A Message from the Executive Manager

The NECA-IBEW Team and The Code of Excellence

When NECA and our labor partners, the International Brotherhood of Electrical Workers (IBEW), formally adopted the Code of Excellence four years ago, labor and management made a joint commitment to achieve the highest level of jobsite excellence. The NECA IBEW Code of Excellence is a national program dedicated to total customer satisfaction. The Code helps ensure that NECA projects are customer-focused in meeting the highest industry standards. Its goals are:

- Performing the highest quality workmanship
- Delivering the greatest quantity of work as efficiently as possible
- A quality job built on time and on-budget

Responsibilities of Labor and Management

To meet these goals, the program stresses the responsibilities of both contractors and workers to adhere to a strict code of jobsite conduct. Employee responsibilities include working in a safe and efficient manner, respect for customers and their property, and zero tolerance for substance abuse and unprofessional behavior. Employers are committed to providing the necessary materials, tools, equipment, and most importantly, supervision – to ensure projects are managed effectively with foremost consideration to safety.

The local unions of the IBEW and chapters of NECA have the ultimate responsibility for implementation and administration of the Code of Excellence. The structure is designed to ensure that workplace representatives have the knowledge, training, support, and ability to resolve Code of Excellence issues quickly and effectively.

The Code of Excellence in Eastern New England

Locally, the Boston Chapter of NECA has been working with IBEW Local 103 in Greater Boston, Local 490 in New Hampshire, and Locals 567 and 1253 in Maine to integrate the Code of Excellence program into numerous projects. The Code is now part of our core curriculum, taught to all workers through our apprenticeship training and continuing education programs.

NECA and the IBEW continually lead the way in setting the highest standards that address the needs of the construction user community. Whether it’s investing in apprenticeship training, establishing uniform portability rules, ensuring adequate skilled manpower on all projects, adopting a nationwide substance abuse testing policy, and, now, implementing the Code of Excellence, the NECA-IBEW team takes a proactive role in ensuring that all our projects achieve the highest level of jobsite excellence, safety, workmanship, quality, and customer satisfaction.

INDUSTRY NEWS

NECA Contractors Attend Solar Workshop

West Newton, MA – In addressing the growing Massachusetts solar market, in October NECA Boston Chapter hosted a solar workshop presented by Lee Smith, principal of prominent solar developer American Solar Partners. All aspects of PV projects were discussed – site evaluation, design and installation, solar panels, inverters, PV metering, grid interconnection, net metering, and funding.

NECA Boston Chapter and MEI Present Facilities Energy Audit Workshops at IBEW Local 103 JATC

Boston, MA – Phase One Training of the Facilities Energy Audit Education Series Program – the Screening Survey Workshop – was held November 9th at the IBEW Electrical Industry Training Center. Phase Two Training was conducted in Boston, December 7th and 8th. The NECA Management Education Institute (MEI) workshop provides skills training enabling NECA contractors’ staff to identify and meet demands of energy efficiency projects in commercial, industrial, and institutional facilities. It prepares them to conduct high-level assessments of entire facilities.

Thomas Driscoll of E.S. Boulos Company Inducted into Academy of Electrical Contracting

San Diego, CA – NECA Boston Chapter Governor Thomas Driscoll of E.S. Boulos Company in Westbrook, Maine, was inducted into NECA’s Academy of Electrical Contracting at the NECA 2011 Convention in San Diego. The Academy honors leaders in the electrical contracting field and their service is continued through membership in the Academy as the voice of experience for NECA and ELECTRI International.

With This Issue

NECA Boston Chapter is pleased to provide a recent issue of NECA’S Electrical Design Library - Give Your Electricity Bill a Really Close Shave. It provides building owners and tenants practical ways to lower energy usage, especially during peak demand. Energy efficient lighting and building heating and cooling practices are discussed.

CONNECTIONS

CONNECTIONS is a quarterly publication of the Boston Chapter of the National Electrical Contractors Association / Electrical Contractors Association of Greater Boston, Inc., 106 River Street, West Newton, MA 02465. Phone 617-969-2521.

Mission: CONNECTIONS is designed to provide information relating to current happenings in the electrical construction industry in Eastern Massachusetts, Maine, and New Hampshire and to report activities of the Boston Chapter of NECA and its members. Your comments are welcome. We can be reached via e-mail at info@bostonneca.org
INSTALLATIONS

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

E.S. Boulos Co. Powers Roxbury, Maine Substation and 8-Mile Overhead Transmission Line Project

Projects, Valued at Approximately $5M, Support Record Hill Wind Farm in Roxbury, ME

Lewiston, ME – E.S. Boulos Company’s Utility/Power Group, based in Lewiston, Maine, recently completed the new Roxbury 115kV/34.5kV Substation and an 8-Mile 115kV Overhead Transmission Line Project. Both projects were awarded to ESB by Iberdrola USA/CMP and were constructed in support of the Record Hill Wind Farm Project, which is being developed by Independence Wind. The new OH 115kV Section 270 line runs from the existing Rumford Falls Hill Substation to the new Roxbury Substation. The 8-mile Transmission Line is a single pole davit arm constructed adjacent to the existing 34.5 kV Line Section 59. Construction began in early May and the fast-track project was completed in August. Pat Driscoll served as ESB’s Project Manager for the OH T-Line project and Timothy Murphy, the Project Superintendent. The new Roxbury Substation was constructed concurrent to the Overhead Transmission Line project. The project was supervised by Project Manager John Carrier and Superintendent Kevin Nesbit.

Lighthouse Electrical Providing $800,000 Fire Alarm System Upgrade at Dana-Farber Mayer Building, Boston, MA

Boston, MA – Lighthouse Electrical Contracting, Inc., of Rockland, Massachusetts, has reached substantial completion of the $800,000 fire alarm system upgrade project at Dana-Farber Cancer Institute’s (DFCI) Louis B. Mayer Research Laboratories building in the Longwood Medical Area. The project scope at the 10-story, 124,000 square foot cancer research facility was comprised of Lighthouse’s installation of a new addressable Simplex Fire Alarm system, A/V speaker strobes, 48 pull stations, a state-of-the-art graphic smoke control panel designed by EXP Engineering of Boston, and three new fire command centers on floors 1, 5 and 7. The NECA contractor also installed a new Comtronics bi-directional antenna system that provides Boston Fire Department communication from all points in the high-rise building. The project commenced in March and will be completed in the next several weeks, when Boston Fire Department will provide final testing. Project Manager Scott Sullivan and Foreman Rich Carney supervised a field crew of 6 IBEW Local 103 electricians at peak construction.

Other Key Issues discussed include Renewable Energy, Job Creation, Davis Bacon


Bill Passes House and Senate; President Signs It Into Law;

LEGISLATIVE NEWS

H.R. 674 – legislation that repeals the law passed in 2005 requiring all governmental agencies to withhold 3 percent of contractor payments as a prepayment of taxes. The bill passed both the House, 422-0, and Senate, 95-0. The President signed the new legislation November 21.

Broadway Renewable Strategies Brightens Future for Leicester, MA—Solar Projects Complete for Schools and Police Department

NECA Contractor's Projects to Provide Economic, Environmental and Educational Benefits for the Town

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caster, MA—Broadway Electrical Company's renewable division, Broadway Renewable Strategies, has recently completed four photovoltaic (PV) installations for the Town of Leicester at Leicester High School (172.48kW), Leicester Primary School (110.88kW), Memorial School (90.72kW), and the Leicester Police Station (22.40kW). The four roof-mounted solar systems are projected to collectively save the Town of Leicester approximately $34,000 annually.

Broadway Renewable Strategies provided engineering, procurement, construction, and financing of each of the four PV systems. The NECA contractor will also own and maintain the solar systems. Broadway provided equipment and services in a Solar Power Purchase agreement with the Town of Leicester. The Town has no capital investment in the system. Broadway provides the facilities with solar-generated electricity at a discounted per kWh rate, resulting in significant energy savings for the Town and protection against volatile energy prices.

Broadway supervised four field crews comprised of a total of 17 licensed IBEW electricians—a Project Executive and 4 Project Foremen based out of IBEW Local 103 and 12 licensed journeymen wiremen from IBEW Local 96 in Worcester. The projects commenced in May and were completed in early September.

Worcester Polytechnic Institute students and faculty provided a feasibility study in 2009 to spearhead the renewable project. The schools will utilize the solar systems as a learning platform in their science curriculum.

Broadway Executive Project Manager Dan Griffin said, "Student involvement on the Leicester project makes it a very gratifying project for Broadway Renewable Strategies to complete."

Ostrow Electric Underway with Lowell

Regional Transit Authority's .5MW Solar Project

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ewell, MA—In the State’s largest public transit solar project to date, Ostrow Electric, based in Worcester, is underway with the .5MW solar project at the LRTA Bus and Maintenance facility at 100 Hale Street in Lowell. The solar electric installation will be comprised of 1911 250kw solar panels on the 70,000 square foot roof. It will generate 489,700kwh of electricity per year, saving the agency up to $85,000 annually.
W inchester, MA – J. & M. Brown Company, Inc. (JMB), of Jamaica Plain, MA, recently completed the electrical construction of Winchester Hospital’s Cancer Care Center at 620 Washington Street in Winchester, Massachusetts. The 40,000 sf project entailed complete removal and reconstruction of the hospital’s existing 2nd floor. In addition, JMB’s project parameters required demolition and renovation of an adjacent, existing 14,000 sf two-story structure and electrical construction of the facility. The 12-month phased construction was provided while the existing facility remained fully operational.

J. & M. Brown’s comprehensive scope included installation of the facility’s primary and emergency power systems, new fire alarm system, nurse call system, tel/data installations, and low voltage lighting control system. Electrical installations related to the historic restoration and preservation of an attached three-story historic 4,000 sf portion of the building were also provided.

JMB’s Executive VP and Project Manager Joe Trodella, General Superintendent Paul Arthur and Project Foreman Tom Campbell supervised an IBEW Local 103 field crew of nine electricians and three telecom specialists during the fast-track project, which commenced in June 2010 and was completed in June 2011.

J. & M. Brown’s tel/data division, Spectrum Integrated Technologies, provided telecom installations under separate contract, including TV/video installations for the oncology bay, which features dedicated individual overhead speakers and DVD capabilities. The Winchester Cancer Care Center project, designed by Steffian Bradley Architects of Boston, is seeking LEED™ Gold Certification from the U.S. Green Building Council. Electrical and mechanical systems were coordinated and installed utilizing a BIM platform via AutoCAD Revit. General contractor A.J. Martini of Winchester headed the project team. Electrical engineering services were provided by R.W. Sullivan Engineering of Boston.

The electrical project was secured and partially funded through IBEW Local 103’s market recovery fund.

State-of-the-art Facility

Winchester Hospital’s new, comprehensive Cancer Care Center provides patients the most advanced testing, radiation oncology services, drug therapies and technologies. The expanded radiation oncology unit, located on the facility’s first floor, offers the latest imaging technologies and processes provided in collaboration with Shields Health Care Group. This floor is also comprised of offices, support services, a community room, examination and consultation rooms, a patient library, and “A Caring Place” boutique. The 2nd floor is dedicated to medical oncology and infusion services, housing 14 exam rooms and 28 infusion chairs, as well reception and waiting areas, all in a serene atmosphere designed to allow for ample natural light. Amenities for families include wireless communications and televisions with a DVD library.

Commenting on demands of the project, PM Trodella said, “Coordination and project scheduling was critical, as each of the project’s phases was so distinct. Handling complete reconstruction of the facility’s second floor while the first floor remained fully operational necessitated off-hour scheduling. In addition, the historic restoration of the administrative and doctors’ office building provided its own set of challenges. The project was managed efficiently by general contractor A.J. Martini and Winchester Hospital’s project team, ensuring that all trades could coordinate the project systematically and meet the project schedule.”

A.J. Martini Project Manager Phil Balboni commented, “J. & M. Brown Company’s office and field staff were important partners in the project team and contributed to the successful delivery of this complicated project for Winchester Hospital.”

J. & M. Brown Company is also underway with electrical construction of Winchester Hospital’s adjacent ambulatory surgery center project.

**NECA and Wentworth Institute Hold Advanced Training for Construction Management Sessions**

Winchester, MA – In October, NECA Boston Chapter and Wentworth Institute of Technology (WIT) held the Advanced Training for Construction Management session at the IBEW Electrical Industry Training Center in Dorchester. The advanced training program, developed by NECA in collaboration with Wentworth, provides field tailored solutions to common site management challenges. It is comprised of three seminars conducted by course instructor Wayne DelPico (pictured) of Wentworth Institute of Technology and attended by NECA foremen, general foremen and project managers. The first session focused on Contract Documents, including expectations and performance requirements; plans and specifications; RFI process; and managing scope creep. The second session centered on Managing Construction Contracts, and the third session was dedicated to Scheduling – Practical Applications. Attendees earned 1 CEU in Advanced Training for Construction Management from WIT.

For a complete directory of NECA Greater Boston Chapter members, visit www.bostonneca.org
The Importance of Facility Energy Audits

NECA and its contractors are at the forefront of identifying and implementing energy efficiency and renewable energy initiatives for commercial, industrial, and institutional facilities. Toward this end, this fall, NECA’s Management Education Institute (MEI) conducted Facilities Energy Audit seminars for NECA Boston Chapter project managers and owners. The workshops were conducted by Mark Toda and Bill Paletski, senior technical specialists with the Pennsylvania Technical Assistance Program (PennTAP) at Penn State University.

Phase 1 Training focused on Facilities Energy Audit Screening, and Phase 2 on Preliminary Energy Assessment, which quantifies potential energy savings through implementation of energy efficiency measures and practices. Mark Toda was interviewed concerning the importance of energy efficiency, renewable energy, and how NECA contractors are spearheading the effort for companies to reduce energy consumption.

Q Why is it important for building owners and managers to conduct energy audits of their facilities?
A To understand how energy is currently being consumed at a facility, to identify and quantify energy saving opportunities, determine a cost effective energy efficiency solution, and a projected return on investment. The audit will assist the company in making an informed decision when investing in energy efficiency.

Q Why does it make sense for NECA contractors to provide these assessments?
A NECA contractors have received specialized energy efficiency training. Also, NECA contractors are already familiar with and have installed energy consuming pieces of equipment within a facility.

Q In conducting energy audits of facilities, what aspects of facilities’ energy systems are NECA contractors finding to have the most significant impact on energy efficiencies?
A This is dependent on the type and age of the facility. For many facilities, lighting is usually a good place to start, as significant savings can result from lighting retrofits. However, building heating and cooling systems (HVAC) can provide significant savings. Also motors, and even office equipment, can provide savings.

Q And, in undertaking energy efficiency measures, what kind of energy savings can a building owner expect to realize by upgrading equipment? Please focus on lighting systems, power equipment, and HVAC/building automation.
A This again is dependent on the type of facility, and whether or not the facility has already undergone energy efficiency work. However, up to 10% of the overall energy consumption is realistic. Companies who have not done energy efficiency work can potentially save up to 25-50% of the energy consumed by lighting and HVAC systems.

Q What cost can a building owner or a property manager expect to incur in having a NECA contractor undertake a facility energy audit?
A This will depend on the facility, however, the initial energy assessment will typically be done at no cost. This initial assessment will result in a for fee proposal to do a more in-depth assessment of the specific energy savings opportunities that were identified. Often these assessments can be done for $1-5K.

Q When the audit is completed, what does the building owner receive for an assessment of the facility?
A The building owner will receive an initial report that identifies potential energy savings opportunities. Then, if they move forward with a for fee assessment, they will receive a report outlining the energy savings potential for an energy efficiency measure, the cost of implementing that measure, and the potential return on investment. This is of great value as it guides the company as they undertake energy efficiency work, and provides the financial justification for moving forward.

Q If major systems need retrofitting, whether they are low voltage lighting systems or power distribution systems, what are NECA contractors finding to be the most efficient way for owners to budget retrofits?
A Energy efficiency retrofits will pay for themselves from the energy savings. Typical payback periods are 1-4 years.

Q Are there federal or state tax credits for energy efficient upgrades?
A There are typically incentives available for undergoing energy efficiency improvements from the State as well as from the utilities. NECA contractors can assist their clients in identifying these incentive programs, however, companies can contact their utility as well as the State energy office.

Q How do renewable installations, in particular solar, fit into the picture for the typical commercial building in an urban setting? And are renewable installations typically reviewed within the facility energy audit?
A Renewable installations are not typically considered in the energy efficiency assessment. Energy assessments are intended to assist a facility in becoming energy efficient first. Then, facilities should consider installing renewable energy technologies to further reduce energy costs and environmental impact.

Q From the contractor’s and owner’s perspectives, when is the best time to conduct an audit, and why?
A As soon as possible, especially if an energy assessment has not been done recently at a facility. The sooner an assessment can be done, the sooner the opportunities can be evaluated, and energy efficiency measures can be implemented so that companies can begin saving money.
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For more than a century, NECA member firms and the skilled union electricians of Local 103 have set the standard for quality and safety in electrical construction for wide-ranging projects throughout Eastern New England – from biotech, healthcare and educational facilities to major infrastructure and utility projects; and from corporate facilities to community schools, and world class stadiums to libraries. Trust a NECA contractor to deliver the highest standards of quality and safety in electrical and tel/data construction.

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