



Engineers Joint Committee of Long Island

Andrew S. Haimes, P.E., F.NSPE, Co-Chair

Anthony Cacioppo, P.E., Co-Chair

ENGINEERS WEEK SEMINAR SERIES

Thursday, February 16, 2012

Place: **Dave & Busters** • 261 Airport Plaza Blvd., Farmingdale, NY (631) 249-0708
www.daveandbusters.com

Program:	8:00 am – 9:00 am	Registration & Continental Breakfast
	9:00 am – 10:00 am	Morning Seminars
	10:00 am – 10:15 am	Break
	10:15 am – 12:15 pm	Morning Seminars Cont'd.
	12:15 pm – 1:15 pm	Lunch with Guest Speaker
	1:15 pm – 3:15 pm	Afternoon Seminars
	3:15 pm – 3:30 pm	Break
	3:30 pm – 5:00 pm	Afternoon Seminars Cont'd.

Seminars & Descriptions

“Power Quality Design Considerations” (1 PDH) **9:00am – 10:00am**
Presented by: Paul Moraft – Data Power Systems

Data Power Systems provides power systems for critical facilities such as radio and TV broadcast, data centers and other critical facilities where power quality and down-time are important issues. This seminar will address the most up to date problems that effect these facilities and effective methods of preventing them. The presentation will illustrate ways to improve the effectiveness of designs while keeping costs within reason when planning for UPS and surge protection equipment. Topics to be covered include:

- Effects of transients on unprotected transfer switchgear
- UPS systems, etc.
- Where transients come from
- Anatomy of a lightning strike (what is the magnitude of a lightning strike)
- Applying surge protection
- Where and how much
- Options to avoid
- Pros and cons of putting surge protection inside a distribution panel
- General design considerations.

“Enclosed Switchgear / PCC Fundamentals” (2 PDH) 10:15am – 12:15pm
Presented by: Niel F. Miele, PE, LEED AP, Engineering Manager - PACS Industries, Inc.

PACS (Power And Control Systems), manufactures metalclad switchgear through 40.5 kV, and Power and Control Center (PCC) buildings. This seminar will discuss the basics of designing and specifying power and control systems in pre-engineered buildings. Major topics are:

- Introduction to Electrical over-current protection, relaying, SCADA
- MV (<40kV) Switchgear designs, applications, sample projects
- LV (<600V) Switchgear designs and applications, sample projects
- Structural Substation (<230kV) designs and applications, sample projects
- PCC designs and applications, sample projects
- Structural features (walk-in, non-walk-in, ratings, environments, coatings)
- Mechanical features, options, accessories

“Grounding and Lightning Protection” (2 PDH) 1:15pm – 3:15pm
Presented by: Richard L. Rosner, P.E., Director of Engineering
and Donald Kane, P.E. - Nassau Suffolk Engineering & Architecture, PLLC

This forum provides an overview of several aspects of electrical grounding and lightning protection, with a focus on the areas that pose hazards if left out of designs or if improper designs are implemented. Considerations for life safety will be stressed while Federal, State and local Codes & Standards will be reviewed for compliance. Practical solutions will be offered and design and installation pitfalls will be discussed.

“Specifying LED Lighting Equipment” (1 PDH) 9:00am - 10:00am
Presented by: Mike Ferraris - Electric Lighting Agencies, Inc.

National energy efficiency regulations have led to new developments in many electrical devices, including commercial and residential lighting. This seminar will provide you with a basic understanding of LED lighting equipment, which can provide as much as or greater light output while using much less energy than conventional fixtures and bulbs. Topics will include:

- What an LED is and how it creates visible light
- Design of the electrical/electronic power pack “driver” and how it works
- Arrangement of LED clusters and relationship to fixture/luminaire design
- Factors to be considered for long term performance
- Discussion of basic layout and fixture selection for an application

If time permits, we will briefly discuss where incandescent and fluorescent lighting technologies is headed, and try to dispel some of the myths that arose when the new regulations were first made public.

“Six Sigma” (2 PDH) 10:15am – 12:15pm
Presented by: Scott Damiani, Lead Business Analyst - Wolters Kluwer

In this session, attendees will learn about the components and tools which are used in the Six Sigma methodologies. Detailed examples of several tools will be presented for the various phases of a sample Six Sigma initiative. The session will also cover how Six Sigma integrates with other methodologies such as Lean. The session will also address how company management can create an environment for Six Sigma success. Various case studies will be reviewed. Attendees will also learn about the various levels of Six Sigma training and certification, and career opportunities will be highlighted in various industries which have embraced Six Sigma.

“Lean & Value Stream Mapping” (2 PDH) 1:15pm – 3:15pm

Presented by: Stan Stone, CEO, Founder & Lead Consultant - GreyStone Business Solutions, Inc.

This session will provide an introduction to the tools and techniques utilized in the Lean Enterprise methodology to eliminate waste and non-value added activities leading to dramatic improvements in operational efficiency, quality and the bottom line. Each of the key techniques including Value Stream Mapping, 5S, One Piece Flow, Kan Ban, and Single Minute Exchange of Dies (SMED) will be thoroughly discussed. Additionally, practical quality tools such as Pareto Analysis, the Five Y's and Root Cause Analysis will be explained and illustrated. Attendees of this session will obtain a fundamental understanding of these powerful Lean techniques as well as how to correctly select and apply them in their own organizations. This session is a must for anyone considering a Lean approach or just desiring to learn more about this highly effective continuous improvement process.

“Building Information Modeling (BIM)” (2 PDH) 10:15am - 12:15pm

Presented by: Steven V. Costa, BIM Specialist - Microsol Resources

Christopher S. Shoemaker P.E., Senior Associate -

Lizardos Engineering Associates, P.C.

This presentation will provide an introduction to Building Information Modeling (BIM), an effective design and construction tool that provides a database of useful information for building owners, managers, architects, engineers, and constructors. An overview of what BIM is, and what it is not, BIM's features and use as a 3-dimensional virtual building model from initial building conceptualization, through design and construction, and throughout the life span of a building will be discussed. The discussion will include reasons for utilizing BIM in the design and construction of a building, and reasons for not using BIM. The contents of a typical BIM model will be presented including the building orientation; floor plan; construction of foundation, walls, floors, roof, windows, etc.; HVAC systems; electrical systems; plumbing and fire protection systems. How the BIM model contains CADD drawings embedded with building information. How construction drawings prepared in a BIM model differ from conventional CADD drawings. The BIM presentation will include use of BIM for building design as well as for the design of civil engineering projects. Computer system requirements for BIM will be discussed, as well as training of staff to use BIM and required coordination between the members of a design and construction team to effectively utilize BIM in the design and construction of a building.

“Gas Exposure Hazards – Risk Management” (2 PDH) 1:15pm – 3:15pm

Presented by: Stephen G. Phelps, Applications Manager - Sensidyne, LP

This seminar will explore gas exposure risk management in transportation and commercial HVAC systems.. Discussions will include assessing, monitoring and controlling critical gas hazard exposures in transportation, commercial mechanical room HVACR, assembly occupancies and gathering places. The hazards are defined and illustrated with a discussion of compliance solutions with local state and federal regulations.

“Application of Wireless Measuring Instruments in Water and Wastewater Plants”

(1.5 PDH) 3:30pm – 5:00pm

Presented by: Tom Thomas, Municipal Regional Manager - Emerson Process Management

This seminar will cover Wireless field networks, HART protocol, security, and available measurement instruments including vibration monitoring of rotating machinery. Best practices in field monitoring and actual installations will be discussed. Systems integrate both wired and wireless plant and field networks to address process industry needs. Wireless monitoring can be integrated into existing SCADA systems.

Lunchtime Speaker: Robert F. Waite, P.E., PC

“Doing Business in China – Issues for an American Engineer”

SCHEDULE

	Room A	Room B	Room C
9:00a-10:00a	Power Quality Design	Specifying LED Lighting Equipment	
10:15a-12:15p	Enclosed Switchgear / PCC Fundamentals	Six Sigma	Building Information Modeling (BIM)
12:15p-1:15p	LUNCH with Guest Speaker		
1:15p-3:15p	Grounding and Lightning Protection	Lean & Value Stream Mapping	Gas Exposure Hazards Risk Management
3:30p-5:00p			Wireless Measuring in Water & Wastewater Plants



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To register, complete and return this form with payment by February 13, 2012 to: Andrew S. Haimes, PE, 172 Sherry St, East Islip, NY 11730. Ph: 631-859-5190. Email questions to: ashaimes@optonline.net

ALL FIELDS MUST BE COMPLETED. PRINT NEATLY. CHECK ALL SEMINARS YOU WISH TO ATTEND.

Fee: _____ **\$110 for full day (4 to 6.5 PDH); includes lunch**
_____ **\$75 for half day (3 or fewer PDH); includes lunch**

- _____ 9:00am – 10:00am “Power Quality Design Considerations” (1 PDH)
- _____ 10:15am – 12:15pm “Enclosed Switchgear / PCC Fundamentals” (2 PDH)
- _____ 1:15pm – 3:15pm “Grounding and Lightning Protection” (2 PDH)
- _____ 9:00am – 10:00am “Specifying LED Lighting Equipment” (1 PDH)
- _____ 10:15pm – 12:15am “Six Sigma” (2 PDH)
- _____ 1:15pm – 3:15pm “Lean & Value Stream Mapping” (2 PDH)
- _____ 10:15am – 12:15pm “Building Information Modeling (BIM) (2 PDH)
- _____ 1:15pm – 3:15pm “Gas Exposure Hazards – Risk Management” (2 PDH)
- _____ 3:30pm – 5:00pm “Wireless Measuring Instruments in Water and Wastewater Plants” (1.5 PDH)

Total PDH _____ **Total Amount Enclosed \$** _____

Make check payable to: Engineers Joint Committee of LI (credit cards can not be accepted)

Name _____

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