



## Bright Lights. Big Ideas.

SEPT 29–OCT 2 • MANDALAY BAY

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[www.NECAconvention.org](http://www.NECAconvention.org)

# MANDALAY BAY

NECACONVENTION.ORG | SEPTEMBER 29–OCTOBER 2, 2012 | MANDALAY BAY RESORT AND CASINO | LAS VEGAS, NV

Mandalay Bay is NOT just an unmatched luxury hotel and casino; it's also one of the world's pre-eminent convention resorts. It offers nearly 1 million square feet of flexible exhibit space, three levels of meeting and function space, elegant and comfortable accommodations and a nearly inexhaustible list of amenities for guests to enjoy, and a professional staff dedicated to exceeding expectations. That makes Mandalay Bay the perfect all-in-one destination for NECA 2012 Las Vegas!

Attendees and exhibitors alike will appreciate the ease and convenience of all Convention sessions, the Trade Show, and special events such as the Opening Reception all taking place under one roof. Mandalay Bay, located on the lively Las Vegas Strip and only three miles from McCarran International Airport, has it all — and then some:

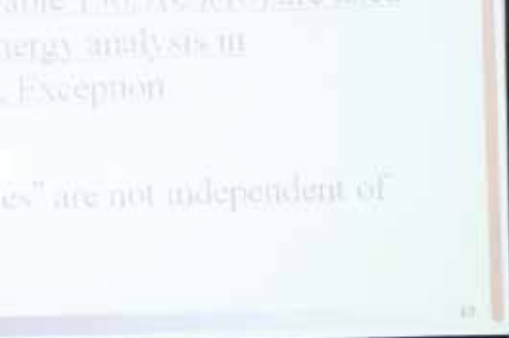
- 26 of the best restaurants in Las Vegas onsite, ranging from five-star venues to casual eateries.
- Mandalay Place features a mix of nearly 30 one-of-a-kind boutiques and specialty stores you won't find anywhere else, plus there are another 16 great shops within the hotel complex.
- Mandalay Bay also offers the hottest Las Vegas nightclubs, the coolest music venues and the best lounges on the Strip. You can even catch a concert or show!
- Golfing is available at four spectacular courses just minutes away — Shadow Creek, Bali Hai, Royal Links, and Desert Pines — and tee times and transportation can be arranged hassle-free.
- An unparalleled gym and award-winning spa offer relaxation and reinvigoration. Or, conventioners can enjoy the ultimate in aquatic relaxation on the 11-acre Mandalay Bay Beach!
- Mandalay Bay also hosts North America's only predator-based aquarium and exhibit.

And that's the abridged list. You can learn more at [www.mandalaybay.com](http://www.mandalaybay.com).

We hope you are as excited about experiencing NECA 2012 Las Vegas at Mandalay Bay as we are. Ease, convenience, and FUN — all in one!

## NECA Premier Partners





# EDUCATION

## NEW THIS YEAR! CUSTOMIZE YOUR EDUCATION

**DO YOU SPECIALIZE** in a specific area of electrical construction such as energy solutions or safety? Or are you the CEO looking for the latest in executive management models? NECA has created interest area tracks to help you customize your convention educational choices for everything from pre-convention workshops, to management sessions, to the technical workshops on the trade show floor. We have assembled the industry's best thought leaders to present the latest information and technologies to help you grow your business. Send your key personnel through one track, while you cover another. Tracks include:

- Management
- Electrical
- Safety
- Energy Solutions
- Line Construction

We'll show you the way to cross-train your workforce, employ best practices, and be more efficient on the job.

“ AT THE NECA CONVENTION, YOU WILL FIND TRAINING/ MENTORING OPPORTUNITIES AND NETWORKING WITH OTHER CONTRACTORS AROUND THE COUNTRY THAT YOU WON'T FIND ANYWHERE ELSE. THESE OPPORTUNITIES ARE ONE OF NECA'S KEY SERVICES. ”

—Sonja Rheame, Christenson Electric, Inc., Portland, OR





## OPENING GENERAL SESSION

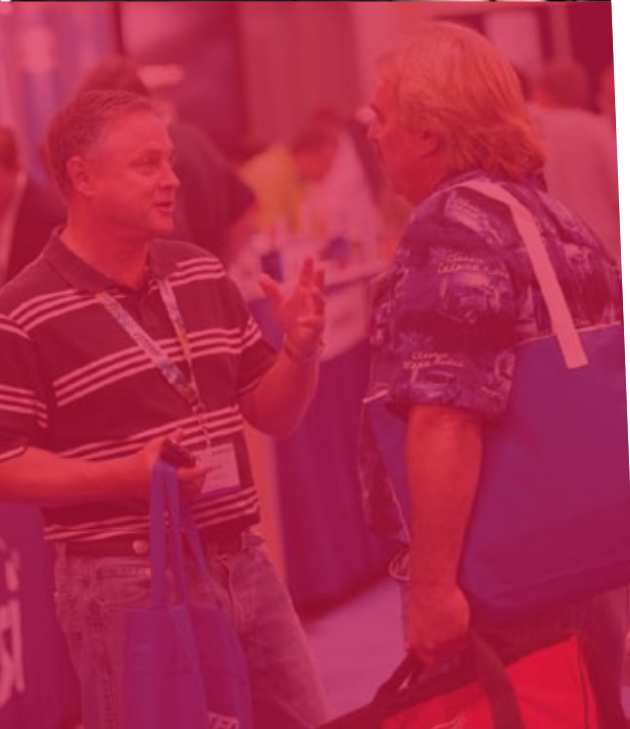
### JOE SCARBOROUGH & MIKA BRZEZINSKI CO-HOSTS OF MSNBC'S MORNING JOE

Sunday, September 30, 10:15–11:30 am

**ANY WEEKDAY MORNING** on MSNBC, you can catch in-depth analysis of the day's biggest stories, political buzz, and timely interviews with top newsmakers. What you won't hear is the one-note pitch of the echo chamber that so many other political talk shows seem to inhabit. That's why Morning Joe has been called "the thinking viewer's choice."

On Morning Joe, the hosts and guests genuinely, thoroughly, discuss the news. And they debate it and laugh over its absurdities, hour after hour. The primary hosts are Joe Scarborough (an opinionated conservative and a former Republican congressman who served Florida's 1st district from 1995 to 2001) and Mika Brzezinski (a moderate liberal and the daughter of Zbigniew Brzezinski, the national security adviser during the Carter administration in whose household world affairs were a constant presence).

This talented team will share their quick wit and winning insight on the state of national and global events with NECA Conventioneers during our Opening General Session. And, they'll do it in the same breezy, off-the-cuff, unrehearsed style that has injected a jolt of fresh air into the world of morning news. Prepare to be informed, enlightened and entertained — all at once!



## CLOSING GENERAL SESSION

### DR. PETER H. DIAMANDIS CHAIRMAN AND CEO, X PRIZE FOUNDATION

Tuesday, October 2, 9:00–10:15 am

**DR. PETER H. DIAMANDIS**, a key figure in the development of the personal spaceflight industry, knows something about exponential technologies and the tools of collaboration that are allowing each of us to transform industries and address humanity's grand challenges. For over 30 years, he has educated corporations, philanthropists and entrepreneurs on what it takes to drive innovations and breakthroughs in their own organizations.

With degrees in Molecular Genetics and Aerospace Engineering from MIT, as well as an M.D. from Harvard Medical School, Diamandis founded or co-founded many of the leading entrepreneurial companies in the commercial space arena, including Zero Gravity Corporation, the Rocket Racing League and Space Adventures. He also founded Singularity University to teach leaders about technology and innovation. He recently authored *Abundance: The Future Is Better Than You Think*.

He also runs the X PRIZE Foundation, which leads the world in designing and launching large incentive prizes to drive radical breakthroughs. Best known for the \$10 million Ansari X PRIZE for private spaceflight, the Foundation is now launching prizes in Exploration, Life Sciences, Energy, and Education.

Diamandis will share stories of innovations that are changing the way we think, work, and educate future generations with NECA Conventioneers. He will also discuss intelligent risk-taking, maverick thinking, and environments where failure is allowed and celebrated. His personal motto: "The best way to predict the future is to create it yourself!"



## LABOR RELATIONS SPECIAL SESSION

### GETTING MORE: HOW TO NEGOTIATE FOR GREATER SUCCESS IN WORK AND LIFE

Monday, October 1, 10:00–11:30 am

**THIS YEAR'S LABOR RELATIONS SPECIAL SESSION** features Professor Stuart Diamond, a practicing business executive and attorney (JD Harvard, MBA Wharton), as well as a professional teacher at the Wharton Business School.

The business world is notoriously perceived as combative, dominated by an aggressive conflict model of negotiation. Power and leverage are often the name of the game. Using the revolutionary strategies articulated in his presentation, Diamond shows how a more collaborative model provides a massive advantage and focuses on finding and valuing the other party's emotions and perceptions to create far more value.

## ELECTRI INTERNATIONAL TALENT INITIATIVE

### FOURTH ANNUAL GREEN ENERGY CHALLENGE

Saturday, September 29, 4:15–5:30 pm

**THE ELECTRI INTERNATIONAL/NECA GREEN ENERGY CHALLENGE** marks a yearly highlight for NECA Student Chapters. With 18 Student Chapters registered for the 2012 competition, ELECTRI International is connecting hundreds of students with real challenges and asking them to develop real solutions, achieved with the assistance of NECA members and Chapters. Electrical construction companies and industry partners looking to hire the best and brightest students in the country appreciate the opportunity to assess the finalists' work firsthand during the NECA Convention.


For the 2012 Green Energy Challenge, teams conducted an energy audit and designed an energy retrofit for a power and/or lighting system for a campus facility of their choice. Each entry includes a new solar PV and/or wind energy generation system design and offers ways to advance on-campus efforts to improve energy awareness. A jury of electrical contractors and industry partners selected three finalist teams, which will each make a 15-minute oral presentation to determine the competition's overall winner. Milwaukee School of Engineering won the 2011 Green Energy Challenge, its second win in two years. Join us as we get to see our industry's future "live and in person".

**“ KNOWLEDGE IS A VERY POWERFUL TOOL. I ALWAYS  
LEAVE THE NECA CONVENTION WITH MORE  
KNOWLEDGE THAN I HAD BEFORE I ATTENDED. THIS  
WITHOUT A DOUBT GIVES ME MORE TOOLS TO BE A  
SUCCESSFUL AND PROFITABLE NECA CONTRACTOR. ”**

—Mike Weaver, M & W Electric Inc., Albany OR







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# **Saving Energy is Our Business**

**Graybar has energy solutions to assist your customers with what matters most: whether it's safety, savings or sustainability**



## NEW SAFETY FORUM AT NECA 2012 LAS VEGAS

Saturday, September 29

8:00 am–4:30 pm

and

Sunday, September 30

8:00 am–9:30 am

\$250 for NECA members

Presented by



**THE ELECTRICAL INDUSTRY** is rapidly changing requiring electrical contractors to be at the cutting edge of many safety and health requirements. Clients demand evidence of effective safety performance and the integration of safety and health management systems to jobsite safety. Safety and health has evolved from a regulatory drive activity to a business development tool. NECA's Safety Forum delivers the latest safety-related topics and information contractors need to be aware of in today's competitive markets. The Forum brings together a collection of leading industry presenters that provide clear vision of existing and new safety rules and how to implement effective compliance strategies. The Safety Forum at NECA's Convention brings high energy programs to captivate an audience whose primary role is safety, health and risk management. There are significant benefits for registrants whose roles in the electrical contracting industry are diverse in nature. This important subject matter targets not only employees but has benefits for business owners, project management staff and supervisory personnel seeking to enhance their knowledge on safety and health.

The NECA Safety Forum will be held Saturday, September 29 from 8:00 am – 4:30 pm and Sunday, October 1 from 8:00 – 9:30 am with the popular NECA Safety Roundtable held from 1:00 – 2:00 pm Sunday afternoon.

NECA and electrical industry safety experts will clearly present on each of these popular topics:

- ET&D OSHA 10 Hour Course
- Arc Flash Hazard and Protective Strategies
- NECA NFPA 70E: NECA's System Approach to Safety 2012
- Leading Safety Indicators – A Proactive Approach to Enhancing Workplace Safety
- NFPA 70E-2012 Changes – Contractors and Electricians Need to Know
- OSHA's New Electric Power Transmission and Distribution & Electrical: PPE
- National Electrical Safety Code 2012 Changes
- OSHA's Enforcement Initiative: What you need to Know
- Electrical Transmission and Distribution (ET&D) Partnership 2012 – Panel Discussion
- Safety Roundtable

Safety in the workplace is an important responsibility shared by both employers and employees. NECA's Safety Forum at the Convention is sure to assist electrical contractors by providing the latest electrical safety trends and provide effective methods to successfully traverse the dynamics of safety and health conformity in electrical construction. History has proven that NECA provides the knowledge and the tools to assist contractors toward success in implementation of effective and competitive safety and health programs. This unprecedented event is not to be missed...it's good for and an essential part of the electrical contracting business.





## NECA ENERGY FORUM RETURNS IN 2012 BY POPULAR DEMAND!

Saturday, September 29  
1:00 pm–5:30 pm

\$145 for NECA members  
**New this year:** FREE with full  
Convention registration

**A REVOLUTION IN ENERGY TECHNOLOGY** is sweeping the nation, and each new discovery or innovation means growth opportunities for electrical contractors. Powerful advances in energy efficiency and renewable energy sources are creating new, profitable markets for those NECA members that recognize the signals and seize the moment.

District 9 Vice President Stan Lazarian is a true believer when it comes to energy solutions, as witnessed by everyone who attended NECA's first Energy Forum. Lazarian, who chairs NECA's Energy Solutions Task Force, constantly preaches that alternative power and energy efficiency upgrades are the boom market for contractors. But it's hard for electrical contractors to know when it's the right time for them to add new services to their traditional business model. Hence, the Energy Forum was born.

- Buildings use more energy than any other sector of the U.S. economy, consuming more than 70 percent of electricity and over 50 percent of natural gas. There is 74.8 billion square feet of non-residential space throughout the United States. According to the U.S. Department of Energy less than 8% of these buildings can be considered energy efficient.
- The U.S. Energy Information Administration estimated that in 2010, almost 500 billion kilowatt-hours (kWh) of electricity were used for lighting by the residential and commercial sectors – about 18% of the total electricity consumed by those sectors and about 13% of total U.S. electricity consumption.
- We spend more than \$400 billion each year to power our homes and commercial buildings, consuming more than 70% of all electricity used in the United States, about 40% of our nation's total energy bill, and contributing to almost 40% of the nation's carbon dioxide emissions. And much of this energy and money is wasted—20% or more on average.
- Energy-efficient lighting upgrades and advanced lighting controls together can save 30-50% of kilowatt-hours and lighting dollars. **THAT MEANS OPPORTUNITY FOR NECA CONTRACTORS – RIGHT NOW!**

In 2011 the NECA Energy Forum in San Diego drew over 250 contractors and their employees to a full-day combination of plenary sessions and breakout workshops. For 2012, the Energy Forum is an intensive Saturday afternoon of keynote speakers and expert panels that will inform and inspire NECA contractors to grow their businesses through energy solutions. **The Forum will end with the NECA Green Energy Challenge, the annual NECA Student Chapter competition.**

**AND** – your energy solutions education at NECA 2012 Las Vegas doesn't have to stop with the Energy Forum. A series of related management workshops and technical workshops are offered throughout the Convention and the NECA Show.

"There isn't a single path of entry for all NECA member companies to pursue this work," Lazarian said. "The one thing we know for certain is if we don't begin immediately offering our expertise and services, customers will go elsewhere to get their renewable and energy-efficiency needs met."





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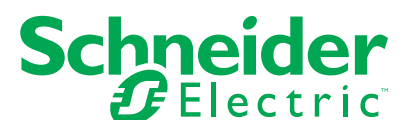
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**"I came back [from the NECA Show] with a wealth of new information—labor saving products and tips, better safety practices, customer service ideas, and a renewed spirit."**

**—Phillip Peterson, President and CEO, Dynalectric San Diego**

## THE NECA SHOW: IT'S ABOUT SOLUTIONS

**THE NECA SHOW IS THE PLACE** where the electrical construction industry finds solutions for their projects and their bottom lines. We all know that customers have become more demanding, and expect to be offered more energy efficient options to consider. The NECA Show is North America's largest resource for our industry, and you'll discover the newest innovations and technological product advances.

This is your chance to meet company executives and product designers and ask questions or talk about your specific needs on upcoming projects and what you expect from vendors that you work with.

Whether you are looking for better tools, software updates, safety equipment, new emerging technologies like solar and wind, utility vehicles, or the new electric vehicle charging station equipment, you will find thousands of products and services available to help you achieve the results you need.

## NECA SHOWSTOPPER SHOWCASE

**DON'T MISS** the industry's most prestigious program that honors the best innovations and emerging technologies for our industry each year. The Showstopper Showcase is located front and center on the NECA Show floor. Sponsored by ELECTRICAL CONTRACTOR Magazine, the winners of these new products and services are selected by an independent panel of electrical contractors from around the country. The Showstopper Showcase provides a perfect opportunity for attendees to see the diverse products, equipment and systems from a range of manufacturers and systems developers prior to the show opening each day. Winners are denoted by a blue ribbon on the product and a trophy in their booth.



### NECA Show Hours:

- Sunday, Sept. 30  
11:30am – 5:00pm
- Monday, Oct. 1  
11:30am – 4:00pm
- Tuesday, Oct. 2  
10:30am – 2:30pm

### Showstopper Showcase Hours:

- Sunday, Sept. 30  
10:30am – 5:00pm
- Monday, Oct. 1  
10:30am – 4:00pm
- Tuesday, Oct. 2  
9:30am – 2:30pm





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# OPENING RECEPTION

## It's a Beach Party, Baby!

Saturday, September 29 • 7:30 pm–9:30 pm

**WE'RE TAKING OVER** the Mandalay Beach, a world-famous playground with a wave pool, lazy river, three swimming pools, and 2,700 tons of real sand—right in the middle of Las Vegas! Kick off your shoes, let your hair down and enjoy the night! From the tiki bars to the sand sculptures to the fall breezes in the air, this is the time to kick back and relax.

Chill out at the ultra lounges and sip tropical drinks while our amazing band covers the hits of the surf culture—from the Beach Boys to UB40, from Blondie to the B52s...there's something for everyone! Check out the cabanas along the pool where theme vignettes abound, including Elvis and his showgirl sidekicks, and Marilyn in all her glory.

As the sun sets you'll find yourself drawn surfside, where the water is cool and the music is hot. Dance the night away, or simply dip your toes in the water while you enjoy an end-of-summer concert.

There is so much to take in, including fire twirlers, a limbo king and side shows all around! The menu is fun and festive, with the thrill of the grill and grab-and-go food stations everywhere. There's even something for the kids with a Wonka-style candy buffet and sand games!

So get your flip flops on, get your surf style ready and unwind the night away...Mandalay beach style!

# CLOSING CELEBRATION

## Le Rêve

Tuesday, October 2 • Doors open 6:30, Show begins 7:00 pm  
Wynn Resort and Casino

**THIS YEAR'S CLOSING CELEBRATION** will take place in a dazzling realm of fantasy, adventure and intrigue where dreams swim in the air and dance on water. It's at Wynn Las Vegas where *Le Rêve* ("The Dream"), one of the hottest ensembles of production performers in Las Vegas, will put on a breath-taking display of aerial acrobatics, provocative choreography, synchronized swimming, and artistic aerial feats captivating the senses with live music and some of the most thrilling special effects you've ever seen.

*Le Rêve* opened concurrently with Wynn Las Vegas on April 28, 2005. Since then, the troupe has performed more than 3000 shows there. On Tuesday, October 2, these 93 talented entertainers will perform exclusively for NECA conventioners in an intimate aqua theater-in-the-round. The circular 1608-seat theater is situated around a pool that is 68.5 feet in diameter, with the furthest seat only 42 feet from the water. So, each spectator enjoys an amazing view and a feeling of being immersed in the show along with its beautiful, mystifying characters.

You can see fantastic scenes from *Le Rêve* on Facebook ([facebook.com/lerreve](https://www.facebook.com/lerreve)). Of course, the best way to experience *Le Rêve* is live and in person. We guarantee you've never experienced anything like the Closing Celebration at NECA 2012 Las Vegas — except maybe in your dreams!

\*Transportation not provided to Closing Celebration.



## LIFESTYLES

### Chef Jeff Henderson: America's Most Inspirational Culinary Star

Monday, October 1 • 10:00–11:30 am



**JEFF HENDERSON** grew up on the mean streets of Central LA and San Diego. By the time he was 19, he was running a \$35,000 a week drug operation. At 24, he was arrested and sent to prison, where he spent the next ten years behind bars. It was while incarcerated that he discovered a passion for cooking and committed himself to turning his life around.

Having no formal education and a criminal background, Henderson struggled for years in the hospitality industry. But, with persistence and

determination, he was able to achieve his dreams, eventually becoming the executive chef of Café Bellagio in Las Vegas. His story was first told in the New York Times best-selling memoir, *Cooked: My Journey from the Streets to the Stove*. His follow-up book, *The Power of Potential*, comes out this fall.

Today, Henderson is the Food Network personality behind The Chef Jeff Project, which takes at-risk young adults and commits to turning their lives around. He also shares his captivating, and often humorous, story to inspire audiences all over the country to take charge of their lives and become a driver on the freeway towards their dreams. On Monday morning, October 1, he'll provide attendees in the Lifestyle Program effective and simple ways to implement strategies to navigate through the detours and roadblocks along the way.



## SAFETY ROUNDTABLE

Sunday, September 30 • 1:00 pm–2:00 pm

**JOIN NECA SAFETY** for the fourth annual Safety Roundtable. The roundtable allows for two-way discussion on NECA's safety-related activities and electrical industry needs. Participants will have the opportunity to engage in the lively discussions. The Roundtable is moderated by Michael J. Johnston, Executive Director Standards and Safety, NECA and Jerry E. Rivera, Director of Safety, NECA.

## PRAYER SERVICE

Sunday, September 30 • 6:45 am–7:45 am

**START YOUR DAY** with an inspirational message and music from NECA. Please join us on Sunday morning for worship, fellowship and coffee in the Mandalay Bay.



# 2012 EDUCATION TRACKS OVERVIEW



**NECA EDUCATION TRACKS** are a series of strategies, best practices and newest technology grouped in five tracks of related topics. Each track is filled with hours of content presented by the industry's leading experts geared to providing strategic and practical solutions for electrical contractors. If your firm is expanding into one or more of the alternative energy markets, then attend the Energy Solutions track, or send one of your colleagues to cover the information while you attend the Management Track. And, make sure your Safety Director attends the Safety Track. Each theme runs from pre-convention workshops to the management sessions to the technical workshops on the NECA show floor. These new streamlined tracks will help you keep up with the ever-evolving needs of the industry.

## **ELECTRICAL**

There is so much to stay abreast of in the world of technology and best practices. This track covers vital information such as pre-fabrication, significant NEC® code changes, measuring power consumption, new tool technology, leveraging BIM, and more.

## **ENERGY SOLUTIONS**

These sessions are a continuation of the Energy Forum, providing an in-depth look at alternative energy opportunities available to electrical contractors. Topics covered include Smart Grid, Solar/PV, the vast market for lighting and controls retrofits, NECAWORKS™, EVSE, and much more.

## **LINE CONSTRUCTION**

Line contractors are working in extraordinary times. They are at the forefront of electrical grid improvements, smart meters, broadband technology, and distributing power from renewable sources nationwide, as well as safety improvements. The only way your business can be prepared to take advantage of all the emerging market opportunities in our industry is to be exposed to new ideas and solutions. Attendees will find all the latest information and updates.

## **MANAGEMENT**

Immerse yourself in the leadership skills and knowledge you need in order to contribute more effectively as a key member of your management team. Driving improved business results through enabling technologies is crucial to grow sales, reduce expenses, and improve organizational effectiveness.

## **SAFETY**

This safety track extends the learning from the Safety Forum. Topics include new OSHA enforcements, NFPA 70E compliance updates, safety through design, lightning protection advances, and more.

## **PLAN YOUR SCHEDULE**

Attendees will find a complete matrix of the tracks on our website at **[www.necaconvention.org](http://www.necaconvention.org)**. The matrix chronologically outlines all sessions by related topic, so you can customize plan your NECA 2012 Las Vegas education program to fit your business needs.





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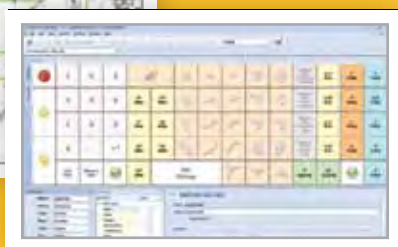
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# PRE-CONVENTION WORKSHOPS

These preconvention workshops present an in-depth look at many of the leading issues in our industry today, from alternative energy opportunities, updates in safety and code changes, pre-fab construction, line construction, to new and innovative management strategies. The best minds in our industry will lead these interactive sessions providing the tools you need to ensure your industry superiority. Full course descriptions and speaker bios can be found at [www.necaconvention.org](http://www.necaconvention.org).

## FRIDAY, SEPTEMBER 28

8:00 am–12:00 pm, PW-1

### Significant NEC® Changes – What You Need to Know

This course provides attendees with a thorough review of the most significant changes in the 2011 National Electrical Code®. Learn about new articles and revisions to existing requirements that have an impact on your daily business. This program delivers authoritative overviews of many of the Code changes that must be understood by contractors and installers alike. Registration includes the NJATC Significant Changes textbook.

Instructors: Michael Johnston, NECA Executive Director of Standards and Safety and James T. Dollard, Philadelphia Electrical JATC Safety and Training Coordinator  
Fee: \$145.00

8:00 am–5:00 pm, PW-2

### Distributed Energy Systems: Design & Construction

Wind, fuel cell, and solar projects are growing rapidly, offering the opportunity for an electrical contractor to step up to the role of general contractor, consultant and construction manager. Power Purchase Agreements (PPA) allow companies to generate local power that is clean, fault tolerant, and profitable for the provider and end user. This workshop will address the technology involved and the steps required to engineer, procure, and construction manage a distributed energy site.

Instructors: Donald E. Nelson, RCDD, WD, RTPM, PMP - Nelson Consulting Associates/ConEst Software Systems  
Fee: \$ 250.00

8:00 am–5:00 pm, PW-3

(Two-day course continues Saturday 8:00 am–5:00 pm)

### OSHA ET&D 10 Hour Train-the-Trainer Course

The OSHA ET&D 10 Hour is an introductory awareness course for electrical line construction. The course objective is to train trainers to enhance accident prevention, review electrical safety principles and how it relates to today's electrical line construction industry. The course also covers an overview of OSHA construction safety regulations with an emphasis on electric generation, transmission and distribution (1910.296 and 1926 Subpart V). Upon completion participants will receive an OSHA 10 Hour card.

Instructor: James McGowan, Corporate Training Instructor, Quanta Services  
Fee: \$ 450.00 (course is NOT part of the Safety Forum Weekend Package)

10:00 am–12:00 pm, PW-4

### Installing and Maintaining Electric Vehicle Charging Stations

NECA-413, *Standard for Installing and Maintaining Electric Vehicle Supply Equipment*, is a new NEIS. This presentation provides a review of essential installation requirements that deal with safety, performance and quality. This program provides valuable insight into effective site assessments and providing customers with Code-compliant installations of electric vehicle supply equipment in residential and commercial occupancies. Attendees receive a copy of the standard.

Instructor: Gregory Massey PE, Director of Electrical Engineering, SME NECA-NEIS Standards Development  
Fee: \$89.00

1:00 pm–2:30 pm, PW-5

### The Value of Inspector Relations

This presentation by the International Association of Electrical Inspectors (IAEI) provides attendees with valuable insight into electrical inspections, required permits and plan review processes, and provides focus on inspector/contractor relationships and the value of communication and working together to achieve common objectives. Examples of how gray areas in the NEC are addressed and the importance of electrical inspector proficiency and certification/qualifications are reviewed. Inspection techniques and tools are discussed with real-world examples of how inspectors apply the Code to installations and systems.

Instructor: Donald R. Cook, Chief Electrical Inspector, Shelby County Department of Development Services  
Fee: \$89.00

1:00 pm–3:00 pm, PW-6

### The Economic Costs of Restricting the Portability of Electrical Workers

Restricting the ability of signatory electrical contractors to move union electricians to projects in multiple IBEW locals dramatically impacts their ability to compete with their non-union counterparts. The most notable disadvantages from restricting portability include increased costs, lower productivity and quality, and increased difficulty servicing customers with projects in multiple locals. These problems ultimately reduce market share and negatively impact the bottom line of signatory contractors. This seminar will discuss the specific costs associated with restricting portability and some strategies for mitigating them.

Instructor: Justin M. Reginato, Ph.D., P.E., Construction Management Program at California State University, Sacramento  
Fee: \$89.00

1:00 pm–3:00 pm, PW-7

### Installing and Maintaining Photovoltaic (PV) Systems

NECA-412, *Standard for Installing and Maintaining Photovoltaic (PV) Systems* is a new NEIS. This program provides insight into performing effective site assessments and providing customers with Code-compliant installations of PV systems and equipment in residential and commercial occupancies. Learn how NEC 412 can assist contractors and installers in providing quality, safe, high-performance photovoltaic (PV) system installations. Attendees receive a copy of the standard.

Instructor: Gregory Massey PE-Director of Electrical Engineering, SME NECA-NEIS Standards Development  
Fee: \$89.00

1:00 pm–3:00 pm, PW-8

### Making CW/CE Work for You: What You Need to Know and What You Need to Do

This workshop will address the utilization of Construction Wiremen (CWs) and Construction Electricians (CEs) and provides tools to make the CW/CE program more efficient and profitable for your company. Case studies of how small and large-scale electrical contractors have successfully integrated workers under the new classification into their workforce are also covered.

Instructor: TBA  
Fee: \$89.00



1:00 pm–5:00 pm, PW-9

### **Maximize Productivity by Implementing a Best-in-Class Prefabrication System**

This session discusses best practices being deployed in the industry including photos of the most productive and progressive shops in the US, the importance of product standardization, linking estimating to detailing to prefabrication to field installation, and logistics and inventory management ideas to further enhance cost reductions resulting in higher margins. Gain an understanding of the three levels of prefabrication and the use of BIM to drive their implementation.

Instructor: Michael McLin, Managing Director and Bruce Wilkinson, Senior Consultant, Maxim Consulting Group, LLC  
Fee: \$145.00

3:00 pm–4:30 pm, PW-10

### **Understanding the Smart Grid – Opportunities and Challenges**

The generally accepted definition of “smart grid” in the U.S. is an upgrade of existing electricity networks to intelligently produce and distribute power in better ways that respond to a varying demand. For electrical contractors, the smart grid represents opportunities on both sides of the point of service. This presentation provides a clear overview of what the Smart Grid initiatives are all about and the opportunities for contractors.

Instructor: Mark W. Earley, Chief Electrical Engineer, NFPA/Secretary, NEC and Michael J. Johnston, NECA Executive Director of Standards and Safety  
Fee: \$89.00

## **SATURDAY, SEPTEMBER 29**

8:00 am–9:30 am, PW-11

### **Temporary Construction Power – Anything Goes?**

This course provides valuable information about efficient and safe design and installation of temporary construction power. The program reviews the requirements in the OSHA regulations and the National Electrical Code. Learn about effective methods to integrate electrical safety into any temporary power installation. Attendees receive a copy of NECA 200, **Installing and Maintaining Temporary Construction Power**.

Instructors: James T. Dollard, Philadelphia Electrical JATC Safety and Training Coordinator  
Fee: \$89.00

8:00 am–12:00 pm, PW-12

### **Maximize Productivity by Implementing a Best-in-Class Prefabrication System**

See course description and fee under PW-9, Friday 1:00 pm–5:00 pm.

9:00 am–12:00 pm, PW-13

### **Lighting Controls and NECA 504: Developing Valuable Expertise**

This program assists contractors in developing valuable expertise in lighting control applications and design. This presentation reviews some new rules in the NEC related to LED and other technologies and provides a glimpse of NECA's new NEIS in development that addresses advanced lighting control and systems. This presentation also looks at understanding and providing dark sky friendly outdoor lighting applications.

Instructor: James R. Benya, P.E., Principle Engineer, Benya Lighting Design  
Fee: \$145.00

1:00 pm–2:30 pm, PW-14

### **NECA 701 Energy Management, Energy Solutions and Demand Response**

NECA-701, **Standard for Installing and Maintaining Photovoltaic (PV) Systems** is an NEIS in development. It provides important information about energy management systems, techniques, and methods. This presentation covers the essentials of providing effective energy solutions for existing and new facilities, effective energy auditing techniques, and building systems integration that maximizes energy reduction and efficiency.

Instructor: Gregory W. Massey, P.E., Director of Electrical Engineering/SME NECA-NEIS Standards Development  
Fee: \$89.00

1:00 pm–4:00 pm, PW-15

### **LED Controls 101: Details on LED Lighting Circuits and Controls**

This presentation provides a current update on how LEDs are being applied in the world of everyday lighting. Retrofitting existing equipment can result in significant savings for facilities, but important requirements must be followed. Learn how LED has advanced and the various applications that building owners are seeking.

Instructor: James R. Benya, P.E., Principle Engineer, Benya Lighting Design  
Fee: \$145.00

1:00 pm–5:00 pm, PW-16

### **Competing in Next Generation Integrated IBC – From Marketing To Implementation To Litigation**

Next-generation Intelligent Industrial Parks and Intelligent Business Campuses (IBC) will overtake the rest of the commercial real estate market in competing for corporate facilities. In this case, high performance means high profitability through high occupancy, a defined theme and utilization of redundant power grids and broadband connectivity as well as high security for the total development. This session will include topics such as Quality in Technology Investments; the RFP Process; Where Broadband Connectivity Fits In; and more.

Instructor: James Carlini, President & Certified Infrastructure Consultant, Carlini & Associates  
Fee: \$145.00

3:00 pm–4:30 pm, PW-17

### **NECA's Electric Vehicle Workshop – A Contractor's Perspective**

This program reviews requirements for site assessments to ensure system capacity of electrical power sources and service equipment and safe installation of EVSE branch circuits and feeders. A review of applicable rules in the NEC and information about NECA 413, the standard on electrical vehicle charging stations, and other applicable standards are integrated into the program. Regulatory agency compliance is also reviewed.

Instructors: Michael J. Johnston, NECA Executive Director, Standards and Safety and Robert W. Colgan, NECA Executive Director, Market Development  
Fee: \$89.00

# MANAGEMENT SEMINARS

New this year! NECA has expanded the Management seminar schedule and created five special interest tracks to make it easy to choose the right education. Attendees can focus on one area such as Management or Energy Solutions, while colleagues attend another track, or mix and match the programs that will help you get the results you need. Full course descriptions and speaker bios can be found at [www.necaconvention.org](http://www.necaconvention.org).

## SUNDAY, SEPTEMBER 30

8:00–8:50 am, M-1 • 9:00–9:50 am, M-10

### Leveraging BIM to Drive Scalable Prefabrication

Presenters: Michael McLin, Managing Director and Bruce Wilkinson, Senior Consultant, Maxim Consulting Group, LLC

This session will discuss best practices being deployed by merit shop contractors to increase productivity and prefabrication via BIM, including product standardization, digital prototyping, digital manufacturing and supply chain management. The integration of BIM into the lifecycle of projects from design through installation and turnover to maximize profitability and owner satisfaction will be covered.

8:00–9:30 am, M-2

### OSHA's Enforcement Initiative: What You Need to Know

Presenter: Jerry Rivera, Director of Safety, NECA

This session will provide participant with a high level review of OSHA's most recently released rules impacting the electrical construction industry. The update will include HazCom, interpretation letters and enforcement memos, confined space in construction and emerging issues. Participants will gain a better understanding of the new rules and how it will impact electrical contractor's safety programs.

8:00–9:30 am, M-3

### Electrical Transmission and Distribution (ET&D) Partnership 2012 – Panel Discussion

Presenter: Michael J. Johnston, Executive Director, Safety & Standards, NECA - Moderator and Panel ETD - Steering Committee Members

The session will review some of the ET&D Partnership activity during the 2012 calendar year. Updates will include task team projects on data collection, training activity, and development of best practices and communication means used to make partnership material accessible to the industry. Participants will gain valuable information on partnership activity and means for accessing information.

8:00–8:50 am, M-4 • 9:00–9:50 am, M-11

### Building Lasting Value with Energy Efficiency

Presenter: Melissa Golden, Market Segment Manager, Schneider Electric

Buildings and industry are the biggest consumers of energy in United States. Energy costs are often the single largest controllable facility operating expense. Your customers are interested in mitigating these expenses, and they are turning to you for answers. This session will teach you all about crafting an energy efficiency solution for your customer allowing you to leverage this growth opportunity.

8:00–8:50 am, M-5 • 9:00–9:50 am, M-12

### Customer Side Smart Grid Installations – Preparing for the Future

Presenter: Thomas M. Korman, Ph.D. and Lonny Simonian – Associate Professors, Cal Poly State University San Luis Obispo

As the Smart Grid continues to evolve over the next 20 years, customers will have the opportunity to tailor their electrical power usage and reduce energy consumption costs. The NIST Smart framework includes a range of smart grid energy management applications and service provider interactions which will present new opportunities to enhance existing systems in residential, commercial, and industrial facilities.

8:00–8:50 am, M-6 • 9:00–9:50 am, M-13

### Change Order Protocol

Presenters: Matt Syal, Ph.D., LEED@AP Professor, Michigan State University and Giovanni Marcelli, Founder of Accubid Systems

The objective of this seminar is to expose the true costs of change orders and help project managers recover these costs by presenting professional and consistent documentation to support the price. **[EI]**

8:00–8:50 am, M-7 • 9:00–9:50 am, M-14

### What You Need to Know Now: Pension Reform

Presenters: Marco Giamberardino, MPA, Executive Director, NECA Government Affairs and Kristin McDonough, Director, Legislative Affairs, NECA

An update on the current status of pension reform efforts on Capitol Hill.

8:00–8:50 am, M-8 • 9:00–9:50 am, M-15

### The Economic Costs of Restricting the Portability of Electrical Workers

Presenter: Justin M. Reginato, Ph.D., P.E. – Construction Management Program at California State University, Sacramento

Restricting the ability of signatory electrical contractors to move union electricians to projects in multiple IBEW locals dramatically impacts their ability to compete with their non-unions counterparts. The most notable disadvantages from restricting portability include increased costs, lower productivity and quality, and increased difficulty servicing customers with projects in multiple locals. These problems ultimately reduce market share and negatively impact the bottom line of signatory contractors. This seminar will discuss the specific costs associated with restricting portability and some strategies for mitigating them. **[EI]**

8:00–8:50 am, M-9 • 9:00–9:50 am, M-16

### Lighting Retrofits and Relighting – Cost Effective for the Customer, Good for the Environment, and Good Business for Our Nation

Presenter: James R. Benya P.E., FIES, FIALD, Principal, Benya Lighting Design

With the rapid advances in lighting and dramatically falling prices for materials, now is the time to start a campaign to relight America's buildings and to help foster a lasting economic recovery. Lighting is virtually the only large scale business opportunity that pays for itself through energy savings for every customer. Let's find a way to make lighting and the skills of our industry a key part of our economic recovery.

## MONDAY, OCTOBER 1

8:00–8:50 am, M-17 • 9:00–9:50 am, M-25

### Business Financial Planning

Presenter: James Weber and David O'Brien, CPA, Managing Members, Weber O'Brien LTD

Very few business owners are prepared for retirement. Planning is not using the sale of the business to create your net worth. A large number of business owners utilize the value of their business and value of their personal real estate as their primary personal financial planning.

**[EI]** — Course is derived from ELECTRI International research



8:00–8:50 am, M-18 • 9:00–9:50 am, M-26

### **Leading Safety Indicators- A Pro-Active Approach to Enhancing Workplace Safety**

**Presenter:** F. Scott Grischow, CSP, ARM, OHST, Special Accounts Risk Consultant, Federated Mutual Insurance

This course is an overview of how traditional injury and loss measurements are Lagging Indicators and only show past performance. Several Leading Indicators, including safety observations, site & facility inspections, timing and quality of training will be introduced and a discussion regarding use of these indicators of how to apply them to a pro-active safety program will take place.

8:00–8:50 am, M-19 • 9:00–9:50 am, M-27

### **Finding Energy Savings Projects – A Total Building Approach**

**Presenter:** Karl Griffith, Director, Emerging Technology, Graybar

This presentation will break down a typical commercial enterprise into multiple segments and outline energy savings opportunities in each segment using the PowerSmart approach. Learn how to identify energy savings opportunities, dollarize each opportunity and describe how the customer payback can be received (ROI), identify the size of the opportunity that exists in existing buildings, what resources are available for additional help, and how to partner for success.

8:00–8:50 am, M-20 • 9:00–9:50 am, M-28

### **Hype vs. Reality of LED Luminaire Lifetimes: What You Need to Know**

**Presenter:** John W. Curran, Ph.D., President, LED Transformations, LLC

This presentation will help attendees understand why a system-based approach is necessary when considering LED luminaire lifetime. The speaker will discuss typical areas of failure for LED luminaires as well as steps contractors can take to ensure greater reliability in the products they purchase from luminaire manufacturers.

8:00–8:50 am, M-21 • 9:00–9:50 am, M-29

### **Involvement of Electrical Contractors in Integrated Project Delivery**

**Presenter:** Mehmet Egemen Ozbek, Ph.D., Colorado State University

Integrated Project Delivery (IPD) is believed to be one of the most prominent movements in enhancing the performance of the construction industry. This presentation will report on the findings from a recent ELECTRI International study which sought to gain a better understanding of the electrical contractors' point of view with respect to IPD and how it could affect their ability to pursue—and ultimately complete—IPD projects successfully. **[E]**

8:00–8:50 am, M-22 • 9:00–9:50 am, M-30

### **The High Cost of a Low Price in the ECs World**

**Presenter:** Craig Goodman, Account Executive/Seminar Scheduler, The ACT Group

Research shows that more than 80% of your potential customers will pay more for additional benefits, faster results and superior solutions to their problems. Please join us for a fast moving, content packed introduction to the No Pressure Selling® Process. You will leave with the skills, tools, and confidence to make an immediate impact on your business using a simple, repeatable process that is No Pressure for both you and your customers.

8:00–9:50 am, M-23

### **Getting More Everyday In Work and Life: A New Model for Negotiating Anything**

**Presenter:** Stuart Diamond - President, Global Strategy Group

Participants will submit three negotiation problems before the session, and the presenter will use the problems to illustrate negotiation tools as applied to real life situations. Learn how to set goals and navigate issues of trust, commitment, standards and emotion. Participants will learn methods that are immediately practical and can be applied to any negotiation situation.

8:00–8:50 am, M-24 • 9:00–9:50 am, M-31

### **NECA's System Approach to Safety 2012**

**Presenter:** Joe O'Connor, President, INTEC

The course has been designed to provide a systematic approach to establishing an electrically safe working condition. The course will address energized vs. de-energized work, Personal Protective Equipment Selection and LOTO procedures. Participants will gain simplified approach to electrical safety as it relates to NFPA 70E Standard.

## **TUESDAY, OCTOBER 2**

8:00–8:50 am, M-32

### **Situation Analysis – A Vital Step in Realistic Business Planning**

**Presenter:** Karl Borgstrom, Ph.D., Training Consultant

The "situation analysis" evaluates business assets, strengths, and resources, as well as the opportunities and challenges of the external operating environment. Investing in this front end "strategic thinking" phase of the planning process will pay off in terms of business goals that are realistic and the alignment of company resources and capabilities to best achieve those goals.

8:00–8:50 am, M-33

### **NECA's Supervisor's Guide to Jobsite Safety**

**Presenter:** Michael J. Johnston, Executive Director, Safety & Standards, NECA and Jerry Rivera, Director of Safety, NECA

Safety is mission-critical in the electrical industry. Statistics reveal that more than 10,000 electricians are injured annually on the job, with an average of 10 lost work days. Learn how to improve your safety and health performance by capitalizing on supervisory staff. Participants will gain valuable information on the importance of the supervisor's role in achieving jobsite safety. Session topics include activities such as pre-planning, training, inspection, coaching and accident reporting.

8:00–8:50 am, M-34

### **Implementing Lighting Management Technologies and Practices to Drive Building Efficiency**

**Presenter:** Erik Sorenson, Section Program Manager, National Electrical Manufacturers Association

This session will review implementation and installation of the latest lighting control technologies, strategies and systems for reaching Net-Zero energy and sustainability goals, for complying with energy codes and for integrating with intelligent buildings. Technologies such as digital lighting controls, wireless systems, advanced daylighting and window shade controls, and occupancy sensors will be covered.

8:00–8:50 am, M-35

### **Improving Labor Productivity for Electrical Contractors**

**Presenter:** David Brown, President, Consultant, D. Brown Management

This class describes some of the tactics that can be used to improve productivity. The ideas come from the presenter's real-world experiences as an electrician, foreman and contractor augmented by experiences from consultants working with clients across the country observing best—and more importantly worst—practices in labor productivity. The class covers ideas including talent differentiation, skill-gap analysis, material logistics, key things that impact productivity and a daily planning and tracking system that can be put into practice immediately.

8:00–8:50 am, M-36

### **NECA Government Affairs 2012 Election Update**

**Presenters:** Marco Giamberardino, MPA, Executive Director, NECA Government Affairs and Kristin McDonough, Director, Legislative Affairs, NECA

A detailed look at the upcoming Presidential and Congressional elections.

# TECHNICAL WORKSHOPS

Manufacturers and distributors often have the best research and development (R&D) teams in the industry. They constantly study trends and develop new technologies that are designed to help electrical contractors be more effective and efficient on the job. Again this year, NECA has partnered with our exhibitors to bring you nineteen (19) technical workshops in the areas of power, improving productivity, alternative energy opportunities, new management tools, security, and life safety.

## SUNDAY, SEPTEMBER 30

12:00–12:50 pm, Room 1, TW-1

### Measuring the Cost of Power Consumption

Presenter: Wade Thompson, Fluke Corporation

Measuring power in the way that utilities charge for it requires more than taking a voltage and amperage reading. You need to know power factor. This workshop steps through various levels of power measurement, explaining the application scenarios, how to connect correctly, what to measure, and, most importantly, how to quantify the amount of energy waste, either due to operational practices or poor power quality. Measurement parameters covered: voltage unbalance, harmonics, phase current, voltage sags, peak consumption and power factor.

12:30–1:20 pm, Room 2, TW-2

### Electric Motor Systems Diagnostics: See the Potential Service \$\$\$ You are Missing

Presenter: Richard Scott, All-Test Pro

The reliability and energy consumption of electric motors and the systems they drive has a financial impact to industrial and commercial enterprises. We will discuss the financial justification for a motor testing program, along with a general discussion of off-line and on-line testing methods, and ways to sell the service.

1:00–1:50 pm, Room 1, TW-3

### EVSE Installation Observations and Trends

Presenter: Manoj Karwa, Leviton

This session provides insights into residential and commercial electrical vehicles supply equipment installations. Installer training in classroom and online, installation metrics, time to install and customer interaction will be covered, based on Leviton's turnkey installation program across the USA. The learning outcomes include best practices for designing and implementing a turnkey installation program.

1:30–2:20 pm, Room 2, TW-4

### Integrating Submeter Data into Building Management Systems (BMS)

Presenter: Sim Gurewitz, E-Mon

Attendees will learn how to integrate data from electric submeters, interval data recorders, water, gas, steam and other pulse-output meters into typical building management systems. Real-world facility case studies will help to illustrate how submeters can drive a variety of energy upgrades for contractors, distributors and other sales-channel professionals.

2:00–2:50 pm, Room 1, TW-5

### Lighting Controls for the Rest of Us

Presenters: Mike Malone and Jim McGrath, Crestron Electronics

This session will take the complexity and challenges out of technology for lighting, occupancy sensors, and daylighting controls with simple packaged solutions.

2:30–3:20 pm, Room 2, TW-6

### Understanding the Arc Flash & NFPA 70E Update

Presenter: Scott Margolin, Westex

The presentation will provide an overview of the arc flash hazard, and an update on the NFPA 70E 2012 Edition. Dramatic super-slow motion video will illustrate the arc flash event, the hazard of non-flame resistant clothing and the necessity of arc rated clothing for everyday work wear.

3:00–3:50 pm, Room 1, TW-7

### Robotic Total Station Layout

Presenter: Ken Shawler, Trimble

Attendees will learn how to leverage robotic technology as a competitive advantage, how one person can accurately layout hundreds of points in a very complex design, how to reduce errors by extracting field layout information directly from CAD or BIM files, best practices for precise field layout and cost savings, and what to know before investing in robotic stations.

3:30–4:20 pm, Room 2, TW-8

### Upgrading Your Solar Business from Simple Grid-Tied to Interactive Systems

Presenters: Mark Cerasuolo and Marty Spence, OutBack Power

Learn how to plan a solar power system that does more than provide net metering savings. There is one that can also continue to provide power during an outage. Battery-based grid interactive systems have many advantages over simple PV grid-tie systems, including un-interruptible back-up power and energy storage capabilities for emerging Smart Grid needs.

## MONDAY, OCTOBER 1

12:00–12:50 pm, Room 1, TW-9

### The Advantages and Intricacies of Induction Retrofits

Presenter: Richard White, Fulham Co. Inc.

Today, an induction retrofit of an existing HID lighting system is significantly less expensive than a new LED or induction fixture. This session will discuss the benefits of induction lighting, the retrofit process for existing fixtures, and the technical hurdles to be expected and overcome.



12:30–1:20 pm, Room 2, TW-10

### **Advances in Lithium-ion Cordless Tool Technology**

Presenter: Kevin Arnold, Milwaukee Electric Tool Corporation

This session will review the current technology in advancement of cordless power tools as used by the professional electrical contractor. Topics covered include motor technology, battery technology, charging technology and how these systems operate together as an eco-system.

1:00–1:50 pm, Room 1, TW-11

### **Solar & EV: A Winning Combination**

Presenter: Seth Cutler and Brian Schmalberger, GE Energy, Industrial Solutions

Solar carports are a great example of the merging new technologies to deliver a win/win integrated energy efficient solution. The rising demand for both solar and EV will be discussed along with trends and growth projections. Learn how you can provide innovative turn-key solutions to your customers.

1:30–2:20 pm, Room 2, TW-12

### **Evaluating LED Luminaires for Best Illumination and Economic Performance**

Presenter: Eric Haugaard, Cree Inc.

Learn how to evaluate the illumination, economic, and ecological requirements and risks for your lighting application using a lifecycle cost analysis approach. The session emphasizes the necessity for comprehensive and credible product performance data. Learn how to use application-based performance evaluations to meet sustainable illumination, with ecological and economic objectives. The integration and compatibility of SSL solutions with networked and non-networked controls will also be discussed.

2:00–2:50 pm, Room 1, TW-13

### **NEIC Lightning Protection System Installation and Maintenance Standard**

Presenters: Mark S. Harger, Harger Lightning & Grounding

NEIC standard ensures the installation meets/exceeds quality and performance criteria and complies with requirements of NFPA® 780, Standard for Installation of Lightning Protection Systems. Standard covers Pre-Construction Site Assessment, Project Management, Multiple Site Inspection, Quality Control, Application and Acquisition of UL Master Label® Certificate of Inspection, Maintenance and testing procedures.

2:30–3:20 pm, Room 2, TW-14

### **The New Mobility**

Presenter: Wayne Newitts, Dexter + Chaney

As mobile computing becomes more common, so are construction-specific mobile applications. This session will explain how the types of applications available are changing, and how they are fostering contractor collaboration.

3:00–3:50 pm, Room 1, TW-15

### **Type Metal Clad Cable (MC) – Feeder Installation Techniques**

Presenters: John Tinney and Tim Edwards, Alcan Cable

Metal Clad feeder cables are being installed in virtually every type of building under construction including stadiums, schools, multi-family housing, hotels, commercial retail and office, industrial plants and warehouses. This session will provide best practice techniques and show installers tips and tricks on how to make neat and workmanlike installations in the most efficient way possible. The presenter will share real-life experiences gathered from installations across the country.

## **TUESDAY, OCTOBER 2**

11:00–11:50 pm, Room 1, TW-16

### **Designing for Digital AV**

Dennis Olson, CTS, Extron Electronics

This system design course provides the principals of fiber optic and twisted pair technologies and design standards for delivering pixel for pixel quality. You will be able to identify which AV applications are better suited for twisted pair technology and for fiber optic technology. Attendees will gain an understanding of infrastructure requirements to properly distribute digital video.

11:30–12:20 pm, Room 2, TW-17

### **Save Labor in the Submittal Process**

Presenter: Sumana Rao and Mike Podoris, Trade Service

Software is automating the submittal process, reducing errors and resulting in dramatic labor savings. Learn how built-in page numbering, mark-up tools and automatic configuring to the CSI MasterFormat lessen the hassle of building a submittal package while still producing a professional looking document.

12:00–12:50 pm, Room 1, TW-18

### **Improving Productivity for Electrical Contractors on the Jobsite**

Presenter: Ryan Berg and Sumeet Pujari, Greenlee Textron

This session focuses on cable management and the new products that have been developed around cable pulling and termination. The presenters will demonstrate advances in cable pulling, gripping, pulling and feeding, termination, cutting, stripping and crimping.

12:30–1:20 pm, Room 2, TW-19

### **Oil Filled Transformer Applications and Maintenance**

Presenter: Mitchell Sweigart, Solomon Corp.

This session will address transformer design including accessories and options such as dual voltage and taps. Attendees will learn about the impact on arc flash ratings with a Dead Front vs. Live Front. Transformer connections and preventive maintenance cycles will be discussed.

# SCHEDULE AT A GLANCE

## Thursday, September 27

1:00 pm – 5:00 pm  
Registration ..... MB

## Friday, September 28

7:30 am – 5:00 pm  
Registration ..... MB

8:00 am – 12:00 pm E/S  
**PW-1** Significant NEC® Changes – What You Need to Know –  
Mike Johnston, James Dollard ..... MB

8:00 am – 5:00 pm ES  
**PW-2** Distributed Energy Systems: Design and Construction—  
Donald Nelson ..... MB

8:00 am – 5:00 pm (Day 1) LC  
**PW-3** OSHA ET&D 10 Hour Train-the-Trainer Course—  
James A. McGowan ..... MB

9:00 am – 12:00 pm  
Tour: Red Rock Canyon ..... MB

9:00 am – 2:00 pm  
Tour: Viva! Las Vegas City Highlights ..... MB

9:00 am – 2:00 pm  
Tour: Hoover Dam Discovery ..... MB

9:00 am – 2:00 pm  
Tour: Puttin' on the Ritz: Behind the Scenes at Jubilee! ..... MB

10:00 am – 12:00 pm E/ES  
**PW-4** NECA 413 Standards for Installing Electric Vehicle  
Charging Stations—Gregory Massey ..... MB

12:00 pm – 1:30 pm  
Pre-Convention Workshop Lunch (requires ticket) ..... MB

1:00 pm – 2:30 pm E/M/S  
**PW-5** The Value of Inspector Relations – Donald R. Cook ... MB

1:00 pm – 3:00 pm E/M  
**PW-6** The Economic Costs of Restricting the  
Portability of Electrical Workers—Justin Reginato ..... MB

1:00 pm – 3:00 pm E/ES  
**PW-7** NECA 412, Installing and Maintaining Photovoltaic (PV)  
Systems—Gregory W. Massey ..... MB

1:00 pm – 3:00 pm M  
**PW-8** Making CW/CE Work for You—TBA ..... MB

1:00 pm – 5:00 pm E/M  
**PW-9** Maximize Productivity by Implementing a Best-in-Class  
Prefabrication System—Michael McLin, Bruce Wilkinson ..... MB

3:00 pm – 4:30 pm ES/LC/M  
**PW-10** Understanding the Smart Grid—Mike Johnston,  
Mark Earley ..... MB

## Saturday, September 29

6:30 am – 8:00 am  
District 10 Breakfast ..... MB

7:30 am – 5:00 pm  
Registration ..... MB

7:00 am – 8:00 am  
Board of Governors Breakfast ..... MB

8:00 am – 12:00 pm  
Board of Governors Meeting ..... MB

8:00 am – 9:30 am E/S  
**PW-11** Temporary Construction Power Solutions – Anything  
Goes?—James T. Dollard ..... MB

8:00 am – 5:00 pm (Day 2) LC  
**PW-3** OSHA ET&D 10 Hour Train-the-Trainer Course—  
James A. McGowan ..... MB

8:00 am – 12:00 pm E/M  
**PW-12** Maximize Productivity by Implementing a Best-in-Class  
Prefabrication System—Michael McLin / Bruce Wilkinson ..... MB

9:00 am – 12:00 pm ES  
**PW-13** Lighting Controls and NECA 504: Developing Valuable  
Expertise—Jim Benya ..... MB

9:00 am – 12:00 pm  
Tour: Red Rock Canyon ..... MB

9:00 am – 2:00 pm  
Tour: Viva! Las Vegas City Highlights ..... MB

9:00 am – 2:00 pm  
Tour: Hoover Dam Discovery ..... MB

9:00 am – 2:00 pm  
Tour: Puttin' on the Ritz: Behind the Scenes at Jubilee! ..... MB

12:00 pm – 1:00 pm  
Pre-Convention Workshop Lunch (requires ticket) ..... MB

1:00 pm – 5:30 pm ES/M  
NECA Energy Forum ..... MB

1:00 pm – 2:30 pm E/ES  
**PW-14** NECA 701 Energy Management, Demand Response,  
Energy Solutions—Gregory Massey ..... MB

1:00 pm – 4:00 pm ES  
**PW-15** LED Controls 101: Details on LED Lighting Circuits and  
Controls—Jim Benya ..... MB

1:00 pm – 5:00 pm E/ES  
**PW-16** Competing In Next-Generation IBC Markets – From  
Marketing to Implementation to Litigation—James Carlini ..... MB

3:00 pm – 4:30 pm ES  
**PW-17** NECA's Electric Vehicle Workshop—Rob Colgan,  
Mike Johnston ..... MB

 PreConvention  Management  Technical

Tracks: E=Electrical; ES=Energy Solutions; LC=Line Construction;  
M=Management; S=Safety

[EI]=based on ELECTRI International research

MB = Mandalay Bay Resort and Casino

All times subject to change.



4:15 pm – 5:30 pm ES/M  
ELECTRI International Talent Initiative  
Green Energy Challenge..... MB

7:00 pm – 7:30 pm Presidents Reception  
(Invitation Only) ..... MB Beach

7:30 pm – 9:30 pm  
Opening Reception ..... MB Beach

## Sunday, September 30

6:30 am – 5:00 pm  
Registration ..... MB

6:45 am – 7:45 am  
Prayer Service ..... MB

8:00 am – 8:50 am M  
**M-1** Leveraging BIM to Drive Scalable Prefabrication—  
Michael McLin/Bruce Wilkinson ..... MB

8:00 am – 8:50 am ES  
**M-4** Building Lasting Value with Energy Efficiency—  
Melissa Golden..... MB

8:00 am – 8:50 am ES/LC  
**M-5** Customer Side Smart Grid Installations – Preparing for the  
Future—Thomas M. Korman, Lonny Simonian ..... MB

8:00 am – 8:50 am M  
**M-6** Change Order Protocol [EI]—Matt Syal,  
Giovanni Marcelli ..... MB

8:00 am – 8:50 am LC/M  
**M-7** What You Need to Know Now: Pension Reform—  
Marco Giamberardino, Kristen McDonough ..... MB

8:00 am – 8:50 am M  
**M-8** The Economic Costs of Restricting the Portability of  
Electrical Workers [EI]—Justin Reginato..... MB

8:00 am – 8:50 am E/M  
**M-9** Lighting Retrofits and Relighting – Cost Effective for the  
Customer, Good for the Environment, and Good Business for  
our Nation—James R. Benya ..... MB

8:00 am – 9:30 am S  
**M-2** OSHA's Enforcement Initiative: What You Need to Know  
(Part of Safety Forum)—Jerry Rivera..... MB

8:00 am – 9:30 am LC/S  
**M-3** ETD Partnership 2012 – Panel Discussion  
(Part of Safety Forum)—Michael J. Johnston  
and Steering Committee Members ..... MB

9:00 am – 9:50 am M  
**M-10** Leveraging BIM to Drive Scalable Prefabrication—  
Michael McLin/Bruce Wilkinson ..... MB

9:00 am – 9:50 am ES  
**M-11** Building Lasting Value with Energy Efficiency—  
Melissa Golden..... MB

9:00 am – 9:50 am ES/LC  
**M-12** Customer Side Smart Grid Installations – Preparing for  
the Future—Thomas M. Korman, Lonny Simonian ..... MB

9:00 am – 9:50 am M  
**M-13** Change Order Protocol [EI]—Matt Syal,  
Giovanni Marcelli ..... MB

9:00 am – 9:50 am LC/M  
**M-14** What You Need to Know Now: Pension Reform—  
Marco Giamberardino, Kristen McDonough ..... MB

9:00 am – 9:50 am M  
**M-15** The Economic Costs of Restricting the Portability of  
Electrical Workers [EI]—Justin Reginato..... MB

9:00 am – 9:50 am E/M  
**M-16** Lighting Retrofits and Relighting – Cost Effective for the  
Customer, Good for the Environment, and Good Business for  
our Nation—James R. Benya ..... MB

10:15 am – 11:30 am  
Opening General Session—Joe Scarborough and Mika  
Brezzezinski ..... MB

10:30 am – 5:00 pm  
Showstopper Showcase ..... Show Floor

11:30 am – 5:00 pm  
Trade Show Hours..... MB

12:00 pm – 1:30 pm  
ELECTRI Council Meeting ..... MB

12:00 pm – 2:00 pm  
Lunch (requires ticket) ..... MB

1:45 pm – 2:30 pm  
NECA International Meeting ..... MB

12:00 pm – 12:50 pm M  
**TW-1** Measuring the Cost of Power Consumption—  
Wade Thompson ..... Show Floor, Room 1

12:30 pm – 1:20 pm E  
**TW-2** Electric Motor Systems Diagnostics: See the Potential  
Service \$\$\$ You are Missing—  
Richard Scott..... Show Floor, Room 2

1:00 pm – 1:50 pm ES  
**TW-3** EVSE Installation Observations and Trends—  
Manoj Karwa ..... Show Floor, Room 1

1:00 pm – 2:00 pm  
Safety Roundtable..... MB

1:30 pm – 2:20 pm E  
**TW-4** Integrating Submeter Data into Building Management  
Systems (BMS)—Sim Gurewitz ..... Show Floor, Room 2

2:00 pm – 2:50 pm E/ES  
**TW-5** Lighting Controls for the Rest of Us—  
Mike Malone, Jim McGrath ..... Show Floor, Room 1

2:30 pm – 3:20 pm S  
**TW-6** Understanding the Arc Flash & NFPA 70E Update—  
Scott Margolin ..... Show Floor, Room 2

3:00 pm – 3:50 pm E/M  
**TW-7** Robotic Total Station Layout—  
Ken Shawler ..... Show Floor, Room 1

# SCHEDULE AT A GLANCE

3:00 pm – 5:00 pm  
Student Chapter Summit..... MB

3:30 pm – 4:20 pm ES  
**TW-8** Upgrading Your Solar Business from Simple Grid-Tied to Interactive Systems—Mark Cerasuolo, Marty Spence..... Show Floor, Room 2

5:00 pm  
Daily Prize Drawing .....Show Floor

6:00 pm – 7:00 pm Academy Reception  
(Invitation Only) ..... The Bank, Bellagio

7:00 pm – 8:30 pm ELECTRI International  
Reception (Invitation Only) ..... The Bank, Bellagio

## Monday, October 1

7:00 am – 8:00 am  
Business Development Committee Breakfast..... MB

7:00 am – 8:00 am  
Energy Solutions Task Force Breakfast..... MB

7:00 am – 8:00 am  
Workforce Development Committee Breakfast..... MB

7:00 am – 8:00 am  
Codes & Standards Committee Breakfast ..... MB

7:00 am – 8:00 am  
Management Committee Breakfast ..... MB

7:00 am – 8:00 am  
Government Affairs Committee Breakfast..... MB

7:30 am – 4:00 pm  
Registration ..... MB

8:00 am – 8:50 am LC/M  
**M-17** Business Financial Planning—James Weber, David O'Brien ..... MB

8:00 am – 8:50 am S  
**M-18** Leading Safety Indicators- A Pro-Active Approach to Enhancing Workplace Safety—F. Scott Grischow..... MB

8:00 am – 8:50 am ES  
**M-19** Finding Energy Savings Projects – A Total Building Approach—Karl Griffith ..... MB

8:00 am – 8:50 am E/ES  
**M-20** Hype vs. Reality of LED Luminaire Lifetimes: What You Need to Know—John W. Curran ..... MB

8:00 am – 8:50 am E/M  
**M-21** Involvement of Electrical Contractors in Integrated Project Delivery [EI]—Mehmet Ozbek ..... MB

8:00 am – 8:50 am E/M  
**M-22** The High Cost of a Low Price in the Electrical Contractors World—Craig Goodman ..... MB

8:00 am – 8:50 am S  
**M-24** NECA's System Approach to Safety—Joe O'Connor..... MB

8:00 am – 9:50 am E/LC/M  
**M-23** Getting More Everyday In Work and Life: A New Model for Negotiating Anything—Stuart Diamond ..... MB

9:00 am – 9:50 am LC/M  
**M-25** Business Financial Planning—James Weber, David O'Brien ..... MB

9:00 am – 9:50 am S  
**M-26** Leading Safety Indicators- A Pro-Active Approach to Enhancing Workplace Safety—F. Scott Grischow..... MB

9:00 am – 9:50 am ES  
**M-27** Finding Energy Savings Projects – A Total Building Approach—Karl Griffith ..... MB

9:00 am – 9:50 am E/ES  
**M-28** Hype vs. Reality of LED Luminaire Lifetimes: What You Need to Know—John W. Curran ..... MB

9:00 am – 9:50 am E/M  
**M-29** Involvement of Electrical Contractors in Integrated Project Delivery [EI]—Mehmet Ozbek ..... MB

9:00 am – 9:50 am E/M  
**M-30** The High Cost of a Low Price in the Electrical Contractors World—Craig Goodman ..... MB

9:00 am – 9:50 am S  
**M-31** NECA's System Approach to Safety—Joe O'Connor..... MB

10:00 am – 11:30 am  
Lifestyle Program—Chef Jeff Henderson ..... MB

10:00 am – 11:30 am  
Labor Relations Special Session – Getting More: How to Negotiate for Greater Success in Work and Life—Stuart Diamond ..... MB

10:30 am – 4:00 pm  
Showstopper Showcase ..... MB

11:30 am – 4:00 pm  
Trade Show Hours..... MB

12:00 pm – 2:00 pm  
Lunch (requires ticket)..... MB

12:00 pm – 12:50 pm E/ES  
**TW-9** The Advantages and Intricacies of Induction Retrofits—Richard White ..... Show Floor, Room 1

12:30 pm – 1:20 pm E  
**TW-10** Advances in Lithium-Ion Cordless Tool Technology—Kevin Arnold ..... Show Floor, Room 2

1:00 pm – 1:50 pm ES  
**TW-11** Solar & EV: A Winning Combination—Seth Cutler, Brian Schmalberger ..... Show Floor, Room 1

1:00 pm – 4:00 pm  
Tour: Viva! Las Vegas City Highlights ..... MB

1:00 pm – 5:00 pm  
Tour: Hoover Dam Discovery..... MB

1:30 pm – 2:20 pm E/ES  
**TW-12** Evaluating LED Luminaires for Best Illumination and Economic Performance—Eric Haugaard ..... Show Floor, Room 2

All times subject to change.

2:00 pm – 2:50 pm E  
**TW-13** NEIC Lightning Protection System Installation and Maintenance Standard—Mark S. Harger ..... Show Floor, Room 1

2:30 pm – 3:20 pm M  
**TW-14** The New Mobility—Wayne Newitts..... Show Floor, Room 2

3:00 pm – 3:50 pm E  
**TW-15** Type Metal Clad Cable (MC) – Feeder Installation Techniques—John Tinney, Tim Edwards..... Show Floor, Room 1

3:00 pm – 5:00 pm  
 Women in NECA Meeting and Reception (Invitation Only)..... MB

3:00 pm – 5:00 pm  
 Business Development Meeting and Reception (Invitation Only)..... MB

4:00 pm – 5:00 pm  
 Future Industry Leaders Reception (Invitation Only) ..... MB

4:00 pm  
 Daily Prize Drawing .....Show Floor

## Tuesday, October 2

7:30 am – 2:30 pm  
 Registration ..... MB

8:00 am – 8:50 am M  
**M-32** Situation Analysis—A Vital Step in Realistic Business Planning—Karl F. Borgstrom ..... MB

8:00 am – 8:50 am M/S  
**M-33** NECA's Supervisors Guide to Jobsite Safety—Michael J. Johnston, Jerry Rivera ..... MB

8:00 am – 8:50 am ES  
**M-34** Implementing Lighting Management Technologies and Practices to Drive Building Efficiency—Erik Sorenson..... MB

8:00 am – 8:50 am M  
**M-35** Improving Labor Productivity for Electrical Contractors—David Brown..... MB

8:00 am – 8:50 am M  
**M-36** NECA Government Affairs 2012 Election Update—Marco Giamberardino, Kristen McDonough ..... MB

8:45 am – 10:00 am  
 Exhibitor Focus Group Meeting and Breakfast ..... MB

9:00 am – 10:15 am  
 Closing General Session—Peter H. Diamandis ..... MB

9:30 am – 2:30 pm  
 Showstopper Showcase ..... MB

10:30 am – 2:30 pm  
 Trade Show Hours..... MB

11:00 am – 11:50 am E/ES  
**TW-16** Designing for Digital AV—Dennis Olson ..... Show Floor, Room 1

11:30 am – 12:20 pm E/M  
**TW-17** Save Labor in the Submittal Process—Sumana Rao, Mike Podoris .....Show Floor, Room 2

11:30 am – 1:00 pm  
 Lunch (requires ticket) ..... MB

12:00 pm – 12:50 pm M  
**TW-18** Improving Productivity for Electrical Contractors on the Jobsite—Ryan Berg, Sumeet Pujari .....Show Floor, Room 1

12:30 pm – 1:20 pm E  
**TW-19** Oil Filled Transformer Applications and Maintenance—Mitchell Sweigart ..... Show Floor, Room 2

2:00 pm  
 Grand Prize Drawing .....Show Floor

7:00 pm  
 Closing Celebration—Le Rêve ..... Wynn Resort and Casino

For more information about NECA 2012 Las Vegas, visit **www.necaconvention.org**. There you will find full descriptions of the technical, management and pre-convention workshops, CEU information, instructor biographies and information about the General Sessions, Opening Reception and Closing Gala. The daily schedule will help you plan your time at the Convention and Trade Show, and information about tours and a list of Las Vegas restaurants will help you plan your time in the city!

For the most current updates about NECA 2012 Las Vegas, friend us on Facebook or follow us on Twitter:



**www.facebook.com/NECAConvention**

**@necaconvention**

**NECA SHOW APP DEBUTS!** Plan your Convention and Show on your smartphone or tablet! Our NECA 2012 app lets you access information on exhibitors, education tracks, speakers, the schedule and more, and then helps you put that information into a personalized schedule so you won't miss a thing! You can find our **FREE** app for the iPhone and iPad in the AppStore and for Android phones and tablets in the Android Market by searching for **NECA2012**.

PreConvention Management Technical

Tracks: E=Electrical; ES=Energy Solutions; LC=Line Construction; M=Management; S=Safety

[EI]=based on ELECTRI International research

MB = Mandalay Bay Resort and Casino





# TOURS

## Hoover Dam Discovery Tour

Friday, Sept 28 • Saturday, Sept 29 • 9 am – 2 pm  
Monday, Oct 1 • 1 pm – 5 pm \$84 per person

It's a Wonder of the Modern World weighing over 6,600,000 tons. It's the structure that contains over three million cubic yards of concrete, enough to pave a road between San Francisco and New York. It's the marvel that began in 1931 and was completed in 1936, two years ahead of schedule. Built during the Great Depression, the Hoover Dam provided jobs for 21,000 men and answered a great need. Citizens wanted to irrigate low desert areas without the risk of flooding and the US government determined the Colorado River was the solution to the battle over water rights.

A knowledgeable guide will prepare you with a history-filled dialogue as you travel 30 miles east to Boulder City, the location of the Hoover Dam. Upon arrival to the Dam, you will begin the self-guided tour making several stops including a brief video introduction followed by a trip down 530-feet through the rock wall of the Black Canyon to view eight of the 17 generators. A stroll on the observation deck is essential, as it offers up the perfect panoramic views of the Hoover Dam, Colorado River and Lake Mead. Additional stops on the tour include the Winged Figures of the Republic, the spillways (large enough to float a WWII battleship), and the intake towers.

## Puttin' on the Ritz- Behind the Scenes at Jubilee!

Friday, Sept 28 • Saturday, Sept 29 • 9 am – 2 pm \$84 per person

The showgirl is synonymous with Las Vegas, and there's no show in town that glorifies showgirls quite like Jubilee! Go behind the scenes at the premiere Las Vegas showgirl production where the show's 1,000 different costumes are made with 8,000 miles of sequins!

The tour begins in the Jubilee! Theatre where you will ascend the massive stage and learn about the technology that makes the show possible—the sound system, giant elevators and fly rail. Next, go to the lighting booth high above the theatre to get an in-depth look at everything involved in creating the spectacular lighting effects.

The tour then continues beneath the stage in the carpenter, electrical and prop shops, where the incredible sets that are used throughout the show are designed, built, repaired and stored. Guests will get a close up look at these brilliant pieces of art.

Next it's on to one of the most complete costume shops in the world. Visit the wig room, elaborate feather headdresses and the magnificent costumes designed by Bob Mackie and Pete Menefee. Then stop by the dressing rooms, where the real drama unfolds every night as over 100 actors frantically run from their last costume change to their next stage cue. At the end of the tour, watch as a cast member in street clothes is transformed into a glamorous showgirl, complete with make-up and a Bob Mackie costume.

## Red Rock Canyon

Friday, Sept 28 • Saturday, Sept 29 • 9 am – 12 pm \$60 per person

Red Rock Canyon is located 15 miles from the Las Vegas Strip and is a must-see while visiting. The area presents the most awe-inspiring views while showcasing desert beauty, towering red sandstone peaks and abundant wildlife.

Formed millions of years ago, the red peaks are actually fossilized sand dunes, created after collisions of the earth's crust. The red sandstone that makes Red Rock so unique is part of the Navajo Formation, which is the same geologic formation found in the Valley of Fire, Zion National Park and throughout many parts of the southwestern United States and southern Nevada.

The tour begins at the Visitors Center where you can view exhibits about the area and a tortoise habitat before departing for the 13-mile loop drive. The drive is the ideal way to see the geological history, brilliance and grandeur of the canyon. There are many stops along the way where you can take photos and ask questions, and a stop will also be made to see petroglyphs and pictographs on the peak walls. Keep the cameras ready because many animals call Red Rock Canyon home including bighorn sheep, wild horses, burros and even mountain lions.

## Viva! Las Vegas City Highlights Tour

Friday, Sept 28 • Saturday, Sept 29 • 9 am – 2 pm  
Monday, Oct 1 • 1 pm – 4 pm \$108 per person

Las Vegas is a true original—a classic—and there is nothing else like it in the world. The city highlights tour is the perfect overview for people who have not traveled to Las Vegas before, or for those looking to see the city in a few hours.

A knowledgeable guide will begin with a 'then and now' history of the Las Vegas Strip. The guide will talk about the days of the Stardust, the Dunes, Elvis and the Rat Pack and how each of those elements helped make Vegas what it is today. Learn about the 'movers and shakers' in Las Vegas such as the infamous Steve Wynn and the empire that he has built.

As the tour continues south on Las Vegas Boulevard, you will have the opportunity to stop at the Welcome To Las Vegas sign, which recently underwent a makeover, making it safely accessible for photo opportunities.

Then head to Downtown Las Vegas and visit hotels such as the Golden Nugget and see where it all began...

Finally, make your way to the top of the Stratosphere Casino, Hotel & Tower. Jutting 1,149 feet into the Vegas skyline, the iconic Stratosphere Tower is the tallest freestanding observation tower in the United States and one of the most exciting attractions among Las Vegas resorts.



## REGISTERING FOR NECA 2012 LAS VEGAS: IT MAKES PERFECT BUSINESS SENSE

**WHERE ELSE CAN YOU** participate in education sessions geared to the needs of NECA contractors, connect with manufacturers and service providers you rely on, and meet up with your fellow NECA contractors? No where else but NECA 2012 Las Vegas! And, you get all that knowledge and face-to-face networking in just three days, meaning fewer days out of the office, lower travel costs, and immediate results...at an \$800 savings!

**Member registration fee for NECA 2012 Las Vegas includes:**

Energy Forum	\$145 value
Five Management Education sessions (250 minutes)	\$525 value
Three lunches on the Trade Show floor	\$125 value
Opening reception with heavy hors d'oeuvres and beverages	\$325 value
Closing celebration	\$150 value
Three General Sessions	\$195 value
Lifestyle Program	\$120 value
Fourteen hours of exclusive Trade Show access	\$250 value
Technical Workshops on the Trade Show floor	\$105 value
<b>Value of NECA 2012 Las Vegas</b>	<b>\$1,940.00</b>
<b>Full member registration</b>	<b>- \$975.00</b>
<b>Actual Member savings</b>	<b>\$965.00</b>

**We look forward to seeing you September 29 – October 2!**





# WESTEX IS PROUD TO BE A PREMIER PARTNER OF NECA



NECA<sup>®</sup> second annual  
Safety Professionals Conference

NECA  
Safety Roundtable  
*Las Vegas*

Presented by  **WESTEX**<sup>™</sup>



PLATINUM  
TRAINING  
PARTNER

Westex, established in 1919, is proud to be in its 4th year as a Premier Partner of NECA. With a strong focus on safety, Westex was pleased to present the 2nd Annual NECA Safety Professionals Conference in St. Louis. Headquartered in Chicago with all manufacturing in the United States, Westex is the world's largest manufacturer of arc rated/ flame resistant fabrics for protective clothing. Westex's proprietary technology has 25 years of market proven performance with millions of garments in service worldwide of Westex UltraSoft<sup>®</sup>, UltraSoft AC<sup>®</sup> and Indura<sup>®</sup> fabrics. Westex is committed to continuing a strong relationship in safety education and training with NECA as a Premier Partner, a Platinum Training Partner of the NJATC and a Partner in Safety of the IBEW.

 **WESTEX**<sup>®</sup>  
A WORLD LEADER IN FLAME RESISTANT FABRICS

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**neca** 2012  
Sep 29-Oct 02  
**BOOTH 1543**

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# CUSTOMIZE YOUR EXPERIENCE WITH A LA CARTE AND WEEKEND PACKAGES!

WE'RE MAKING IT EASIER THAN EVER to access the education, networking, and new products and technologies you need to help your business grow. In addition to full Convention registration, NECA members can choose from two new weekend packages that encompass a range of NECA Convention and Trade Show offerings, or members and non-members alike can fully customize their time at NECA 2012 Las Vegas with the a la carte menu!

## Weekend Packages (NECA members only)

### Package #1:

Includes: Energy Forum or Safety Forum, Opening Reception, Sunday General Session, Sunday Management Seminar, Sunday Tradeshow lunch, Sunday Daily Prize tickets, Sunday Tradeshow pass, Sunday Technical Workshops, and Sunday Showstopper Showcase

\$599

### Package #2:

Includes: Energy Forum or Safety Forum, Sunday General Session, Sunday Management Seminar, Sunday Tradeshow lunch, Sunday Daily Prize tickets, Sunday Tradeshow pass, Sunday Technical Workshops, and Sunday Showstopper Showcase.

\$499

## A La Carte

■ Pre-Convention Workshops	Workshop prices vary (see pages 16–17)
■ Energy Forum	
Member	\$145 (included in full Convention registration)
Non-member	\$599
■ Safety Forum	
Member	\$250
Non-member	\$599
■ Opening Reception	\$200
■ Management Seminars (all 3 days)	\$525
■ Lunch on the Trade Show Floor (per day)	\$28
■ Trade Show only (Includes Technical Workshops & Showstopper Showcase)	\$85



# REGISTRATION AND HOUSING FORM

**NEW: ALL BADGES WILL BE PICKED UP AT REGISTRATION.**

## IDENTIFICATION (REQUIRED)

Chapter Affiliation \_\_\_\_\_

NECA Member ID# \_\_\_\_\_ Individual ID# \_\_\_\_\_

Registrant Name \_\_\_\_\_  
(LAST, FIRST, MI)

Nickname for Badge \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Zip \_\_\_\_\_ Country \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail Address \_\_\_\_\_

Spouse Name \_\_\_\_\_  
IF REGISTERING (LAST, FIRST, MI)

Spouse Nickname for Badge \_\_\_\_\_

Spouse Position in Company (if any) \_\_\_\_\_

☐ Check here if this will be your first NECA Convention (see page 31, box 1 for details)

## PAYMENT (PAYABLE TO NECA IN U.S. DOLLARS)

☐ Check Enclosed ☐ American Express ☐ MasterCard ☐ Visa

Account No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

Name \_\_\_\_\_  
(AS IT APPEARS ON CARD)

Signature \_\_\_\_\_

## ACCOMMODATIONS DEADLINE FOR ROOM RESERVATIONS IS AUGUST 27, 2012.

Hotel arrangements handled by NECA Housing/Convention Management Resources (CMR)

Arrival Date \_\_\_\_\_ am/pm Departure Date \_\_\_\_\_ am/pm

Occupant Name(s) \_\_\_\_\_

Send Confirmation to (if different from above):

Name \_\_\_\_\_

Company/Chapter \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Province \_\_\_\_\_

Zip \_\_\_\_\_ Country \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail Address \_\_\_\_\_

Hotel Requested \_\_\_\_\_ Number of People \_\_\_\_\_

Request: ☐ King ☐ 2 Double Beds ☐ Smoking ☐ Non-Smoking

☐ Check here to request a suite. (A CMR representative will contact you.)

All reservations must be accompanied by one-night deposit guarantee (by check or credit card): **Room Deposit \$300, Suite Deposit \$500**

Total Deposit \$ \_\_\_\_\_

☐ Check Enclosed ☐ Credit Card (Fill out PAYMENT information above)

### IF PAYING FOR HOUSING BY CHECK:

Make check (in US dollars) payable to **CMR**, and mail to:  
NECA Registration & Housing • c/o Convention Management Resources  
33 New Montgomery, Suite 1100 • San Francisco, CA 94105

## 1 CLASSIFICATIONS (Check all that apply)

- ☐ (1) NECA Member (OWNER, ACCREDITED REPRESENTATIVE, OR EMPLOYEE) ☐ (6) Chapter Staff
- ☐ (2) Governor ☐ (7) Veteran Member\*
- ☐ (3) Invitee of Member/Chapter ☐ (8) Non-Member
- ☐ (4) Chapter President ☐ (9) Press
- ☐ (5) Exhibitor ☐ (10) Speaker

## 2 NECA CONVENTION FEES (page 31)

Includes Management Seminars and Trade Show

	Registrant	Spouse
Early Registration (BY AUGUST 16) Classifications 1-7	\$975 <input type="checkbox"/>	\$375 <input type="checkbox"/>
Classification 8	\$1,400 <input type="checkbox"/>	\$1,400 <input type="checkbox"/>
Regular (AFTER AUGUST 16) Classifications 1-7	\$1,175 <input type="checkbox"/>	\$575 <input type="checkbox"/>
Classification 8	\$1,400 <input type="checkbox"/>	\$1,400 <input type="checkbox"/>
Convention Fees	\$ <input type="text"/>	\$ <input type="text"/>
OUTSIDE HOTEL Fees	\$ <input type="text"/>	\$ <input type="text"/>

Add \$155 for rooms NOT booked through CMR. →

## 3 PRE-CONVENTION WORKSHOPS (pages 16-17)

Includes Trade Show

2-HOUR COURSES: \$89

- ☐ PW-4 ☐ PW-10  
☐ PW-5 ☐ PW-11  
☐ PW-6 ☐ PW-14  
☐ PW-7 ☐ PW-17  
☐ PW-8

4-HOUR COURSES: \$145

- ☐ PW-1 ☐ PW-13  
☐ PW-9 ☐ PW-15  
☐ PW-12 ☐ PW-16

8-HOUR COURSE: \$250

- ☐ PW-2

2-DAY COURSE: \$450

- ☐ PW-3

## 4 MANAGEMENT SEMINARS ONLY (pages 18-19)

Includes Trade Show

	Registrant	Spouse
MANAGEMENT FEES, \$525	\$ <input type="text"/>	\$ <input type="text"/>

## 5 TRADE SHOW ONLY

	Registrant	Spouse
TRADE SHOW ADMISSION, \$85	\$ <input type="text"/>	\$ <input type="text"/>

## 6 TOTAL NECA FEES

Add Totals from 2, 3, 4, 5	\$ <input type="text"/>	\$ <input type="text"/>
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## 7 COMBINED TOTAL REGISTRATION

Registrant + Spouse	\$ <input type="text"/>
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### IF PAYING FOR REGISTRATION BY CHECK:

Make check (in US dollars) payable to **NECA**, and mail to:  
NECA Registration & Housing • c/o Convention Management Resources  
33 New Montgomery, Suite 1100 • San Francisco, CA 94105

TO REGISTER ONLINE, GO TO [WWW.NECACONVENTION.ORG](http://WWW.NECACONVENTION.ORG) • FOR ASSISTANCE WITH ONLINE REGISTRATION, CALL 415-979-2291.  
FOR WEEKEND PACKAGE AND A LA CARTE REGISTRATION, VISIT [WWW.NECACONVENTION.ORG](http://WWW.NECACONVENTION.ORG)

## REGISTRATION NOTES

### 1 CLASSIFICATIONS

\*Veteran Members receive a \$100 discount on registration. A Veteran Member is awarded the designation by the Executive Committee, and is one who has represented a member in good standing for at least 15 years and who is not engaged in any manner in the electrical contracting business. Veteran Members are not eligible for prize drawing tickets.

\*\*First time Convention attendees receive a \$100 discount on full registration (by fax or mail only).

Members of the Press with credentials (Classification 9) may attend the Trade Show only at no cost.

### 2 NECA CONVENTION FEES

Please enter all information in the **Identification/Payment/Accommodations** sections. Then, under the **Registration Worksheet** column, check the appropriate registration classification(s) (Section 1), and determine the appropriate NECA Convention Fee(s) (Section 2).

**Please note that registering for the full Convention also entitles you to admission to the Trade Show all three days as well as any of the Management Seminars at no additional charge.**

Full Convention registration includes: Opening Reception, Management Workshops, Technical Workshops, Trade Show, admittance to General Sessions, Lifestyle Program and Closing Celebration.

To qualify for the reduced early housing and registration rates, your paid registration must be received at CMR by 5:00 p.m. (PST), August 16, 2012.

If you live in the Las Vegas area and/or staying with family or friends, you do not have to pay the out of room block fee. This fee is **only for those staying in a hotel that is not part of NECA's hotel block.**

### 3 PRE-CONVENTION WORKSHOPS

For descriptions of the Pre-Convention Workshops, please see Pages 16 and 17.

Full day courses include lunch.

Fees for Pre-Convention Workshops are **NOT** included in full Convention registration.

### 4 MANAGEMENT SEMINARS ONLY

If you are not registering for the full Convention (Section 2), but you wish to attend any of the Management Seminars (see Pages 18 and 19), please check the appropriate box (Registrant or Spouse) and enter the flat fee of \$525. This fee also entitles you to admission to the Trade Show all three days at no additional charge. **Do not enter a fee for Management Seminars if you are registering for the Convention.**

### 5 TRADE SHOW ONLY

If NOT paying other fees (Sections 2, 3, and 4), please check the appropriate box (Registrant or Spouse) and enter flat fee of \$85 for admission to the Trade Show all 3 days. **Do not enter a fee for the Trade Show if you are registering for Management Seminars or the Convention.**

### 6 TOTAL NECA FEES

Please add all fees in Sections 2, 3, 4, and 5 and enter the totals for Registrant and Spouse in the boxes.

### 7 COMBINED TOTAL REGISTRATION

Please add Registrant and Spouse fees and enter the total in the box.

**NEW: NECA Full Convention Registrants—All badges can be picked up in the Registration Area at the Convention. They will NOT be mailed.**

**Please choose one registration method and register ONE TIME ONLY!**

## PAYMENT AND CANCELLATION

Add the amounts from **2, 3, 4,** and **5** for Registrant and Spouse and enter the total in the appropriate boxes in **6.** Then combine those figures to arrive at the Combined Total Registration in **7.**

**Cancellation policy:** All registration cancellations must be made in writing (by mail or by email: [necareg@cmrus.com](mailto:necareg@cmrus.com)). Full Convention Registration and Management Seminar fees will be refunded if the written request is postmarked no later than August 17, 2012. Between August 18 and August 28, 2012, a \$100 fee will be charged for each full registration cancellation. After August 29, 2012, no refunds will be made.

**If paying by check, please make one check for Hotel Room Deposit (payable to CMR) and one check for Registration Fees (payable to NECA) in U.S. dollars. If paying by credit card, fill out information in the PAYMENT section on Page 30.**

Course availability is based on number of registrants.

**Mail OR fax form to:** NECA Registration & Housing  
c/o Convention Management Resources  
33 New Montgomery, Suite 1100  
San Francisco, CA 94105  
1-800-368-6322 tel  
1-415-293-4745 fax

## CONVENTION ONLINE INFORMATION AND REGISTRATION

Take advantage of the quickest way to find out everything you need to know about **NECA 2012 Las Vegas**—and while you're on the site, you can use our easy online registration system to avoid delays and get immediate confirmation of your registration. The NECA Convention site offers the most recent updates and additions to the Convention & Show, including: registered exhibitor information, product information, contact numbers, links to company Web sites, seminar information and locations, guides to the opening and closing events, guest tour information, Convention & Show schedule, featured new products, booth locations, exhibitor press releases, information on local entertainment, attractions and hotels, and more!

Check us out on the Web for more NECA Convention & Show information and to register online—the address is [www.necaconvention.org](http://www.necaconvention.org)

### EARLY REGISTRATION

(ON OR BEFORE AUGUST 16, 2012)

	REGISTRANT	SPOUSE
Member	\$975	\$375
Non-Member	\$1,400	\$1,400

### REGULAR REGISTRATION

(AFTER AUGUST 16, 2012)

	REGISTRANT	SPOUSE
Member	\$1,175	\$575
Non-Member	\$1,400	\$1,400

### REGISTERING CHILDREN

Registration for children attending the NECA Show must be completed online. Children may visit the Trade Show floor all three days, but must be registered and accompanied by a responsible adult at all times. Please visit [www.necaconvention.org/child](http://www.necaconvention.org/child) for options.





# EXHIBITOR LIST

There are many ways to get product and supplier information, but only the NECA Show allows you to test a manufacturer or distributor's claim easily and on your schedule. Seize the opportunity to directly examine the product or technology, ask face-to-face questions, and compare its performance with competitive products...all on one show floor. In addition, attendees can see what's new in the industry, keep abreast of industry and market developments, develop new business contacts, and solve specific problems.

## Exhibitor List as of April 30, 2012

3M  
Access Hardware Supply  
Accubid/Trimble  
Acuity Brands  
ADI  
Advance Metalworking Co., Inc.  
AEMC Instruments  
Alcan Cable  
alliantgroup  
ALL-TEST Pro, LLC  
American Heart Association  
American Technical Publishers, Inc.  
Amprobe  
Anixter  
Aqua-Tronics, Inc.  
A-Rise Pipe Support  
Arlington Industries  
ASCO  
Atkore International  
AVO Training Institute, Inc.  
BD ELECTRICAL  
Bidtracer - Specialty Software Group LLC  
Blaklader LLC  
Bridgeport Fittings  
BTU Research  
Buckingham Mfg.  
Burndy  
CAB (Cambria County Association for the Blind and Handicapped)  
Rugged Outfitters  
CBM Lighting Mfg.  
Cementex Products, Inc.  
Cerro Wire LLC - Electrical Distribution Division  
Cert-In Software Systems, Inc.  
Charles J. Krasnoff Electrical Estimating  
Chatsworth Products, Inc.  
CLC Lodging  
Clicksafety  
Collective Data  
Colonial Engraving Co., Inc.  
ConEst Software Systems  
Contractors Choice Inc.  
Copper Development Assoc. Inc.  
Copper Wire Stripper  
Corning Cable Systems  
Cree, Inc.  
Crescent Electric Supply  
Crestron Electronics, Inc.  
Cretex Concrete Products  
Cummins Onan  
Current Tools, Inc.  
CurrentSAFE Corporation  
DAS Simplified  
Dawson Tools Inc.  
Dent Instruments  
Dexter + Chaney  
QSSI/Duraguard  
Eaton Corporation  
EC&M Electrical Wholesaling (Penton Media, Inc.)  
Edwards Manufacturing Company  
efergy USA, Inc.  
ELECTRI International  
Electrical Advertiser, The  
Electrical Contractor Magazine  
Electrical Prefab Systems, LLC  
Electrical Solutions  
ElectricSmarts / NetPricer  
ElectricTV  
Elliott Equipment Company  
E-Mon  
Encore Wire Corporation  
Enterprise Fleet Management  
ERICO

Ericson Manufacturing Company  
eSUB Inc.  
ET Solar Inc.  
Extron Electronics  
eze System, Inc.  
Facility Results  
Federated Insurance  
FireLite Alarms  
FLIR Systems/Extech Instruments  
Fluke Corporation  
Ford Commercial Truck  
Foundation Software  
Fulham Co., Inc.  
Fuseco Inc.  
Gardner Bender  
GE Energy  
Get The Point  
GEXPRO  
GM Fleet and Commercial  
Graybar  
Greenlee, A Textron Company  
Hansen Supply Co.  
Harger Lightning & Grounding  
Hercules Industries  
High Voltage Inc.  
Highline Products  
Hioki USA Corporation  
Hipotronics, Inc.  
Honeywell Power Products  
IBEW / NECA / LMCC  
Ideal Industries, Inc.  
ILSCO  
International Association of Electrical Inspectors (IAEI)  
Isuzu Commercial Truck of America Inc.  
Jameson, LLC  
Jerry's Electric, Inc.  
Jonas Software  
Key Digital  
Klein Tools, Inc.  
KNIPEX Tools LP  
Kohler Co.  
L.H. Dottie Company  
Legrand  
LENOX®  
Leviton Mfg. Co., Inc.  
Light Efficient Design  
Lutron Electronics  
M.H. Rhodes Cramer Co.  
Madison Electric Products  
Management Education Institute (MEI)  
Marking Services, Inc.  
Material Management Software, Inc.  
MaxCell  
Maxwell Systems Inc.  
McCormick Systems, Inc.  
Megger  
Millspec Industries  
Milwaukee Electric Tool Corp.  
Mr. Electric  
Musco Lighting  
National Joint Apprenticeship & Training Committee (NJATC)  
NECA Showstopper Showcase 2012  
NECA  
NECA Student Chapters  
Neekson  
Nesco Sales & Rentals  
Networkfleet, Inc.  
NexTraq  
NFPA (National Fire Protection Association)  
Nissan North America  
NJATC FR Apparel

Northwest Lighting Systems Co.  
Oldcastle Precast Enclosure Solutions  
OutBack Power  
Pace Electronic Products  
Palmer Wahl Instrumentation Group  
Panduit Corp.  
Partex Marking Systems, Inc.  
Pearson  
Pencell Plastics  
PG LifeLink  
Power & Tel  
Power Standards Lab  
ProEst Estimating Software  
Project DocControl  
Protective Industrial Products  
RAB Lighting  
RANDL Industries, Inc.  
Rath Security  
Rectorseal  
RELECTRIC  
Rexel, Inc.  
Riverside Manufacturing Co.  
Royal Building Products - Pipe & Fittings Solutions  
Sage  
Salisbury by Honeywell  
Schneider Electric  
Sellstrom Manufacturing Company  
Service Wire Co.  
Siemens Industry, Inc.  
Silvertronic, Inc.  
Snake Tray  
Solomon Corporation  
Solon Manufacturing Company  
Southwire/Maxis  
S-P Products  
Sta-Down Conduit Retaining Device  
Stark Safety Consultants  
Stark Safety Consultants  
Strip Technology, Inc.  
Sumitomo Electric Lightwave - FutureFLEX Air-Blown Network Solutions  
Superior Essex  
T & R Electric Supply  
T3 Innovation  
Technical Sales International, LLC  
TenCate Protective Fabrics  
The Electric Current  
The M. K. Morse Company  
Marvel Office Furniture  
thermoweld  
Thomas & Betts  
Trade Service  
Trastar, Inc.  
Travelliance  
Triple Crown Products  
Tyndale Company  
Underground Devices Inc.  
Underwriters Laboratories (UL)  
Unicomposite Technology Co., Ltd.  
United Copper Industries  
Universal Lighting Technologies  
Utilimaster Corporation  
Utility Equipment Leasing Corp.  
V2 Technology Solutions (VECA Technologies)  
Venture Lighting International, Inc.  
Viewpoint Construction Software  
Vinatronics High Visibility Apparel  
Vision InfoSoft  
WennSoft  
WESCO Distribution, Inc.  
Westex Inc.  
Wheatland Tube Company  
Wireless Matrix