. In 2009, CDM entered into a partnership with the building owner, building manager and CEA to conduct an energy audit and implement improvement programs concurrent with sustainability focused renovation activities guided by the USGBC LEED® criteria. This presentation will describe the collaborative interdisciplinary project approach employed, the specific improvement measures implemented and the quantified reduction in energy use, greenhouse gases emissions and cost savings achieved. Learning Objective(s):

- 1. Understand roles of building owner, manager, tenant and service provider in sustainability improvement
- 2. Recognize and leverage interdisciplinary nature (HVAC, Architectural, Civil...) of sustainability improvement projects
- 3. Ability to define key energy improvement opportunities
- 4. Recognize importance of triple bottom line dimensions (people-planet-profit) in planning improvements

AUDIENCE: ADVANCED CEU: 0.1

Maintenance and Operations

W2.37 Metering, Measuring and **Verification Strategies**

Troy Hull, Director, Metering Solutions, Leviton

Learn about the importance of using submeters for measurement and verification as well as the products and technologies available today. This presentation will cover understanding the applications where sub-meters should be used and how to select the appropriate product. Understand how LEED credits can be earned using meters and measuring software solutions and the requirements for metering in government facilities. This will also cover the software applications that consolidate the meter data to show how energy use can be intelligently decreased in any type of structure. Learning Objective(s):

- 1. Understanding the value and benefits of measurement and verification through metering systems
- 2. Understand the opportunities of employing metering in facilities
- 3. Learn how to gain LEED credits with measurement and verification technologies **AUDIENCE: INTERMEDIATE CEU: 0.1**

Maintenance and Operations

W2.39 Complying with the **Federal Buildings Personnel Training Act**

Larry Ross, PE, CCP, CPE, Director of Maintenance and Engineering, Erickson Retirement Communities

Signed into law in December of 2010, the Federal Buildings Personnel Training Act requires all contracted and federal employees who operate federal buildings to demonstrate core competencies in maintaining those facilities by passing the Government High Performance Buildings Certification exam by the end of 2013. Join representatives from the Association of Energy Engineers and the Association of Facility Engineering for a discussion of how this legislation will affect the future of federal facility management, and learn about the competencies required to gain certification.

Learning Objective(s):

- 1. Identify the core competencies that federal personnel must maintain in all federal buildings
- 2. Learn about the industry associations helping to ensure the federal government's personnel meet the required competencies
- 3. Review the six areas that General Services Administration must include as core competencies

AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations

W2.43 Legionella and Waterborne Pathogens: What's in Your Reclaimed Water?

Janet Stout, PhD, Director, Special Pathogens Laboratory

Collection and reuse of greywater, rainwater, and condensate for toilet flushing, irrigation and HVAC systems could replace 7 percent of drinking water production. Potential sources and links to disease will be reviewed as well as the waterborne pathogens that pose the greatest risks from reclaimed water. Microbiological control of reclaimed water will be addressed and includes

novel application of water treatment strategies, such as ultraviolet disinfection, filtration and biocides. A safe and sustainable water reuse program must address the potential public health implications of untreated reclaimed water. Learning Objective(s):

- 1. Learn the potential risks of water reuse and grey water for facilities with respect to amplifying waterborne pathogens
- 2. Learn approaches to managing the risk of waterborne pathogens and Legionnaires' disease 3. Learn what's new regarding the epidemiology of waterborne pathogens; reservoirs, transmission, risk factors and guidelines AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement

W2.45 Three Keys to Sustaining Organizational Change

Bruce Wesner, Managing Principal, Life Cycle Engineering

Have you ever been the leader of a significant business change and not been able to make it "stick"? Most organizations feel that the key element in any project is sound project management. But what about the people who the change is affecting? This presentation will focus on the essential elements required to effectively manage a business change initiative and ensure it is sustainable.

Learning Objective(s):

- 1. Understand the three elements of successful projects
- 2. Understand that change happens in two dimensions
- 3. Connecting change management to business results
- 4. Case study review why do projects fail? AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

W2.47 Smart Buildings: Energy **Optimization Technology for Efficiency and Savings**

Michael Zimmerman, CEO, BuildingIQ Commercial buildings consume 20 percent of U.S. energy. Facility managers are looking to save energy and reduce their utilities expense with less capital and resources. Many existing energy management systems do not have the capabilities to incorporate predictive modellingbased optimization strategies that address realtime and forecasted weather data, real-time and future energy supply pricing/constraints, and the occupant comfort the current environment demands. This session will explore the next generation of intelligent building energy management, showcasing how predictive energy optimization technology can manage energy consumption in buildings and save 10-30 percent energy with little or no capital and no impact on occupant comfort.

Learning Objective(s):

- 1. Review and discuss core issues in balancing building performance, tenant satisfaction and managing costs
- 2. Highlight new technologies and approaches that overcome challenges without capital expenditure or operating budget increases
- 3. Introduce the concept of predictive energy optimization
- 4. Provide case studies on real savings and operational improvements AUDIENCE: INTERMEDIATE CEU: 0.1

Strategic Planning

W2.49 Linking End User Data to **FM Solutions**

Kevin Rettle, Director of Innovation Marketing, Sodexo

This session will present primary research that Sodexo gathered from the CoreNet community in 2011 which identified the short and long term outlook for facilities management. Most notably, CoreNet respondents anticipate a trend towards more integrated and consolidated workplaces, increased demand for a global service provider, increased integrated services, outsourcing all non-core functions and measuring outcomes related to FM. Using CoreNet trend data, Sodexo created a holistic strategy for organizational change that combines elements of designed community, designed workspace, consolidation of services, and alignment with a value structure that has been shown to influence individual and organizational well-being. This session will delve into this model and will provide case studies showing how it plays out and how we map outcomes to our process.

Learning Objective(s):

- 1. Understand the outlook of facilities management outsourcing
- 2. Understand the correlation of trend data, end user preferences and psychographics related to the design of FM solutions
- 3. Be able to measure FM outcomes AUDIENCE: INTERMEDIATE CEU: 0.1

3:10 PM

Greening an Existing Building

W3.21 Sustainable Glass Solutions

Andrew Sabados, President & CEO, Cornerstone Energy Solutions, LLC

Attend this session to understand the latest technological developments in energy efficient glazing, energy conservation and how it applies to attaining LEED credits through advanced nano-ceramic window film technology. Learning Objective(s):

- 1. Learn about spectrally selective advancements in window film technology
- 2. Understand how window film technology can satisfy numerous LEED requirements
- 3. Be able to analyze, further research and select appropriate window films

Energy Efficiency, Upgrades and Utilities

W3.24 Energy Efficiency in Commercial Real Estate — **Double Bottom Line**

Tony Liou, President, Partner Energy

The movement to green commercial real estate or to reduce energy usage and greenhouse gas emissions means commercial real estate owners are facing mandates to reduce their emissions, but also have a fiduciary duty to their clients to invest their money wisely. We discuss market issues driving green real estate and how green real estate is being perceived by buyers/sellers in the market, how to identify accretive energy efficiency projects - or getting the most bang for your buck. A case study will be presented on benchmarking a portfolio, performing energy audits on the lowest performing assets, and implemented the energy efficiency measures that have the greatest payback. Learning Objective(s):

- 1. Learn about energy benchmarking
- 2. Understand energy audits
- 3. Comprehend energy efficiency project implementation
- 4. Understand quality assurance & verification AUDIENCE: INTERMEDIATE CEU: 0.1

Systems

W3.27 Lighting Efficiency or **Effectiveness?**

E. W. Dovel, VP, Public Sector, Harris Lighting

Many engineered energy projects focus on the efficiency of the lighting recommendations. Real world application requires more than just lumens/watt in any assessment. Come learn about the variables you need to determine to get what you pay for.

Learning Objective(s):

- 1. Define efficient and effective lighting
- 2. Contrast the two terms from a lighting perspective
- 3. Provide real world examples for both
- 4. Be able to answer the question, What is the "best" lighting for my building? AUDIENCE: BEGINNER CEU: 0.1

Strategic Planning

W3.30 Doing Business with the

Mary L. Snodderly, GSA Center for Facilities Maintenance and Hardware; LaVaughn Seepersad-Fayson, Sustainability in Procurement Fellow, Public Building Service

Companies interested in doing business with the General Services Administration (GSA) should not miss this class. A representative from GSA's Public Building Service Industry Relations will discuss how they procure the products and services needed to fulfill their mission. Also, hear from a representative of GSA discuss the basics of the schedules program, with emphasis on the Facilities Maintenance and Management Schedule, and how to obtain a schedule contract. Learning Objective(s):

- 1. Learn how to do business with GSA's Public **Building Service**
- 2. Find out how to obtain a GSA Schedule contract
- 3. Understand the green purchasing requirements of the Federal government AUDIENCE: BEGINNER CEU: 0.1

Maintenance and Operations

W3.37 Your Building's Weather **Barrier** — What Every Facility Manager Should Know

David Leslie, Sr. Consultant/Sr. Project Manager, Conley Group

It is critical to the long-term success of any project and to the sustainable performance of any building that the building envelope components be brought together to create an integrated weather barrier. This is achieved through the purposeful coordination of the three elements of all projects; design, material and installation. This seminar will define the concept of the building envelope, examine the importance of obtaining an integrated weather barrier and explain how the functions of design, material and installation are intimately intertwined and how they can be coordinated. Learning Objective(s):

- 1. Define and develop a better understanding of the building envelope concept and the integrated weather barrier concept
- 2. Define and develop a better understanding of the design, material & installation concept and how they are related
- 3. Explore the process of proactively creating coordination between design, material and installation

AUDIENCE: INTERMEDIATE CEU: 0.1

Power: Generation and Reliability

W3.41 Codes and Standards for **Power Reliability**

Ronald Schroeder, Director of Product Management, ASCO Power Technologies AUDIENCE: BEGINNER CEU: 0.1

Safety and Security

W3.43 The Six Myths of Disaster Planning: Lessons Learned in **Turbulent Times**

Dave Mistick, Business Development Director, DKI

Jim Wills, Commercial Restoration Program Manager, DKI

Attend this session to discuss the practical steps to establish a culture of risk management and disaster planning in each organization. The session will examine lessons learned from seeing first-hand reactions to an event versus proactive actions prior to the event, and how many take hold of the task of disaster planning and preparation. Attendees will also receive guidelines for selecting vendors to support their disaster planning and recovery efforts.

Learning Objective(s):

- 1. Discuss the six myths of disaster planning
- 2. Explore practical steps to establish a culture of risk management and disaster planning
- 3. To be proactive prior to an event versus reactive after it has occurred
- 4. Helpful guidelines for selecting vendors to support their disaster planning and recovery

AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement

W3.45 Hot Topics in Labor and **Employment Laws**

John E. Cruickshank, Attorney, Alaniz & Schraeder

Join an expert labor and employment attorney as he outlines real world ways employers can remain in compliance and steer clear of legal trouble. The session will provide an employment law update which includes identifying new and amended employment and labor laws impacting the industry, many have been added, modified or amended within the last 6-months to one year. The sessions will also include case examples in a way that helps facility professionals understand how these laws impact their daily operations. Learning Objective(s):

- 1. Learn about major developments in Immigration Law
- 2. Get updated on Increased Government Regulatory Action
- 3. An overview on the New Jobs Bill
- 4. Learn what's new in labor laws impacting the facility management industry **AUDIENCE: BEGINNER CEU: 0.1**

Technology

W3.47 A New Tiered Approach to Employing Facility Condition **Assessments**

F. Joshua Millman, AIA, Principal; E. Garrett Brinton, Principal, FP+A

The facility condition assessment (FCA) is an important tool to lower your risk in managing and acquiring real estate assets. ASTM E20120-08 is the industry standard approach for FCAs. However, this approach may be too comprehensive and too costly. A new tiered approach defines the right assessment tool appropriate to desired outcomes. which is a smarter approach to setting a facilities condition baseline.

Learning Objective(s):

- 1. Understand the industry standards: ASTM Standard E2018-08
- 2. Evaluate facility condition assessment using a new four tiered approach
- 3. Employ this model to evaluate risks to mission in facilities purchases development
- 4. Present cost-benefit risk-to-mission analysis AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement, Staff Training and Development

W3.49 2012 Edition of Women in Facilities Management Roundtable

Now in its fifth year, this session has become a "not to miss" session for any women working in the field of facilities, maintenance, engineering and/or property management. This interactive roundtable discussion will feature three highly inspiring females discussing everything from mentorships to technical skills, life-work balance and communication styles. The historically male dominated industry is beginning to change and many women are poised to become the next generation of leaders,. Come discuss with your peers how to reach that level. This extended session will go from 3:10 - 4:30 p.m.

AUDIENCE: INTERMEDIATE CEU: 0.1

4:10 PM

Technology

W4.37 Data Centers: Scalable, Modular, Flexible, Efficient, Designs

Mark S. Evanko, Principal, BRUNS-PAK The data center facility design must optimize scalability, modularity, flexibility, and efficiency. These elements of facility infrastructure should be consistent and evolving with the IT department's computer hardware, software, network, cloud, and disaster recovery strategies. The data center solution should be cost effective and be compared to out-sourcing and/or co-location.

Learning Objective(s):

- 1. Elements of a scalable, modular, flexible, efficient data center
- 2. Impacts of data center elements to the information technology short/long term plan
- 3. Other data center cost corporate alternatives: co-location containers
- 4. Data center scalability and the impact to PUE.
- 5. Data center cooling options and the decreased operating costs.

AUDIENCE: INTERMEDIATE CEU: 0.1

Safety and Security

W4.39 Ensuring Fire Safety for Food Service Operations in **Commercial Facilities**

Nelson Dilg, President, Nelbud Services Group

Two important issues have recently emerged regarding fires in the grease exhaust systems of commercial buildings: 1) The NFPA standard governing this particular discipline (NFPA 96) now places compliance burden squarely upon the building owner and 2) firefighter deaths that resulted from these otherwise preventable fires have prompted several cities and states to pass laws requiring licensure and strict inspection/ reporting provisions, and more are beginning to speak of criminal consequences for building owners who fail to comply. This session will distill the specific responsibilities under NFPA 96, including changes to the standard, the building owner's responsibilities, the form that compliance takes in differing jurisdictions, and simple inspection techniques. Learning Objective(s):

- 1. Increase awareness of the building owners and engineers' responsibility to fire safety in grease exhaust systems
- 2. Learn about recent changes in NFPA 96 codes and compliance
- 3. Understand how inspection can help reduce noncompliance as well as the risk of fire in grease exhaust systems

AUDIENCE: INTERMEDIATE CEU: 0.1

Safety and Security

W4.41 The ENERGY STAR Portfolio Manager Tool

Robert Sauchelli, ENERGY STAR Service and Product Provider Program Manager, U.S. Environmental Protection Agency

This presentation will provide an update on ENERGY STAR for Commercial Buildings through a discussion of industry/regulatory

trends, and an introduction to Portfolio Manager, including an overview of the functionality that has made this tool the de facto industry standard for tracking commercial building energy performance. The presentation will also address how Portfolio Manager outputs can be used to plan and prioritize energy management activities - thereby translating information into action. Learning Objective(s):

- 1. Understand the financial, environmental, and regulatory drivers making energy performance benchmarking a necessity
- 2. Gain a better understanding of EPA's Portfolio Manager benchmarking tool
- 3. Learn about the variety of entry points into benchmarking - from single-building manual entry to automated data upload
- 3. Identify how benchmarking in Portfolio Manager can identify and prioritize energy improvement opportunities across portfolios AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement

W4.45 Raising the Bar: Differentiating Yourself in the FM Marketplace

IFMA Chesapeake Chapter Panel In these tight economic times, facility managers are being asked to provide greater expertise and professional knowledge to meet the management challenges of their organizations. Professional education in the form of the facility management professional credentialing is one such path that allows even those new to the profession to demonstrate competence with the topics and challenges that facility managers face on a day-to-day basis. Hear from and interact with a panel that can help you learn how to distinguish yourself as a valuable commodity to the facilities management organization. Learning Objective(s):

- 1. Understand the importance of differentiating yourself from other FM professionals
- 2. Learn the steps to differentiate yourself
- 3. Understand the importance of professional credentialing

AUDIENCE: BEGINNER CEU: 0.1

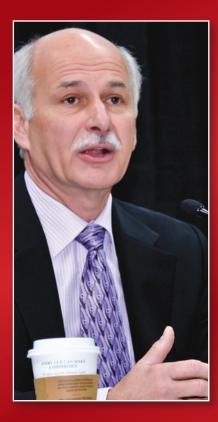
Technology

W4.47 Systems Integration Best **Practices**

Chris Hollinger, Senior Product Manager, Integrated Systems, Siemens Building Technologies, Inc.

There is increasing emphasis on sharing system data to consolidate information for the user, providing more efficient and productive facility systems, and adding value to the facility organization. Increasing integration leads to more complete information to drive productive energy efficiency and occupant comfort decisions. This presentation emphasizes strategies to assess short term and long term facility needs and goals. Learn how more integration requires careful planning to ensure vendors are delivering the products and configurations requested, making communication and detailed planning all the more vital. Learning Objective(s):

- 1. Understand why an integration strategy is important
- 2. Assess how to integrate systems
- 3. Use the right tools to integrate systems
- 4. Make the most of the investment AUDIENCE: INTERMEDIATE CEU: 0.1



General Session Thursday 8:00-8:50 am

Leadership and Career Advancement

TS.16 Engage in the Five C's of Leadership for Successs

Lenny Jachimowicz, FMA, Vice President Engineering and Facilities Management, Global Operations Services, Marriott International

Join Lenny Jachimowicz, who has catapulted up the Marriott corporate ladder from plumber to Vice President, Engineering and Facilities Management for Global Operations, for a discussion on the vital role leadership plays in a faciliity professional's career -- and how the Five C's of Leadership identified by PepsiCo's Chairman and CEO Indra Nooyi can be uniquely tailored to the facilities and engineering field. In this in-depth, interactive and engaging session, Lenny will identify the key moments in his own career trajectory that honed his leadership capabilities, spurred him on to the the next phase in his professional development and highlighted valuable lessons to pass along to the next generation of facility managment leaders.

Learning Objective:

1. Understand the importance of being

competent and a lifelong student 2. Learn how to be courageous and confidence

in regard to your competencies

3. Be able to communicate effectively to mobilize people 4. Review that you are being consistent with

your words and actions 5. Ensure that your compass points true North and you have integrity AUDIENCE: CEU 0.1

Thursday, March 15 9:00 AM

Green Standards

R1.18 The Formation of a Robust Recycling Program for Roofing Systems in North America

Rod Pfannenstiel, Vice President, Nationwide Foam Inc.

With over 3 billion square feet of commercial re-roofing each year, the resulting tear-off materials represent an area of special concern. In order to address this concern, roofing system manufacturers and industry associations have worked with roofing contractors to demonstrate the feasibility of reclamation, and private sector entrepreneurs have begun to invest in collection and processing systems. As more endmarkets for roofing debris form, the economics of handling and collection will improve dramatically. This in turn will allow recycling companies to offer roofing material recycling services that complement a project's schedule and budget - two necessary elements of a truly robust program. With experience from coast to coast in North America, an assessment will be provided on what is working and what still needs to be done.

Learning Objective(s):

- 1. Solving environmental issues associated with low slope tear off materials
- 2. Real recycling, real results for specific materials
- 3. Specifications: can it be recycled?
- Review market development
 AUDIENCE: BEGINNER CEU: 0.1

Green Standards

R1.21 Toxic-free, Chemical-free, Cleaning Strategies

Vince Elliott, President, Elliott Affiliates, Ltd. This session will explore the emerging development of a toxic-free, chemical-free innovation in products. It will examine how cleaning strategies are changing and impacting

cleaning strategies are changing and impacting the safety of workers, the health of building occupants and the environment. This session will also highlight the economics of a chemicalfree cleaning model for property managers, operations managers, buying professionals and senior managers.

Learning Objective(s):

- Be able to define what are the toxic-free, chemical-free products
- 2. Review chemical-free materials and products
- Learn how chemical-free products are different than traditional products AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

R1.24 Using EPAct to Make Energy Projects Possible

Charles Goulding, Esq., President, Energy Tax Savers, Inc.

Tax deductions can be a major factor in getting C-suite approval for energy efficiency projects. With the Energy Policy Act (EPAct) providing up to \$1.80/square foot for HVAC, lighting and building envelope retrofits, it behooves facility managers to develop expertise in applying these deductions, which offer an unbeatable opportunity to recoup upgrade investments and save energy dollars for the long haul. In this session, attendees will learn how to qualify for an EPAct deduction, which types of projects most often achieve deductions, and how to utilize integrated design to reduce overall building energy use. Learning Objective(s):

- 1. Learn how to qualify for an EPAct deduction
- 2. Understand which types of projects most often achieve deductions
- Review ways to utilize integrated design to reduce overall building energy use
 AUDIENCE: INTERMEDIATE CEU: 0.1

Systems

R1.27 Performing Effective Building System Re-Commissioning Studies

Joe Watson, Senior Project Engineer, E3 Designs The benefits of building system re-commissioning are spelled out in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED ®) program, and include: improved air and water quality, reduced operating costs, enhanced asset value and profits, improved employee productivity and satisfaction and optimized life-cycle economic performance. Building system re-commissioning will enhance occupant comfort and health while improving system efficiency. This presentation will highlight some of the opportunities that may be uncovered in each of the building systems as part of a comprehensive re-commissioning program. Learning Objective(s):

- 1. Discuss the wide range of assessments that should be considered when ReCx
- Show how ReCx can enhance occupant comfort and health while improving system efficiency
- 3. Learn how to develop improved strategies for optimizing building system performance
- Identify systems with the greatest need and/ or those with the greatest opportunities for improvement

AUDIENCE: INTERMEDIATE CEU: 0.1



Safety and Security

R1.37 I Survived: ADA & Safety Code Compliances in Pakistan

Saqib Naveed Cheema, Architect/ Design Manager, Camp Dresser & Mckee

In October 2005 a 7.6-magnitude earthquake struck Pakistan, causing massive devastation in northern parts of the country. This catastrophe gave architects, constructors and authorities the opportunity to "build back better". Soon after the United States Agency for International Development (USAID) launched a five-year Earthquake Reconstruction Program to assist in rebuilding facilities and ensure that new buildings are Americans with Disabilities Act and safety code compliant. The challenge: not just to reinforce the facilities with the code obligations, but more importantly execute them in the most sustainable and economical manner. The semi-urban/rural settlements at times challenged designers and executors to even access the sites, as hardly mule tracks would lead their way. Attend this session to hear firsthand how proactive engagement and consultation with the codes was adopted in the design phase to facilitate execution.

Learning Objective(s):

- 1. Understand the framework for reconstruction work
- 2. Challenges of making safety code compliant structures in Mountainous terrain
- Introducing Americans with Disabilities Act in Pakistan's Earthquake Reconstruction work AUDIENCE: INTERMEDIATE CEU: 0.1

Power: Generation and Reliability

R1.41 The Grid Behind the Meter

Richard Deutschmann, Vice President, Business Development, Tangent Energy Solutions

The growing need for generation, especially renewable, is encumbered by infrastructure issues and transmission bottlenecks, the economic impact of which is in the billions, but only a fraction of the projected costs to modernize infrastructure. As a result, utilitydriven solutions for more generation, cleaner energy and higher reliability are uncertain at best. Proactive facility managers need to focus on what can be done behind-the-meter to meet growing needs for reliable generation and controlled costs. This presentation explains how combining clean, on-site generation assets with energy efficiency technology can provide a significant source of power, while cutting costs. Learning Objective(s):

- Understand why generation transmission and distribution issues are major challenges for commercial and industrial energy customers
- Learn how balancing supply and demand behind the energy meter customers can lower costs, increase control, reduce grid stress and increase the mix of renewables in the energy system

AUDIENCE: INTERMEDIATE CEU: 0.1

Safety and Security

R1.43 Implementing Video Image Detection for Life Safety and Intrusion Detection

James A. Lynch, Manager of Technical Services, Fike VID

Large volume spaces such as atriums,

warehouses, and manufacturing facilities present a challenge to conventional smoke detectors due to the large smoke transport time that will delay notification. This session covers the implementation and use of video image detection systems in these applications for smoke and intrusion detection. An overview of the technology will lead to the requirements of the approvals such as UL or FM, and the requirements of NFPA code. Also, the presenter will discuss implementating the technology at large volume sites to prevent delayed detection, increase situational awareness, and general security.

Learning Objective(s):

- 1. Identify how a VID system functions
- 2. Understand the benefits of implementation
- 3. Identify what codes require and how they dictate the system architecture
- 4. Be able to identify proper applications of the technology

AUDIENCE: BEGINNER CEU: 0.1

Leadership and Career Advancement

R1.45 Do you know your Peoples' Skill Gap?

Bill Goebel, President, MPACT Maintenance & Reliability Solutions Learning Objective(s):

- 1. Understand how to identify employees' skill gap
- 2. Understand how to fill that skill gap
- 3. Understand how to use government funds to fill the skill gap

AUDIENCE: BEGINNER CEU: 0.1

Systems, Technology

R1.47 Identify and Quantify Mission-Critical Factors (How to **Perform a Critical Audit)**

Neil Maldeis, Energy Engineering Manager, Trane Commercial Systems

A critical systems audit helps a facility manager assess current performance of HVAC, water, lighting, electrical, mechanical, controls and other building systems. Today, advanced audits have become a key step on the journey to create a high performance building that links the building's physical environment to its overall mission. This presentation will address steps for performing a critical system audit, assemble the right team of participants, define program objectives, understand mission-critical factors (identify and quantify), gather relevant data and make comparisons, determine strategies and actions to meet objectives, and measure results and determine program effectiveness. Learning Objective(s):

- 1. How to identify and quantify mission-critical factors
- 2. Understand the benefits of a critical system
- 3. Learn how to begin the journey to create a high performance building with a critical system audit
- 4. Hear tips on how to optimize your critical system audit

AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities

R1.49 Optimizing Energy **Efficiency without Compromising Occupant Comfort**

Gerrit Reinders, LEED-AP, Executive Vice President, Global Sales and Marketing, Telkonet, Inc.

This session will focus on the opportunities available to cost-effectively harvest energy savings of 20 to 50 percent with off-the-shelf, readily available technologies that control HVAC, lighting and plug loads in spaces with intermittent occupancy such as hospitality facilities, residence halls, assisted living facilities, public housing, K-12 schools and similar spaces. Learning Objective(s):

- 1. Learn how spaces with intermittent occupancy are notoriously overlooked and ripe with opportunity
- 2. Understand how to identify spaces with intermittent occupancy
- 3. Review the types of energy savings available and typical off-the-shelf technology options available to harvest the savings from these

AUDIENCE: INTERMEDIATE CEU: 0.1

10:00 AM

Greening an Existing Building

R2.21 Preparing to Lead Sustainability Initiatives: Roles, Responsibilities, Resources

Kit Tuveson, President, Tuveson and Associates

Facility managers either choose to lead sustainability initiatives or they are given a 'sustainability assignment" by management. In either case, they must take time to clearly define the objectives, measures, teams, resources and implementation plan before starting the project. A clearly defined and managed start-up phase will lead to higher probability of project success. The framework for creating this start-up plan will use a framework with four elements: discover, plan, change, and sustain. Use this framework to create your own program for implementing sustainability initiatives. Learning Objective(s):

- 1. Describe the sustainability initiative so it can be effectively managed
- 2. Establish your sustainability leadership role 3. Clearly define the entry point and choose a
- framework for project management
- 4. Assemble the right balance of internal and external resources to achieve success AUDIENCE: INTERMEDIATE CEU: 0.1

Systems, Maintenance and Operations

R2.24 High Rate of Return **Energy Efficiency Initiative** May be Hiding in Your Facility **Mechanical Rooms**

Ron King, Past President, National Insulation Association

This session details a pilot program executed with the State of Montana to determine the energy cost and emission reduction opportunities available through the repair, replacement, and/or maintenance of mechanical insulation systems in Montana's State facilities. Overall the items identified in the mechanical rooms visited yielded an annualized rate of return of 24 percent. These projected savings represent roughly 8 percent of the total natural gas consumption of the facilities analyzed. While the savings from any single item is small, the aggregated total savings from thousands of small items is significant. One of the objectives of this pilot program was to determine if the results could be extrapolated to similar state-owned or private buildings. The answer was that similar annualized savings could be achieved. This presentation will review the methodology and results of the pilot program and discuss how a similar opportunity may be applicable to your facilities.

Learning Objective(s):

- 1. Understanding an undervalued opportunity for energy efficiency
- 2. Learn more about a forgotten technology, mechanical insulation
- 3. Examining energy savings vs. return on investment
- 4. Understand where to locate available resources AUDIENCE: INTERMEDIATE CEU: 0.1

Leadership and Career Advancement, Safety and

R2.37 I Survived: FM Above the **Arctic Circle**

Michael Abels, Operations Manager, Toolik Field Station

The Toolik Field Station (TFS) is a worldrenowned Arctic research station located in the northern foothills of the Brooks Range in Alaska at 68° 38' N, 149° 36' W, elevation 720 m and is open year round to support research projects. This presentation will provide a case study of the past 35 years of operations and maintenance at this unique facility.

Learning Objective(s):

- 1. Understand the unique challenges of building design and operations in a location with temperature ranges of -60 degrees F to 80 degrees F
- 2. Comprehend the obstacles for operations in the cold: vehicles, snow machines, equipment, and staff working in extreme environment
- 3. Learn how to keep utilities unfrozen
- 4. Understand the trials and tribulations of planning major construction in a remote location

AUDIENCE: BEGINNER CEU: 0.1

Safety and Security

R2.39 A Review of the Final ADA

Joan W. Stein, President & CEO, Accessibility Development Associates, Inc.

In the last year, major changes have been announced for the Americans with Disabilities Act (ADA) and the U.S. Department of Justice has adopted the 2010 ADA Standards for Accessible Design. These changes have created many questions in the facility management world. Attend this session for a brief overview on what actually changed with the new final guidelines and timeline of when these new rules will become enforced.

Learning Objective(s):

- 1. Comprehend what has changed with the new final regulations
- 2. Understand the timeline for these changes to go into effect
- 3. Understand a facility manager's role in implementing these changes AUDIENCE: ADVANCED CEU: 0.1

Power: Generation and Reliability

R2.41 The Dollars and Sense of **Power Reliability**

Ronald Schroeder, Director of Product Management, ASCO Power Technologies AUDIENCE: BEGINNER 0.1

Safety and Security

R2.43 Healthcare Compliance Issues

Jennifer Frecker, Manager, Koffel Associates,

Compliance of health care facilities with the Life Safety Code is a top priority with The Centers for Medicare and Medicaid Services and The Joint Commission. Life Safety citations are more than 50 percent of the top ten citations made by these agencies when conducting compliance surveys. Keeping up with the ever changing issues is a top priority for any health care facility. This presentation will provide the participant with examples of some of the most common citations found in health care compliance, along with suggestions for staying in compliance.

Learning Objective(s):

- 1. Understand the top compliance issues for health care facilities as they pertain to the Life Safety Code
- 2. Be able to identify compliance issues that are common within their own facility
- 3. Understand ways to implement strategies that will remedy compliance issues within their
- 4. Understand some of The Joint Commission's decision rules, changes and other clarifications AUDIENCE: BEGINNER CEU: 0.1

Leadership and Career Advancement

R2.45 Developing A Leadership Style That Fits You and Leads To Success

James E. Barbush, Professional Speaker and Professional Engineer, Barbush Enterprises

Leadership should be a lifestyle, rather than a method. When leadership is a lifestyle, it involves our relationships at work and elsewhere, our head knowledge and our heart condition (our sense of caring, our passions). As a lifestyle, leadership consists of life-giving actions that affect people who will get things done successfully. Life-giving actions inspire people, give people power or strength to press forward. A leader does not motivate people, but uses life-giving actions to inspire people who develop ways to do what must be done in your organization.

Learning Objective(s):

- 1. Distinguish between lifestyle leadership and applied methods of leadership
- 2. Discuss inspiration that leads to the motivation of employees for organization
- 3. Consider the affect of a leader's personal style in leading others
- 4. Show examples of lifestyle leadership. AUDIENCE: BEGINNER CEU: 0.1

Maintenance and Operations

R2.47 Important Factors to Consider to Avoid Low Sloped **Roofing System Failure**

Philip Frederick, Staff Engineer; David Slick, Associate Principal, Simpson Gumpertz & Heger, Inc.

In low-slope roofing systems, poorly adhered roofing assemblies are unable to resist significant wind loads and are likely to be further damaged or destroyed by wind events well below the design wind pressures for the assembly. There are several factors that can contribute to such damage. Foamed adhesives are used to join roofing assembly components to the roof substrate and to each other, and require proper design and installation. Moisture contained within the roofing assembly and substrate can result in failure of the roofing assembly. We will discuss these issues, and present several case studies that illustrate our concerns. Learning Objective(s):

- 1. Learn about several key factors that can effect low sloped roofing assembly performence
- 2. Receive insight into several aspects of roofing system technology
- 3. Be aware of several issues during design and installation of new or replacement low sloped roofing assemblies
- 4. Take away lessons to be learned from actual low sloped roofing investigations AUDIENCE: INTERMEDIATE CEU: 0.1

R2.49 Seismic Assessment of the Washington Monument and the Washington National Cathedral

Erik C. Sohn, PE, Senior Associate, Wiss, Janney, Elstner Associates, Inc.

Following one of the largest earthquakes to affect the east coast, Wiss, Janney, Elstner Associates, Inc. was asked to evaluate the impact of potential interior and exterior seismic damage on the structure and operations of the Washington Monument and Washington National Cathedral in Washington, D.C. Tasks performed ranged from the initial emergency response and make-safe operations, to development of repair designs and the evaluation of potential seismic upgrades. Learning Objective(s):

- 1. Learn about the initial steps that are critical to a structure following a natural disaster
- 2. What items are important to review during the initial sassessment
- 3. What types of access are available, appropriate, and potentially warranted for unique and historically significant structures
- 4. How to best assist an owner of an irreplaceable building asset with recovery From a natural

AUDIENCE: INTERMEDIATE CEU: 0.1

2:10 PM

Greening an Existing Building

R3.18 Developing a Sustainable **Program**

Suzanne M. Zabowski, National Accounts, StructureTec

Be proactive — not reactive! This seminar will help bring your focus back to the basics and assist you in devising a strategic "plan of attack" to meet your specific building envelope goals and objectives. The purpose of this seminar is to provide you with a "roadmap": where you are, where you would like to be, and how to get there. The information discussed will be drawn from actual case studies for organizations and corporations across North America.

Learning Objective(s):

- 1. Understanding the importance of prioritization
- 2. Cost reduction by using the proper tools
- 3. Learn sustainability approaches for your

AUDIENCE: BEGINNER CEU: 0.1

Green Standards

R3.21 To LEED or Not to LEED

Mark Lentz, PE, President, Lentz Engineering Associates, Inc. Lawrence G. Spielvogel, PE, Consulting Engineers

There is growing evidence that some LEED certified buildings are failing to deliver the benefits the USGBC developed program has promised. The market is beginning to show signs of green fatigue. The promise or pursuit of LEED certification imputes a higher standard of care and owners expect to receive both economic and non-economic benefits because of that decision. Design firms and individuals who promise or pursue LEED certification may experience adverse consequences and be at risk if the building fails to achieve LEED certification, fails to meet performance expectations, or is later found to have achieved LEED certification fraudulently. Examples will be provided. Learning Objective(s):

- 1. Understand ASHRAE requirements for LEED
- 2. Learn the common failures to meet LEED requirements
- 3. Understand the risks for participants in LEED projects
- 4. Comprehend LEED facts and fiction AUDIENCE: INTERMEDIATE CEU: 0.1

Energy Efficiency, Upgrades and Utilities, Greening an Existing Building

R3.24 Energy Reduction **Planning**

Jeff Euclide, PE, CEM, Executive Vice President, Entech Engineering Inc.

This presentation will describe the steps facilities managers should take to implement an energy reduction program after the energy audit is complete, including the information requirements, a review of conservation measures and costs and measurement and verification steps. The presenter will present two case studies and review the goals, objectives, resources and outcomes from these projects. Learning Objective(s):

1. Review how to select energy conservation for a

- multi-year energy reduction program
- 2. Understand how energy and deferred maintenance projects can be managed together
- 3. Illustrate how a good energy program is necessary for a realistic climate action plan
- 4. Measurement and verification of predicted energy savings

AUDIENCE: INTERMEDIATE CEU: 0.1

Technology

R3.27 A Road Map for Lifecycle BIM

Marty Chobot, Vice President, FM: Systems Despite all the information available on BIM, it's not always clear how facility managers can realize the value of this new technology. What's in it for us? How do you develop a BIM strategy? Are there any best practices? In this presentation, the speaker will present their stories and challenges, the results they are getting, and the lessons learned along the way as they use BIM to solve real-world facility management challenges. Learning Objective(s):

- 1. Learn more about BIM technology
- 2. Learn how BIM can benefit facility managers
- 3. Review best practices in making a BIM project successful
- 4. Understand the importance of communicating with their AEC firms

AUDIENCE: BEGINNER CEU: 0.1

Staff Training and Development, Strategic Planning

R3.45 Project Management 101

Dr. David R. Hale, CPMM, Consultant, David R. Hale Consulting
Project management - it has been said - is

60 to 90 percent people management. This session will give attendees an introduction to project management with an emphasis on who, what, where, when and why. Is a project actually needed or can the issue be remediated with a procedural or personnel change. Also, a brief on how a competent project manager should conduct the project as well as themselves. Learning Objective(s):

- 1. Understand the steps to consider when developing a project
- 2. Learn the thoughts to consider when running a project
- 3. Considerations for a professional project manager's demeanor

AUDIENCE: BEGINNER CEU: 0.1

Technology

R3.49 Monitoring-Based **Commissioning Enhances** Sustainability

Tim Angerame, Director of Business Development, utiliVisor

Monitoring based commissioning (MBCx) is an important approach to keep buildings operating at maximum energy efficiency, it incorporates permanent energy information systems and diagnostic tools, retro-commissioning based on the data this generates, and ongoing commissioning to ensure efficient building operations and measurementbased savings accounting. Requiring minimal capital investment, MBCx offers a web-based, networked solution, built on open standards, that works in real time to collect and format data, monitor operations and equipment errors, and

deliver oversight via web-based alerts and alarms. Engineers are able to track performance and remedy any malfunctions that would otherwise create operational inefficiencies, resulting in lower energy costs.

Learning Objective(s):

- 1. Understand how monitoring based commissioning enhances sustainability
- 2. Be able to evaluate and implement an energy monitoring and verification program
- 3. Understand how chiller plant optimization can cut energy costs

AUDIENCE: INTERMEDIATE CEU: 0.1

3:10 PM

Greening an Existing Building

R4.37 Sustainable Infrastructure Assessments — More Bang for the Buck

Steve L. Shoaf, PE, Senior Associate, TEC

Advance your understanding on how sustainable infrastructure assessments can generate tremendous value. Agencies routinely perform facility condition assessments, space utilization studies, and energy evaluations. All these assessments, performed collectively, can reduce time, effort, and cost. This session will walk you through how TEC Inc. leveraged this synergistic approach, demonstrating the value in adopting the sustainable infrastructure assessment method currently being explored by the U.S. Department of Defense.

Learning Objective(s):

- 1. Understand Sustainable Infrastructure Assessments
- 2. Evaluate alternative methods of efficiently conducting condition assessments, energy audits, high performance building audits and space utilization/optimization studies
- 3. Learn ways of generating savings for large physical plant owners

AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations, Safety and Security

R4.39 Unlocking Efficiency: Keys to a Successful Energy Management Program

Pete Arnoldt, Sales Consultant; Katie Flynn, Energy Engineer; Cindy Omstead, Business Development Manager, RCx Building Diagnostics

The development and implementation of an energy-management program is the first step in in reducing operating costs. This presentation will help to identify the key components necessary for planning and initiating a successful energy-management plan as well as providing you with an overview of where and how to start managing your facility's energy use. You will learn how to construct and implement an energy management plan, how to evaluate the efficiency of your facility, and identify where you can improve building performance through energy audits or retrocommissioning, when applicable. Learning Objective(s):

- 1. Identify critical elements necessary for a successful energy-management plan
- 2. Learn how to determine current energyconsumption within a facility
- 3. Understand the differences between energy-

audits and retrocommissioning AUDIENCE: INTERMEDIATE CEU: 0.1

Maintenance and Operations, Safety and Security

R4.43 ASHRAE Standard 188P: **Prevention of Legionellosis** Associated with Building Water **Systems**

Dr. William F. McCoy, Chief Technology Officer, Phigenics

The American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) has developed a standard practice that specifies what is required to prevent legionellosis associated with building water systems. The first public review was completed in November 2010; there were many supportive comments posted and also many excellent suggestions to improve the standard. A revision was produced in response to comments received during the public review. The second public review was successfully completed in July 2011. This session will describe what practice the proposed standard requires, the problems that the Standard addresses, and a history of legionellosis prevention practices. Learning Objective(s):

- 1. Review the history of legionellosis prevention
- 2. Understand the new standard practice from ASHRAE about preventing legionellosis
- 3. Review the updates from public review to the standard

AUDIENCE: INTERMEDIATE CEU: 0.1

Technology

R4.47 Acoustical Problem Solving for the Facility Manager

Art Barkman, President, Sound Management Group

Studies have shown that the proper acoustical design can improve efficiencies by up to 14 percent. Acoustical design considerations are often overlooked in new construction and remain unaddressed in existing space. This presentation will identify the most prevalent and disruptive issues, how and where to find them and what to do to fix them. This is a valuable presentation for both the pro-active and reactive FM.

Learning Objective(s):

- 1. Enable the FM to understand sound and how to control it
- 2. Enable the FM to survey their facility to find noise control problems that impact efficiency and function
- 3. Enable the FM to evaluate solutions both in house and outsourced
- 4. Enable the FM to present solutions in a format that is concise and easy to understand AUDIENCE: INTERMEDIATE 0.1



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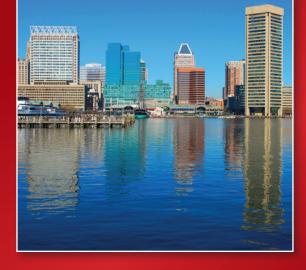
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