INDUSTRY NEWS

NECA Boston at National Legislative Conference

WASHINGTON, D.C. — The 2014 NECA National Legislative Conference was held in the nation’s capital in May. Key issues impacting the electrical industry were discussed, including multiemployer pension plans, infrastructure investment, misclassification of employees, telecommunications licensing, investment in renewable energy, increasing energy efficiency in conventional power generation through combined heat and power, and support of a comprehensive national energy strategy.


NECA 2014 Convention in Chicago, Sept. 27 – 30

NECA 2014, the electrical construction industry’s largest trade show, will be held in Chicago, Illinois at McCormick Place, September 27 to 30. The event will feature more than 300 companies showcasing the latest products. In addition, 19 technical workshops will cover issues and topics that keep NECA contractors the best informed in the industry, including: National Electrical Code 2014 updates, NFPA 70E Best Practices, BIM implementation, Energy Conservation and Performance, Productivity with Prefabrication, and much more.

To register, visit www.necaconvention.org

POWERPOINTS

A Message from the Executive Manager

NECA at Leading Edge of Professional Development and Training

Maximizing Productivity Utilizing Best-in-Class Prefabrication Workshop held

WEST NEWTON, MA — Productivity with the assurance of quality is more important than ever in the construction industry. With streamlined budgetary requirements and compressed construction schedules, NECA contractors are at the forefront of embracing such trends as building information modeling (BIM), lean construction, integrated project delivery, and prefabrication.

To meet the sophisticated power, lighting, building energy performance, and tel/data needs of today’s modern structures, as well as those for historic building renovations, electrical contractors must be up-to-date with the latest construction trends and technologies. As industry leaders in electrical industry training and professional development, NECA’s continuing education programs are designed to ensure our electrical and telecom contractors are the most qualified and productive in the industry. NECA course offerings range from Standards and Safety to BIM and Lean Construction, and from Advanced Project Management to Foreman Training.

In August, NECA Boston held Maximizing Productivity Utilizing Best-in-Class Prefabrication workshops in Quincy and Danvers, attended by member contractors, estimators and project managers. Prefab is among the hottest, most important trends in electrical construction for good reason. Best-in-class contractors are bringing increasingly more field labor into the prefabrication shop with significant productivity improvement. To stay competitive in today’s market, NECA contractors have stopped thinking about prefabrication as a custom,
E.S. Boulos Company Completes Cape & Vineyard Electrical Cooperative (CVEC) Solar Projects for Towns of Barnstable, Dennis, Chatham and Brewster

NECA Maine Division contractor installs over 12 MW of Solar Power with 275-person IBEW crew;

Owner: Redwood Solar Development, LLC, Las Vegas, NV; Developer, Program Manager and EE: American Capital Energy (ACE), Lowell, MA; Structural Engineer: Weston & Sampson, Peabody, MA

**LAN-TEL Communications Installs State-of-the-Art Security for the St. Patrick’s Day Parade and Boston Marathon**

**UBURN, ME** – The Utility Division of E.S. Boulos Company, based in Auburn, Maine, has completed four large-scale solar energy facilities totaling over 12MW of power on Cape Cod for the Cape and Vineyard Electrical Cooperative, Inc. The solar facilities were constructed on capped landfills in the towns of Barnstable, Chatham, Dennis, and Brewster.

E.S. Boulos, a NECA Boston / Maine Division contractor, managed a massive skilled electrical field crew of 275 IBEW electricians from Locals 223 in Lakeville, MA, 103 in Dorchester, 104 in Walpole, 490 in Concord, NH, LU 567 in Lewiston, ME, LU 1253 in Fairfield, ME, and LU 99 in Cranston, RI at the four sites. In total, the electrical crew, comprised of 25 IBEW foremen, 200 journeymen and 50 apprentices, installed nearly 50,000 solar panels.

Significant logistical challenges met by E.S. Boulos included the coordination and scheduling of the electrical crew, as well as the planning and management of vast amounts of solar electric components and materials delivered to the sites and transported to specific areas throughout the large land areas. Ground pressure restrictions added to the complexity of the project. All solar equipment was calculated for psi rating to make sure it meets the limits of each landfill. E.S. Boulos provided initial calculations and structural engineer Weston & Sampson provided approval and verification.

E.S. Boulos commenced construction in February 2014 and the clean, solar energy projects were completed, as scheduled, in May and June. In total, the projects are expected to result in over $2 million dollars in energy savings in the first year of operation. ■

**CVEC Solar by the Numbers**

**Dennis, MA**
Size: 6MW solar PV facility being constructed on a 40-acre site
Solar components: nearly 25,000 SunPrene frameless solar PV panels and framed EP solar panels, 10 AE solar inverter pads
Field crew: 120 electricians at peak
Project timeline: February to June 2014

**Barnstable, MA**
Size: 4.1MW solar PV facility
Solar components: 13,904 ET solar panels and 8 solar inverters
Field crew: 85 – 88 IBEW electricians at peak
Project timeline: February – May 2014

**Brewster, MA**
Size: 1.23MW solar PV facility
Solar components: 4,246 solar panels, 3 solar inverters
Field crew: 39 electricians at peak construction
Project timeline: February – May 2014

**Chatham, MA**
Size: 1.8MW solar PV facility
Solar components: 6,446 ET solar panels, 3 solar inverters
Field crew: 42 IBEW electricians at peak
Project timeline: February – May 2014

**Boston, MA** – LAN-TEL Communications, the Norwood, MA-based NECA Boston contractor, provided advanced security installations for the St. Patrick’s Day Parade in South Boston and the Boston Marathon, teaming with the Boston Police Department, Sonet Electrical Systems of Woburn, MA and Motorola of Schaumburg, IL to install an array of DvTel HD surveillance cameras and Fluidmesh antennas along the parade and marathon routes. The St. Patrick’s Day Parade security system provided LAN-TEL and Boston PD with a successful test run for the system that was deployed for the April 20th race.

A combined total of more than 30 quick deploy cameras were engineered and built by a skilled team of IBEW Local 103 LAN-TEL technicians, headed by LAN-TEL project manager, Eric Johnson, and foreman Mark Savage weeks prior to the events. The devices were encased within a NEMA enclosure, which housed a camera, a network switch and power supply. The pre-built units were deployed either on a pole-mount for streetlights and traffic lights, or as a wall-mount for sides of a buildings throughout the South Boston area. The team worked to achieve connections between every possible transmission point, allowing maximum video viewing capabilities. All equipment was strategically positioned in areas surrounding the parade with live feeds from the cameras streaming instantaneously back to Boston PD headquarters. The security installations provided Boston PD a direct overview of the parade from start to finish, as well as a live recording for Boston PD command personnel. The security installations also integrated state-of-the-art monitoring of all cameras via a DvTel video management system.

Fellow NECA contractor, Sonet Electrical provided electrical installations and Motorola provided network engineering.

LAN-TEL’s extensive security system installations for the Boston Marathon were coordinated with, and directed by, the Boston Police Department. Security equipment was strategically positioned along the Marathon route providing live feeds from cameras to Boston PD headquarters. ■
JOINTS

An inside look at recent projects completed by NECA Greater Boston Chapter members

J&M Brown Energy Division Shines in LED Lighting Retrofit at Suffolk Law School – Sargent Hall

NECA contractor teams with GC: Siena Construction, Cambridge, MA; Architect: STA Design, Boston, MA

BOSTON, MA – J&M Brown Company’s Energy Division, based in Jamaica Plain, MA, has completed the energy efficient lighting upgrade project at Suffolk University Law School on 121 Tremont Street in Boston. The project scope entailed replacing and relamping more than 3,000 existing light fixtures with energy efficient LED fixtures and lamps, greatly reducing wattage consumption at the facility. NSTAR provided an incentive for the energy savings measure undertaken by the university.

Sonet Electrical Systems joins NECA Boston Chapter

WEST NEWTON — The NECA Boston Chapter welcomes Sonet Electrical Systems, LLC as a new Chapter member. Based in Woburn, MA, the full service electrical contractor provides electrical, telecommunications, security, fire alarm, and temperature control services for diverse biotech, pharmaceutical, healthcare, educational, and commercial facilities throughout Greater Boston. The company manages a skilled IBEW field crew that ranges from 10 to 25 electricians and telecom technicians.

Sonet Electrical Systems was founded in 2000 as an IBEW Local 103 signatory contractor by the firm’s principals, Brian Souza and Thomas Cavanaugh. The company had formerly also been a wholly owned subsidiary of J.F. White Contracting Co.

“NECA membership provides Sonet Electrical with a number of significant benefits,” said Souza. “The organization enables us to network with other contractors, and offers opportunities for collaboration and also to discuss business issues we all face. Additionally, NECA Boston provides a number of important continuing education programs, especially on the project management and safety side of the electrical contracting business.”

Sonet Electrical Completes Laboratory Controls Project at Vertex Seaport Facilities; Awarded Dana-Farber Lab Work at Longwood Center

OBURN, MA – Specializing in tenant fit-up and, specifically in temperature control and access control installations in the biopharma and healthcare sectors, Sonet Electrical recently completed electrical and temperature control installations for 25 lab clean rooms at Vertex Pharmaceuticals’ new facilities on Fan Pier in Boston’s Seaport district. The NECA contractor has also been awarded and under way with power and control installations at Dana-Farber’s state-of-the-art laboratories at the new Longwood Center.

Other prominent recent projects include x-ray suite renovations at Cambridge Hospital, and electrical fit-up of T.D. Ameritrade offices at 185 Washington Street and also at Brooks Brothers on 75 State Street.

Sonet Electrical is experienced in security system installations, as well, and has provided electrical security work for a number of U.S. Homeland Security projects throughout Greater Boston, including, most recently, the St. Patrick’s Day Parade and the Boston Marathon, teaming with fellow NECA member, LAN-TEL Communications. Sonet’s electrical installations support the security systems, both at the cameras and at the systems’ head-ends.

Sonet Electrical has achieved a ConstructSecure Gold partner designation for demonstrating outstanding performance in the Contractor’s Assessment Program administered by ConstructSecure, Inc.
Lighthouse Electrical Completes MassChallenge New Office Fit-up at 21 Drydock Avenue in South Boston

NECA contractor teams with GC: Turner Construction, Boston, MA

OSTON, MA – Lighthouse Electrical Contracting, Inc., headquartered in Rockland, MA, has completed the fast track electrical fit-up of the new MassChallenge offices at 21 Drydock Avenue in South Boston. The 25,000 sq. ft. build-out for the world’s largest startup accelerator entailed installation of the facility’s power, lighting and fire alarm systems, as well as the conduit system for the tel/data system.

The scope included Lighthouse’s installation of 25 Wiremold RC4 power and tel/data floor boxes to meet Mass Challenge’s power, communications, and A/V requirements. The open office environment, a converted warehouse space, features high open ceilings and the NECA contractor installed exposed metal-clad (MC) cable, suspended from ceiling areas, to handle all branch circuiting.

Lighthouse also installed more than 70 energy-efficient, 12-foot LED pendant lights throughout the exposed ceiling area. Lighting is controlled by a state-of-the-art, Lutron GRAFIK Eye lighting control system, which features occupancy and daylight sensors.

The build-out also included installation of a Notifier fire alarm system, which interfaces to the building’s primary fire alarm system.

To meet the aggressive, six-week project schedule, Lighthouse PM Scott Sullivan and Foreman Matt Giblin managed a skilled crew of nine IBEW Local 103 electricians. The electrical team worked nights and weekends to meet Mass Challenge’s scheduled move-in requirements, and the start-up incubator firm took occupancy, as scheduled, in May.

This year, MassChallenge will host more than 100 innovative startups. Since its inception in 2010, nearly 500 startups have been supported by the organization, which has raised more than $470 million in outside funding and created nearly 4,000 jobs. MassChallenge moved to the new Drydock space from One Marina Park Drive on Boston’s Fan Pier.

McDonald Electrical Completes $11M Electrical Construction of State Street Corp. Channel Center Building and Channel Center Garage Project

NECA member teams with CM: Suffolk Construction, Boston, MA; Architect ADD Inc., Boston, MA; EE: C3 Engineering, Boston, MA; Owner: Commonwealth Ventures LLC

OSTON, MA – In Boston’s Innovation District, McDonald Electrical Corp., of Hingham, MA, has completed electrical construction of the new, 12-story State Street Corp. office building at 1 Iron Street in the Channel Center.

The comprehensive scope included the 525,000 square-foot facility’s core and shell electrical distribution and primary and emergency power installations, as well as the fire alarm, interior and exterior lighting and lighting control systems. McDonald also provided the conduit infrastructure for the building’s tel/data and security systems.

Power to the Channel Center’s most contemporary building is provided via McDonald Electrical’s installation of three 4000A NSTAR electrical transformers and paralleling switchgear. Power installations also include two 2,000 Amp bus duct risers that accommodate tenant-fit-out, a 3,000 Amp bus duct feeder to the facility’s mechanical switchboard, and integration of power for all mechanical equipment. Two redundant 2MW generators back-feed to the switchgear to provide emergency power in the event of loss of power.

The NECA contractor’s scope also included all power, electrical distribution, lighting, security, and fire alarm installations for the new 10-story, 350,000 square-foot Channel Center Garage, a 970-car facility. In addition, the project included power and lighting installations for two adjacent Channel Center parks and associated roadways.

Surrounding the buildings and parks, McDonald installed energy-efficient LED streetlights, making this one of Boston’s first areas to utilize LED street lighting.

Project Manager Dave Potcner and Foreman Pat Evans managed McDonald Electrical’s skilled electrical and tel/data field crew, comprised of 25 IBEW electricians and technicians at peak construction. McDonald worked in tandem with the project’s construction manager, Suffolk Construction of Boston. The Channel Center project was completed within an 18-month schedule and State Street Bank took occupancy of the facility in May 2014.

The Channel Center facility, designed by architectural firm, Add Inc, of Boston, has numerous sustainable features and is built to achieve LEED Silver certification.
NECA Boston’s E.G. Sawyer Company Receives 50-Year NECA Member Award

OSTON, MA — At the NECA Boston June Chapter Meeting at the Exchange Center in the Seaport, NECA District 1 Region Rep Ben Nest presented E.G. Sawyer Company with a special industry recognition, the NECA 50-Year Membership Award, honoring the company for its distinguished service. E.G. Sawyer CEO David MacKay, President Joseph McCluskey, and other key company executive team members accepted the award. E.G. Sawyer is also celebrating its 150th year as an electrical contractor. The company is thought to be the oldest continuously operating electrical contractor in the U.S. Hearty congratulations… keep up the great work!

NECA Boston Honored with NECA Membership Award

OSTON, MA — At the June NECA Boston Chapter Meeting, NECA Field Rep Ben Nest presented the NECA Membership Award to Chapter Executive Manager Glenn Kingsbury, President Joe Bodio of LAN-TEL Communications, and Chapter Membership Chairman Matthew Guarracino of J.M. Electrical Company. The award recognized NECA Boston’s outstanding performance for attracting the most new member firms to the organization in 2013.

Richard Davey, Secretary, MassDOT Discusses Infrastructure Plans with NECA Boston Chapter

OSTON, MA — Richard Davey, Secretary and CEO of the Massachusetts Department of Transportation (MassDOT) was the featured speaker at the June Boston Chapter Meeting on at the Exchange Center in Boston’s Seaport. He discussed the organization’s aspects of the MassDOT’s planned strategic investment and operations plan over the next five years. The Legislature’s recent passing of a $12.7 billion dollar bond bill is a key to shaping the state’s infrastructure investment over the next five years.

Paul Guarracino to be Inducted into NECA’s Academy of Electrical Contracting

OSTON, MA — The National Electrical Contractors Association recently announced that J.M. Electrical CEO Paul Guarracino will be inducted as a Fellow in NECA’s Academy of Electrical Contracting at the 2014 NECA Convention this September in Chicago. The Academy honors outstanding leaders in the field, and members contribute to the future of the industry through special papers they prepare on aspects of the industry in which they have expert knowledge. Fellows of the Academy also research industry trends and make recommendations for future requirements in the industry. Paul was joined at the podium by NECA Boston President Joe Bodio of LAN-TEL Communications and Academy colleagues John Penney of John A. Penney Company and David MacKay of E.G. Sawyer Company.

Howard F. Lehr, NECA Boston Chapter Past President and Governor

EST NEWTON, MA — Howard F. Lehr, 73, of Jamaica Plain, a beloved member of the National Electrical Contractors Association (NECA) and International Brotherhood of Electrical Workers (IBEW) Local 103, passed away unexpectedly on June 25 while on vacation in Dublin, Ireland. A prominent contributor to Greater Boston’s electrical construction industry, Howard served as NECA Boston Chapter’s president (1996, 1997), governor (1998, 1999), and also as a director on the Chapter’s Board of Directors. In addition, he was a vital member of many of our Association’s committees and was a management trustee for the IBEW Local 103 benefit funds. He had recently received his 56-year IBEW member pin. Howard was the owner of the former Suffolk Electric Company of Jamaica Plain, and with his firm, helped construct many of Boston’s hospitals, educational facilities and other institutions. NECA Boston Chapter will dedicate contributions made in Howard’s memory to Wentworth Institute of Technology to help provide scholarships that will further the education of future electrical industry professionals. Donations may be made to: NECA, Electrical Contractors Association, Boston Chapter, 106 River Street, West Newton, MA 02465. The heartfelt thoughts of his many industry friends and fellow NECA contractors go out to his family.

The goal of fire protection always is to limit the damage a fire can cause. In keeping with that goal, fire suppression is an integral component of every facility’s fire protection system. Fire suppression systems are designed and installed to limit fire spread in new and existing buildings in order to protect lives and control property damage, including the loss of valuable equipment and costly downtime.

It is critical to make sure the system is up-to-date, inspected and tested, and maintained at regular intervals by highly qualified specialists. Every public, commercial, institutional, and private building is required by law to be equipped with updated fire alarm systems. The design, engineering, installation, and maintenance of fire suppression and fire alarm systems must meet stringent National Fire Protection Association (NFPA) Code requirements. Critical facilities require the highest level of fire suppression equipment.

Specific Types of Fire Suppression Require Specific Expertise

Water via fire protection sprinkler systems has long been the first line of defense against fires. Systems that use water as their primary suppressant are monitored by air pressure and, typically, electricians provide the controls and control wiring that will warn of a leak that can be repaired to keep potential water damage minimal.

Today, however, suppression systems are far more sophisticated and varied in their design and installation; depending on the environment, the most appropriate type of device and agent should be designed and installed. For instance, it is typical to use a combination of dry and wet agents to suppress equipment fires. Clean agent fire protection, that is, the use of gases in extinguishing and controlling fires is often employed in critical facilities, where equipment can suffer damage through the use of sprinkler systems and other wet agents.

That said, there are no shortcuts when it comes to fire suppression system design, installation, testing and preventive maintenance. It is critical that the fire suppression system is not only installed correctly, but also tested and maintained to ensure functionality.

An electrical contractor that specializes in the installation of these fire protection systems will know exactly what is required, and provide the most effective system and appropriate means of suppressing a fire, based on the type of facility, the specific environment and application. That electrical contractor/installer will work closely with fire protection contractors, building managers, engineers, emergency personnel, electrical inspectors, and fire department personnel to ensure the intricate installations are performed to code, fully tested and operational.

It is very important for the electrical contractor’s electricians to be fully up-to-date with all aspects of this highly specialized field. With a multitude of systems appropriate to specific facilities — from low, medium and high expansion foam systems to CO2 extinguishing systems, and from dry chemical to wet chemical extinguishing systems — technical wiring requirements must meet NFPA Codes. And, there are many different types of initiation for each system, requiring extensive training to ensure the components of the system tie in properly.

The facility manager should research and interview the installing electrical contractor to make sure the firm has field experience with their specific kind of facility and, also, expertise with the types of fire suppression systems that will be installed.

It is the building owner’s and manager’s responsibility to make sure the fire suppression systems, which are critical components within the facility’s life safety systems, are up-to-code and inspected and maintained regularly.