

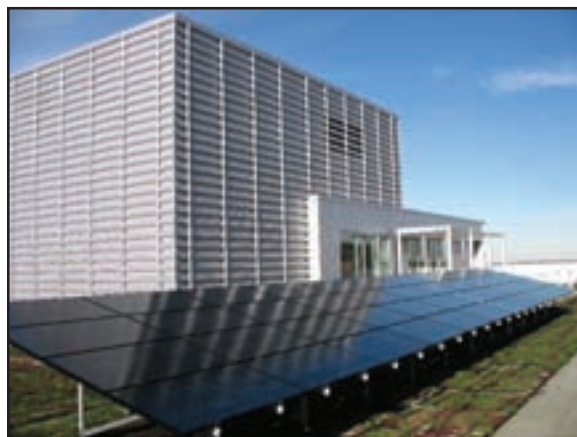


## Energy Audit Training for contractors

In the July *Connections*, we reported on an Energy Training Partnership Grant awarded to the Ohio Electrical Labor Management Cooperative Committee (OELMCC) to provide training for electrical workers in the fields of Energy Efficiency, Wind Turbine Technology and Solar Photovoltaic Systems. The objective of the program is to create a workforce educated in the latest energy efficient technology.

The program, referred to as the Ohio Green Renewable Opportunities for Workers (GROWs) is still underway and over 1200 Apprentices and Journeymen will have been certified by the end of next

year. But having a trained workforce is only half the battle. Contractors must also be brought up to speed on the latest technology.



*Solar panels provide renewable energy.*

To this end, the OELMCC is planning the Ohio Energy Solutions Summit (to be held in the Spring of 2011) to assure that NECA

contractors will be recognized as the State's leaders in providing alternative energy and energy management solutions to the business

community at large. Helping to drive this effort is the Building Star Energy Efficiency Act of 2010. This bill is "to assist in the creation of new jobs by providing financial incentives for owners of

commercial buildings and multifamily residential buildings to retrofit their buildings with energy efficient building equipment and

materials and for other purposes." NECA is committed to this Act nationally and the OELMCC is committed to providing Ohio Chapters with necessary support.

To lay the groundwork for this undertaking the OELMCC has planned a Facilities Energy Audit Program to provide training seminars for NECA contractors. This program will position NECA contractors at the forefront of the green energy business sector by educating and training them, their staff, and electricians in the best practices and most effective auditing techniques.

Phase One Training – The Screening Audit will provide NECA contractors with skills which enable contractor staff to identify

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## NECA goes GREEN

The interest in and, in some cases, the mandated requirement of implementing sustainable building practices is becoming a worldwide phenomenon. One driver of the demand for increased sustainability comes from estimates that buildings, by themselves, consume more than 40 percent of the world's energy and contain unrecycled materials, while producing more than 40 percent of all global waste and greenhouse gases. And while

sustainability is the major force shaping construction today, energy efficiency and sustainable energy often have the greatest impact on just how "green" a building actually is. The National Electrical Contractors Association (NECA) supports a three-pronged approach to energy conservation, energy efficiency, and responsible energy production to help people and businesses meet their green building goals.



Together, they offer a holistic, integrated energy solution to bring power to buildings and communities. Developing energy solutions are a NECA

contractor's commitment to both the environment and the customer.

### Energy Conservation

Energy conservation means using less energy without impacting the occupants' everyday activities or productivity. An important part of energy conservation is advance controls on both the utility and customer sides of the electric meter. Electrical systems that automatically adjust lighting and environmental controls as

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## Training *cont'd*

energy efficiency project opportunities in commercial, industrial and institutional facilities. Screening Audit Training will prepare newly minted auditors to conduct "first blush," high level assessments of entire facilities. All major systems are assessed including the building envelope, mechanical systems, and electrical systems.

Four, one-day seminars are scheduled from 1pm to 7:30pm.

Toledo: Tuesday, February 8<sup>th</sup>  
Hudson: Wed., February 9<sup>th</sup>  
Westchester: Wed, March 16<sup>th</sup>  
Columbus: Thurs., March 17<sup>th</sup>

Phase Two Training – The Preliminary Energy Assessment (PEA) Audit. A PEA audit is a more in-depth energy audit, where the auditor collects the detailed information required to quantify potential energy savings and the financial benefits of implementing appropriate EE measures and practices. During a PEA audit, the auditor investigates all major energy-consuming systems at the facility in order to determine when and where in the facility energy is being used. All major systems are investigated as well. The auditor also collects detailed information about the facility's

energy usage patterns to determine the facility's energy utilization Index (EUI).

This is a two-day follow-up to the Phase One seminar. Classes run 1:00-7:30pm on day one and 7:00am to 1:30pm on day two. The seminar will be held on April 13 and 14 at the Electrical Trades Center in Columbus.

For more information about the seminars and to register, please visit [www.oelmcc.org](http://www.oelmcc.org).

### OELMCC Launches New Website

The Ohio Electrical Labor Management Cooperation Committee recently launched a



new website to showcase its commitment to the electrical industry in Ohio. The OELMCC keeps their members informed about current legislation that impacts the industry, as well as manages state-wide initiatives, like the upcoming Energy Summit. For more information, please visit their website at [www.oelmcc.org](http://www.oelmcc.org).

## NECA green *cont'd*

day lighting and occupancy change are called "Energy Management Systems." EMS helps reduce building operating and maintenance costs, as well as reducing energy waste.

### Energy Efficiency

Reducing the power it takes for a building to operate is usually the first step an owner can take to cut operating costs, while also reducing a building's environmental impact. Energy efficiency involves using more efficient materials and equipment to generate, transfer and use energy. Conservation can only save so much; a systematic approach to cutting energy use is necessary to be truly green.

NECA contractors can perform an "energy audit" to determine how much power is being used and what systems are requiring the most. Contractors can then offer a list of options for reducing power use or improving energy efficiency.

### Responsible Energy Production

People and businesses that invest in alternative energy sources like solar photovoltaic panels and distributed generation have a lot to gain. However, they can only benefit if the technology and equipment necessary for alternative power is designed and installed correctly. No one would have a roofer handle installation of a building's main electrical service. Why then would a roofer be the choice for installing PV panels? The same safety and performance considerations apply for powering a building using alternative energy sources as they would for traditional electrical transmission and distribution.



The Miami Valley Foreman's Club was reborn in 2005 to unite Foremen from the various union building trades to work as a team. On a jobsite, the various trades are dependent on each other. Each step in construction intertwines the services and knowledge of all workers in the building trades, so it only makes sense to create a forum for Foremen to share their knowledge, discuss their challenges, and find better ways to work together. Cooperation on a jobsite helps everyone do their job better.

The Club sponsors seminars throughout the year, and Foremen from all trades are welcome to attend. In addition, they also hold meetings to plan for upcoming events and exchange information. The MVFC also

looks for community projects in which to volunteer, like Habitat for Humanity, Red Cross efforts, F.O.P. Youth Programs and the Rebuilding Dayton Project.

Here are some highlights of upcoming seminars:

#### January 19, 2011

Seminar featuring Roger Hoover of Non-Crisis Management "What is a LEED Certified Project and what is the role of the Foreman on a LEED Project." 6:00 pm, IBEW Local 82 Union Hall.

#### March 16, 2011

"CPR for beginners and recertification for those already certified." 6:00 pm, IBEW Local 82 Union Hall.

#### May 18, 2011

Scissor Lift Training with Bob Barrett from One Source. "Certification for Scissor Lift Training." 6:00 pm, IBEW Local 82 Union Hall (max. 20 participants).

For more information, contact Matt Lightle at 937.271.7545 or visit [www.mvacp.org](http://www.mvacp.org).



January, 2011

Your comments, suggestions and questions are welcome! Contact the Western Ohio Chapter - NECA.

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# The abc's of an *energy audit*

## Why Have a Building Energy Audit Performed?

In these days of uncertainty, it is important to keep operating expenses to a minimum. One difference between those companies that weather these difficult times and those which do not survive will be that the survivors will be those who have reduced their unnecessary expenditures before it is too late.

Unnecessary costs include a portion of your utility costs, which for many until now were just considered "a cost of doing business." By running an inefficient building, you are overpaying your utility company for energy. It just doesn't make any sense. A good building energy audit will point the way to reduce your energy costs by 10% to 40%. For large organizations, this can be substantial, and could be the difference between staying afloat and going under.

## What is a Commercial Energy Audit?

A commercial building energy audit is a study of your building's energy using equipment. Building energy

audits often also look at water consumption (even though that is not technically considered energy). An energy auditor comes out to your building and interviews facility managers, inspects lighting, air conditioning, heating and ventilation equipment, controls, air compressors, water consuming equipment, and anything else that is using



*U.S. Army Corps of Engineers goes for LEED Gold at their new complex in Fort Belvoir, VA. The new complex will use 30% less electricity than conventional buildings.*

energy. The auditor will develop a list of energy conservation measures (ECMs) that could reduce energy usage and costs in

your building. Depending upon the level of building energy audit, the auditor will then quantify how much



*Motion sensor lighting.*

savings potential there is for each of these measures, and the costs associated with implementing them. Some measures will take decades to pay for themselves, while others will start paying for themselves within months.

## What can an Electrical Contractor do to reduce my costs?

The U.S. Green Building Council and its standard for sustainable building design, known as Leadership in Energy and Environmental Design (LEED), is the driving force behind the green building movement. All versions of LEED offer credits for providing varying levels of

individual lighting control. Lighting energy loads are factored into a LEED project through EPA's Energy Star portfolio manager tool, which enables better understanding of a building's energy performance and the program's certification requirements. The Energy Star program promotes efficient lighting as one of the first activities to undertake to make a building more energy efficient.

There are many opportunities to improve lighting efficiency in buildings with the use of proven technologies, such as lamp fixture and ballast replacement; the use of appropriate controls; bilevel switching; occupancy sensors; dimming ballasts; and daylight harvesting.

If a third of the energy consumption of a typical commercial building is attributed to lighting, your contractor can apply lighting technologies that reduce the lighting energy consumption by half, thereby reducing the overall building consumption by 15 percent. Isn't it time you had an energy audit?

## Congratulations to Chapel Electric & CRT!



**Dennis F. Quebe, Chairman and CEO of Chapel Electric Co. LLC,** was unanimously voted as President-elect of the National

Electrical Contractors Association (NECA), to a one-year term beginning January 1, 2011. Quebe will then serve a three-year term as President, beginning in 2012. NECA is the voice of the electrical construction industry. He entered the electrical industry with a national contractor based in Houston, Texas, following his four-year term of service in the U.S. Marine Corps. Quebe is a licensed contractor in over 30 states. He is a Fellow in The Academy of Electrical Contracting.



*(from left) Chapel-Romanoff Technologies (CRT) CEO Dennis F. Quebe, Chapel VP of Contract Operations Bob Shaffer, CRT Service Manager CJ Withrow and Chapel President Buck Ross accept the 2009 Zero Injury Safety Award from NECA District 2. Congratulations!*



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## Builders Exchange of Dayton TEAM Building Night January 27, 2011 The Schuster Center

The Builders Exchange of Dayton (DBX) and the Subcontractors Assoc. of Western Ohio have joined together again to offer the "Eighth Annual Team Building Night." In addition to the great networking opportunities, Team Building Night will also include the presentation of the BX Craftsmanship Awards, Project Manager Award, and Architectural and Engineering Awards, as well as the presentation of the Subcontractors Association's Outstanding Leadership Awards.

This is a great way for the BX to highlight its members and the construction industry.

### Schedule

**3:00 - 4:00pm:** Purchasing Enhancement Program update with the City of Dayton's Human Relations Council

**4:00-6:00pm:** Refreshments and Networking

**6:00-6:30pm:** Dinner, followed by Raffle Prize Drawing

**6:35-7:00pm:** Awards Presentations

For more information, contact BX of Dayton, 937.278.5723 or visit [www.bxdayton.com](http://www.bxdayton.com).

## The Western Ohio Chapter - National Electrical Contractors Association Directory:

### NECA Members

Aztec Electric, Inc.  
Chapel Electric Company  
Chapel-Romanoff Technologies  
ESI Electrical Contractors  
High Voltage Maintenance  
Kastle Electric Company  
Kastle Technologies  
Maxwell Lightning Protection  
Mutual Electric Company  
Stuebaker Electric  
Union Lightning Protection  
Wagner Industrial Electric  
York Electric, Inc.

### Contributing Contractors

Automated Controls  
Bright Street Electric  
Broadway Electric Service Corp.  
Glenwood Electric  
Justice Electric  
Lake Erie Electric  
M.B.A. Electric, Inc.  
Power Services  
Precision Electrical Contrs.  
Productive Electric, Inc.  
Spurling Electric Co., Inc.  
The W.G. Fairfield Co.  
Triad Electrical  
Westfield Electric  
Wilson Sign Company

### Affiliate Members NECA

Battelle & Battelle  
Becker Electrical Supply  
Copp Systems Integrator  
FD Lawrence Electric Company  
Graybar Electric Co., Inc.  
Heapy Engineering LLC  
Riffle & Associates  
Square D / Schneider Electric  
Uptime Solutions

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