

# eI electroindustry

JUNE 15, 2005

WWW.NEMA.ORG

VOLUME 10 NUMBER 6



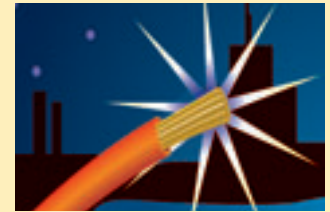
## NEMA submits amicus brief in price discrimination case

**NEMA** filed a friend-of-the-court brief with the U.S. Supreme Court on May 20 in an antitrust case brought under the Robinson-Patman Act. The case resulted in a \$4 million dollar judgment (after trebling actual damages) to a distributor of Volvo heavy duty trucks. The dealer claimed that other Volvo truck

dealers, in competition for the same customer, received more favorable pricing concessions from Volvo. NEMA said the lower court rulings would likely harm competition instead of facilitating it. Faced with legal action if they provided differing discounts among an array of electrical distrib-

*continued on page 19*

### IN THIS ISSUE



3

The Senate is putting together energy legislation that will attempt to retain or strengthen benefits of previously failed bills while overcoming obstacles that have stopped legislation from getting to President Bush's desk.

4

NEMA recently hosted a stakeholder meeting on the certification of distributed generator interconnection equipment and systems in order to build a consensus for a broad-based response to a FERC Notice of Proposed Rulemaking.

5

NEMA and its member companies are helping China tackle two pressing problems—pollution and a voracious appetite for energy.



# NOW, MORE THAN EVER

## **Retailers demand it. Consumers look for it. Manufacturers know it.**

The UL Mark is recognized around the world as a preeminent symbol for product safety.

From the time electricity was first harnessed, UL has been a pioneer and leader in establishing safety standards and helping manufacturers meet those standards.

Now, as demand for our services increases at record levels in both North America and abroad, UL is expanding our capabilities and streamlining processes to ensure we can meet our customers' needs faster and better than ever.

While these improvements will help manufacturers bring their products to market faster, they will in no way hinder our profound commitment to product safety.

For more information about the ongoing initiatives at Underwriters Laboratories, please visit our Web site at [www.ul.com](http://www.ul.com).

WORKING FOR A SAFER WORLD

[www.ul.com](http://www.ul.com)

# Senate moving energy bill; NEMA provisions included

The Senate is putting together energy legislation that will attempt to retain or strengthen benefits of previously failed bills, while overcoming obstacles that have stopped legislation from getting to President Bush's desk.

The Senate Energy and Natural Resources Committee, led by Senator Pete Domenici (R-NM), is hammering out a companion to the version of legislation passed in April by the House (H.R. 6). Following recent public addresses by President Bush to build support for the plan he announced four years ago, Domenici noted that "the President's five energy proposals affirm his vision of clean, abundant, and affordable energy for this country and his commitment to making that dream a reality. ... The energy challenges we are facing now would be more manageable if we had enacted President Bush's National Energy Plan when he proposed it four years ago. Congress's failure to act has hurt our economy and American consumers."

Domenici has for several weeks been meeting with Republicans and Democrats in an attempt to build bipartisan support for the legislation, which was set to begin mark-up in mid-May. "When combined with the energy tax title, this legislation will do more for efficiency and conservation than Congress has done before," said Domenici prior to the mark-up. "We have sought to increase and diversify our energy supply, while employing new technologies to make coal cleaner, electricity more reliable and affordable, and nuclear energy more abundant. It has sometimes been tough to work through these issues, but we have reached a number of important agreements."

Jeff Bingaman (D-NM), the ranking Democrat on the committee, said, "I'm hopeful that this mark-up will advance the Senate toward a bill that strikes the necessary balance between increasing supplies and encouraging conservation."

In late April, the Senate and *continued on page 20*



## IN THIS ISSUE

6

**With the help of NEMA member technology, the world now knows how King Tutankhamun died.**

8

**Through the work of NEMA members, staff, and field representatives, citizens of Texas will be protected from unsafe electrical installations without upsetting decades old electrical industry practices.**

9

**Due to consumers becoming more energy conscious and to the recent functional improvements in lamp design, fluorescents have now become a compelling lighting choice, as well as an aesthetic statement.**

22

**NEMA said the recent release of the National Traffic Signal Report Card underscores the need for more efficient and well-integrated traffic signal operation to handle the growing traffic demand in the U.S.**

## DEPARTMENTS

Advertisers Index . . . . . 22  
 In the News . . . . . 10  
 Spotlight on the Economy . . . 18  
 Standardization Trends . . . . 15  
 Washington Report . . . . . 13

# Stakeholders reach consensus on federal rules for certification of distributed generator interconnection equipment

**NEMA** recently hosted a stakeholder meeting to build a consensus for a broad-based response to a Federal Energy Regulatory Commission (FERC) Notice of Proposed Rulemaking (NOPR), Docket No. RM02-12-000. The meeting brought together stakeholders representing utilities, manufacturers, state regulatory commissions, the federal government, testing laboratories, and others to seek a common understanding of the obstacles to certification of interconnection equipment and to discuss ways to overcome them. Each of these groups will be affected by the final rule to be issued by FERC on the *Standardization of Small Generator Interconnection Agreements and Procedures*.

FERC's rulemaking on interconnection of small generators no larger than 20 megawatts follows a lengthy stakeholder negotiation process. First, an Advance Notice of Proposed Rulemaking (ANOPR) was issued August 16, 2002, followed by a public comment period. A NOPR was issued July 24, 2003, with incorporation of filed comments, and yet another comment period. During that time, IEEE 1547, *Standard for Interconnecting Distributed Resources with Electric Power Systems*, was approved by the IEEE standards board; it was later approved as an American National Standard. Recognizing the evolution inherent in the IEEE/ANSI standard promulgation, FERC extended its request for comments and stated its intent to consider any consensus proposals in the formulation of the final rule.



*Eric Lightner of DOE (standing) speaks to the stakeholders at the meeting.*

The meeting at NEMA began with a presentation by Eric Lightner, a program manager at the Department of Energy's Office of Electric Delivery and Energy Reliability, which seeks to modernize the grid infrastructure and operations from distribution substations to consumers. Lightner referenced the IEEE 1547 series of standards and key targets for their development. He noted that the DOE is supporting regional implementation of the 1547 standard and national certification through testing and validation.

Three stakeholder panels presented perspectives on certification of distributed generation interconnection equipment. A utility panel discussed current and planned practices of interconnecting distributed generation with electric power systems. A manufacturers panel presented current and planned practices of equipment conform-

mance to IEEE 1547 and perspectives on the need and for scope of a certification process. Finally, a panel of state representatives talked about the status of interconnection standards in the states.

After reviewing the existing procedures for testing, labeling, and listing equipment intended for use on electrical systems, stakeholders concluded that the existing regime for assuring the safety, suitability, and reliability of such equipment could be applied to interconnection equipment as well.

A process to accomplish this, they agreed, would include:

1. Final approval (expected in June 2005) by IEEE of the conformance test procedures being developed in IEEE 1547.1 to ensure that the requirements stated in IEEE 1547 are met by given equipment under standard test procedures;

*continued on page 20*

# NEMA sponsors pollution prevention and energy efficiency meeting in China

**NEMA** and its member companies are helping China tackle two pressing problems—pollution and a voracious appetite for energy. The association, along with the U.S. Commercial Service, American Consulate General Hong Kong, and others sponsored a standing-room-only conference on pollution prevention and energy efficiency held in Hong Kong, May 9–10, 2005.

Business interests in China are highly motivated to find solutions to problems that exist in part due to its rapidly accelerating economic development in certain Chinese provinces. China plans to spend \$150 billion under its current five-year plan on environmental protection. Moreover, experts say the environmental industry in China is growing at 30 percent per year.

Hong Kong commercial banks, along with the Asian Development Bank, International Finance Corporation, and others are ready to help finance environmental and energy efficiency projects in China's Pearl River Delta region, generally defined as Guangdong province. Hong Kong interests own many Pearl River businesses and several banks have offices in both areas, thus facilitating project funding. The energy efficiency projects envisioned will predominantly employ energy cost savings performance contracts. Under such arrangements the contractor typically assumes all the risk by paying all capital costs and profiting from the energy cost savings over a given timeframe. The banks represented at the conference, however, indicated a willingness to assume some risk of energy efficiency projects.



*Stewart Ballard, Chief Commercial Consul, American Consulate General, HK.*

This bodes well for electrical manufacturers, several of which perform as energy services companies and take overall project responsibility for such projects. Many NEMA member products are employed in the projects, creating additional opportunity. The energy efficiency projects will reduce pollution by reducing the need for electricity, which is often in short supply, leading to curtailments that are costly for industry.

Participants at the NEMA conference examined the dynamics of China's energy demand and use in several concurrent sessions, including those on energy efficiency in manufacturing, power generation, and commercial buildings.

Speakers indicated that new residential buildings in China use three times the energy that new residential

**The energy efficiency projects will reduce pollution by reducing the need for electricity, which is often in short supply, leading to curtailments that are costly for industry.**

buildings use in the developed world, although China plans to reduce the energy use in these buildings by 50 percent. The annual square footage of new residential buildings in China equals that in the entire developed

*continued on page 20*

# Scan helps solve 3,000-year-old mystery

King Tutankhamun has fascinated the public ever since his tomb, filled with extraordinary treasure including a solid gold coffin, mask, jewelry with precious stones, and many artifacts, was discovered by a British archaeologist in 1922. Despite the great find, however, how the boy-pharaoh died had continued to be a mystery. Was his life cut short by murder or natural causes? With the help of

NEMA member technology, the world now knows.

King Tutankhamun ruled about 3,300 years ago and was believed to be the 12th ruler of ancient Egypt's 18th dynasty. He ascended to the throne at about the age of eight and ruled for nine years before dying. He was probably the son of Akhenaten, the heretic pharaoh who introduced a revolutionary form of monotheism to ancient Egypt.

During the boy's reign there were military campaigns for expansion into Nubia and Palestine/Syria, a return to Egypt's traditional ancient religion, and reopening and rebuilding of temples. Since he was so young, most of the decisions regarding military campaigns, religion, and building projects were made by his advisors.

Thirty-six years ago, a small sliver of bone within the upper cranial cavity was discovered through a simple X-ray analysis, suggesting that his death may have been caused by foul play. Some speculated that the boy was given a blow to the head and others thought he may have been deliberately sent into battle to be killed.

According to some, the condition of his tomb, suggesting a hurried burial, indicates that others had eyes on the throne, giving further weight to the murder theory. The boy-pharaoh's elderly chief advisor, Ay, was under suspicion. Since Tutankhamun did not have a child to succeed him, Ay may have decided to seize the crown and declare himself King of Egypt. Afterwards, he forced the boy-king's wife to marry him, thereby further legitimizing his claim.

Another culprit could have been General Horemheb, a man of "low birth" who rose during Tutankhamun's reign to commander-in-chief of the army and deputy to the pharaoh. A third person-of-interest was Tutankhamun's wife, Ankhesenamun, who was older and had been married to his predecessor, and who wrote to the King of the Hittites complaining that she was surrounded by powerful men whom she didn't care for and requested one of his sons as a replacement husband.

The CT scan of King Tutankhamun began in early January as a



KENNETH GARRETT/NATIONAL GEOGRAPHIC 2005

Zahi Hawass (left), head of the Egyptian Supreme Council of Antiquities, looks on as the 3,300-year-old mummy of King Tutankhamun is prepared for scanning. Taken outside Tutankhamun's tomb in the Valley of the Kings in January of this year, the scan was expected to reveal new information about the enigmatic king. The project is supported by National Geographic and Siemens Medical Solutions.

10-man team of medical doctors, senior antiquities officials, and restoration experts removed the wooden box that holds the mummy from underneath a stone sarcophagus in its underground tomb in Luxor, Egypt. The wooden box was then opened and coverings of insulation-like material were pulled back. The blackened mummy, still contained by the wooden box, was inserted into the CT machine mounted in a nearby trailer.

NEMA member Siemens donated a SOMATOM Emotion 6 CT system, capable of displaying the finest details in sub-millimeter slices as well as in 3D. Its wide opening allowed the mummy to be placed within the scanner without being removed from the wooden box. In all 1,700 images were taken during the 15-minute scan.

And the results?

The scan indicated that Tutankhamun was not murdered, but may instead have suffered a badly broken leg that could have become infected. The team of scientists interpreted a fracture to the left thighbone as evidence that the leg break came just before he died.

“From my perspective as chairman of NEMA’s X-ray Section,” says Roland Richter of Siemens Medical Solutions USA, “I can say that our group is excited that CT was chosen as the modality to investigate and potentially solve these archeological mysteries. The Tutankhamun scan shows that state-of-the-art, innovative CT systems are not only used to create remarkable images to gaze into the depths of living human anatomy and to save thousands of lives annually, but also allows us to gaze intelligently into the depths of humanity and history.”

“We are extremely proud to be in a position to provide the level of CT technology required to make this kind of sophisticated research possible,” says Jim Greaney, a Siemens representative to the X-Ray Imaging Products Section. “We

**The scan indicated that Tutankhamun was not murdered, but may instead have suffered a badly broken leg that could have become infected.**

are honored to be associated with such an important project—it is fascinating to see how current cutting-edge technology, designed to improve healthcare and disease management today and in the future, can contribute to the diagnosis of something that happened 3,000 years ago.”

Another Siemens representative, David Bradley, says the project is not at an end. “Though very intriguing, King Tutankhamun is not the only focus in this collaboration,” says Bradley. “Initially a project with the Clinical Pathological Conference, put on by VA Maryland Health Care System and the University of Maryland School of Medicine to look into the mysterious phenotype of the pharaoh named Akhenaten, it has now grown into a three-phase collaborative effort. In addition to researching the history of Akhenaten, permission has been secured from the Egyptian government to scan all of the mummies from the recent discovery at the Bahariya Oasis, probably one of the most important finds in the last 50 years. We will also have access to the mummies of the Cairo Museum and Luxor, among which are all the extant mummies of the pharaohs.” ■

## YOU NOW HAVE A CHOICE!



**MET is a responsive,  
recognized, UL alternative  
for product safety certification.**

- The nation’s first OSHA licensed Nationally Recognized Testing Laboratory (NRTL); approved to test and certify to over 120 product categories.
- The MET mark is accepted throughout the United States and Canada.

Visit our website to learn of MET’s full capabilities, and how using MET could be one of your best choices.

**[www.metlabs.com](http://www.metlabs.com)**

**Call today:** East Coast: 800.638.6057 West Coast: 888.638.9345

## RETURN ON INVESTMENT

# Manufacturers exempted from Texas law

*One of a series of articles illustrating the return on investment electrical manufacturers achieve through their involvement with NEMA.*

## The Challenge

The Texas legislature in 2003 adopted the Electrician's Occupations Code, requiring the licensing of all electrical workers, with one ill-defined exemption—"Exempt—work involved in the manufacture of electrical equipment." Regulatory and enforcement staff of the Texas Department of Licensing and Regulation interpreted this to mean that "in the field work" would require the licensing of anyone working on, repairing, retrofitting, or performing maintenance on electrical equipment. This would require, in turn, that electrical equipment manufacturers be registered with the state as an electrical contractor and employ at least one licensed master level electrician who would be responsible for all installations. In addition, any person performing electrical work in the field would have to be registered either

as a master, journeyman, or apprentice electrician. The requirement for registration meant that, except for an apprentice, all persons working on electrical equipment would be required to pass a state required electrician examination at a level commensurate with their ability to prove from 8 to 10 thousand hours of field experience as an electrical apprentice installer. This issue came to a head in June 2004 when the Electrical Safety and Licensing Advisory Board considered recommending a definition for "electrical maintenance work" that would preclude the calibration, inspection, or testing of electrical equipment by those not licensed as electricians.

## The Game Plan

A coalition of electrical manufacturers, most notably Schneider/Square D Electric and Eaton Cutler-Hammer Company, NEMA staff, and others planned a full court press to convince the state that its licensing requirements for manufacturers were ill advised. Several manufacturers representatives and NEMA Field Representative John Minick testified against this definition at an Electrical Safety and Licensing Advisory Board hearing, contending that it would prevent electrical manufacturers from performing work they traditionally did prior to the enactment of the mandatory state-wide licensing law.

Even though the advisory board removed the words "calibration, inspection, or testing" from the definition of "electrical maintenance work," the coalition was determined to

gain a clear exemption for electrical manufacturers and waged a lobbying campaign to convince both the advisory board and the Department of Licensing and Regulation of the validity of its position.

## The Results

On September 2, 2004, the Texas Department of Licensing and Regulation (TDLR) adopted the following defining amendment to the 16 Texas Administrative Code, §75.10.

**"73.10 (19) Work Involved in the Manufacture of Electrical Equipment.** Work involved in the manufacture of electrical equipment includes on and off-site manufacture, commissioning, testing, calibration, coordination, troubleshooting, evaluation, repair, or retrofits with components of the same ampacity, maintenance and servicing of electrical equipment within their enclosures performed by authorized employees of electrical equipment manufacturers or their authorized representatives and limited to the type of products they manufacture."

## The Value

The licensing law, as it now stands, will protect the citizens of Texas from unsafe electrical installations without upsetting decades old electrical industry practices. Had the coalition not been successful, beginning on September 1, 2004, manufacturers would have been forced into compliance with the Texas electrician's licensing law or, alternatively, would have had to completely change their business models and practices, proven safe and successful for many decades. The unnecessary change may have cost manufacturers millions of dollars and would have resulted in no demonstrable improvement in public safety. ■



## ELECTROTECHNOLOGY UPDATE

# Fluorescents moving out of the kitchen

This winter, 45 fluorescent light installations were on display in the East Building of the National Gallery of Art in Washington, D.C. The exhibition was a retrospective of Dan Flavin's work done over three decades. When asked what his art has meant to him, Flavin said, "I have known it basically as a sequence of implicit decisions to combine traditions of painting and sculpture into architecture with arcs of electric light defining space."

Fluorescent light has been defining space for generations. When General Electric first introduced fluorescent lamps to the public in 1939 at the New York World's Fair, they were considered the ugly duckling of light sources. Invented in 1926 by a German team consisting of Friedrich Meyer, Hans Spanner, and Edmund Germer, whose patent GE purchased, fluorescent lamps were used in industrial and commercial buildings because of their longer operating life and lower cost-per-lumen (a measure of light output) compared to the incandescent.

Unlike the latter, which creates light from heating atoms in a filament, a fluorescent lamp creates light through a chain reaction. When an electrical current is passed through gases in a tube, ultraviolet light is produced. The ultraviolet light in turn strikes the fluorescent coating on the inside of the tube and makes visible light.

Fluorescent light bulbs use less energy to create the same amount of light. For example, a 60-watt fluorescent uses 15 watts of power to provide the same amount of light as a 60-watt incandescent. Schools and businesses found the cost savings of fluorescents significant and over the years



Dan Flavin's "untitled (in honor of Harold Joachim) 3," 1977 pink, yellow, blue, and green fluorescent light 8 ft. (244 cm) square across a corner. Photo: Billy Jim; Courtesy Dia Art Foundation

have generally opted for fluorescents.

Fluorescents failed to gain much popularity among residential consumers, however, and their use in the home was generally limited to kitchens, basements, hallways, and cove lighting. The blinking when the fluorescent lamp was first turned on, the low buzz or hum heard during its use, and the uncomplimentary, distorted colors it produced all needed to be corrected before fluorescent lighting in the home could grow.

GE Consumer and Industrial Lighting's Joseph Howley, chairman of NEMA's Lamp Section, says that these drawbacks have been addressed:

- The noise from fluorescent lighting systems greatly diminished with the development of the electronic ballast. Electronic ballasts operate fluorescent lamps at high frequencies, outside of the human audible range. Electronic ballasts were developed in the 1980s, but came into widespread use in the 1990s.
- Electronic ballasts also made it possible to start the lamp instantly. Electronic ballast technology replaced pre-heat ballast technology, especially in compact fluorescent lamps, at the

*continued on page 21*

## Cooper industries names Hachigian as CEO; Chairman Riley to retire in December



Cooper Industries, Ltd. recently announced that its board of directors has named Kirk S. Hachigian as president and chief executive officer effective May 1, 2005. The position of chief executive officer had been held by H. John Riley, Jr., who will retire effective December 1, but who will continue as Cooper's chairman until the Board of Directors meeting on February 15, 2006, in accordance with the board's tenure policy. Riley, who has been with the company for 42 years, has served as chairman and chief executive officer since 1996. Hachigian had served as president prior to being given the chief executive post.

"A new Cooper Industries has evolved over the past several years," said Riley. "During this time, we've become a stronger, more focused global company. In my view, tomorrow's winners and losers will be separated by the ability to maintain leading market position, financial strength and consistent profit growth, both here and abroad, in all markets. The new Cooper is well positioned in each of those areas with well-recognized brand names. Moreover, we have excellent cash flow and opportunities for further improvement, which will allow the company to continue to reinvest in operations and value-added acquisitions. Kirk Hachigian is well qualified to take the company to this new level.

"Since joining Cooper in 2001, Kirk has been the driving force in enhancing the performance of our operations and in implementing strategies that better position Cooper for continued profitable growth in the future," said Riley. "I have great confidence that Kirk will continue to do an outstanding job managing our global business and maximizing the strengths of our unparalleled product lines, enabling Cooper to maintain its position as one of the leading manufacturing companies in the world."

## G&W Electric celebrates 100-year anniversary

G&W Electric, known for creating the first



detachable style porcelain pot-head, which today is called cable termination, is celebrating its 100th anniversary this year. Two utility engineers, Harry Gear and Paul Williams, who had an innovative idea for connecting underground to overhead cables, founded the company in 1905. G&W started in a small machine shop in Chicago, spawning years' worth of technological advancements for the electric power industry.

The company's product innovations continued to expand throughout its history. In the 1940s, G&W contributed to the World War II campaign with the manufacture of specialty ship fittings, radar switches, and bomb sights. In 1978, John D. Mueller took ownership of the company and became president and chairman of the board. Because of the industry's respect for the organization, Mueller decided to keep the G&W name. In 1994, his son, John H. Mueller, became president.

Today, as a pioneer of power system solutions and products, G&W has built a reputation for engineering unique solutions to meet the needs of systems designers. Their product offerings include load and fault interrupting switchgear, automatic circuit reclosers, distribution automation products, cable terminations, cable joints, and high current limiting system protection devices. A far cry from that small machine shop in Chicago, G&W Electric's headquarters now occupies a 162,000 square foot manufacturing facility in Blue Island, Illinois. The company also operates a manufacturing facility in Shanghai, China.

## Advance Transformer celebrates 60th anniversary



Advance Transformer is celebrating its 60th anniversary in 2005. From humble beginnings producing transformers for government contracts from a storefront operation in Chicago, company founders Lou Duman and Herschel Epstein manufactured the first fluorescent lamp ballast bearing the Advance name in 1945. The company grew

rapidly over the subsequent decades, expanding its product line, increasing its manufacturing capacity, and laying claim to numerous patented innovations.

Advance began with 10 employees and four manufacturers' representatives in 1945. It has grown to employ more than 5,000 people, to offer over 1,000 ballast and LED driver products, and to occupy more than one million square feet of facility space throughout North America and Asia.

"It is a tremendous honor to be part of the Advance legacy—to both recognize and celebrate Advance associates and accomplishments throughout the company's history as well as to help Advance pioneer its next phase of achievement as a leader and innovator in the ballast and lighting electronics arena," said Advance President and Chief Executive Officer Brian Dundon.

Throughout 2005, Advance will commemorate its 60th anniversary with internal celebrations, customer events, and special communications.

## Industry leaders honored at 2005 NAED annual meeting

The National Association of Electrical Distributors (NAED) honored four industry leaders at its Annual Meeting in Boston.



Crum

David H. Crum, chief executive officer of Crum Electric Supply Co., Inc., Casper, Wyoming, received NAED's highest honor, the NAED Arthur W.

Hooper Award, presented to an individual who has led an exceptional career in electrical distribution spanning many years.

Crum was one of the first industry leaders to recognize and promote the importance of technology in developing the electrical industry's electronic commerce infrastructure. He led the creation of several e-commerce initiatives during his term as NAED chairman and was instrumental in founding the Industry Data Exchange Association (IDEA) in 1999 to manage the flow of data through the distribution channel. He was the first distributor to receive NEMA's Kite & Key Award in 1998. Crum was named Wyoming's "Small Business Person of the Year" in 1982.



Edwin Kanner, chairman emeritus of American Insulated Wire Corp./A Leviton Company was presented with the NAED Award of Merit, which recognizes an associate company or individual that has been exceptionally active in promoting and supporting the tenets and goals of NAED.

Over the past 51 years, Kanner has actively encouraged communication and cooperation between manufacturers and distributors. He has supported NAED throughout his career, as well as serving on the NEMA board of governors twice, most recently from 1999 to 2001. Kanner has also received several awards for his ardent support of the manufacturing network and electrical distribution industry, including the NEMA Kite & Key Award, Scott Award, GEM Award, and NEMRA Preston Award.



Francis Piscitelli, senior vice president of sales and service for OSRAM SYLVANIA, was presented with the NAED Associate Award. The award honors an individual in the electrical manufacturing business who has been exceptionally active in promoting wholesale distribution as the best channel of electrical products and services.



Stuart M. Irby, president of Stuart C. Irby Company, Jackson, Mississippi, received the NAED Distinguished Service Award, which recognizes outstanding and dedicated service to the association and the electrical distribution industry.

### NEMA's industrial control indices point to rebound

Sales of industrial control products and systems increased modestly in the first quarter of 2005, reflected in a 1.4 percent gain in NEMA's Primary Industrial Control Index. While the increase represents only a partial rebound from a 3.8 percent decline in the prior quarter, the index did increase just above four percent for the year. In addition,

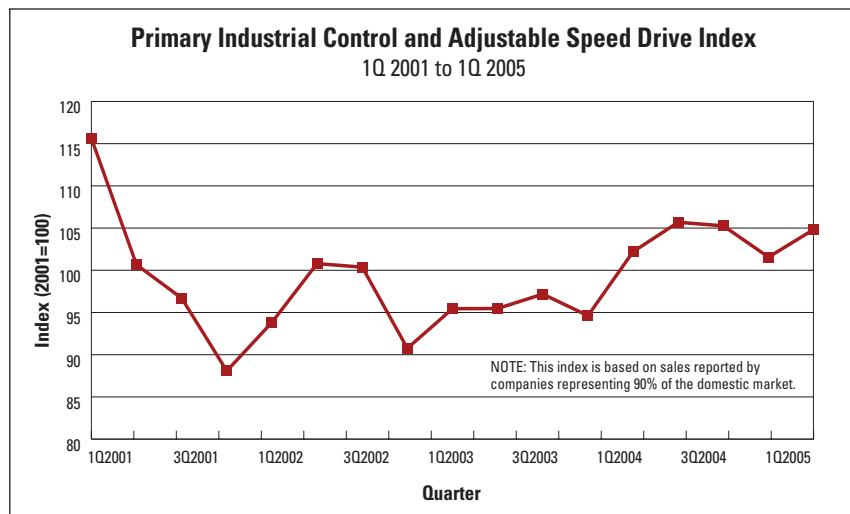
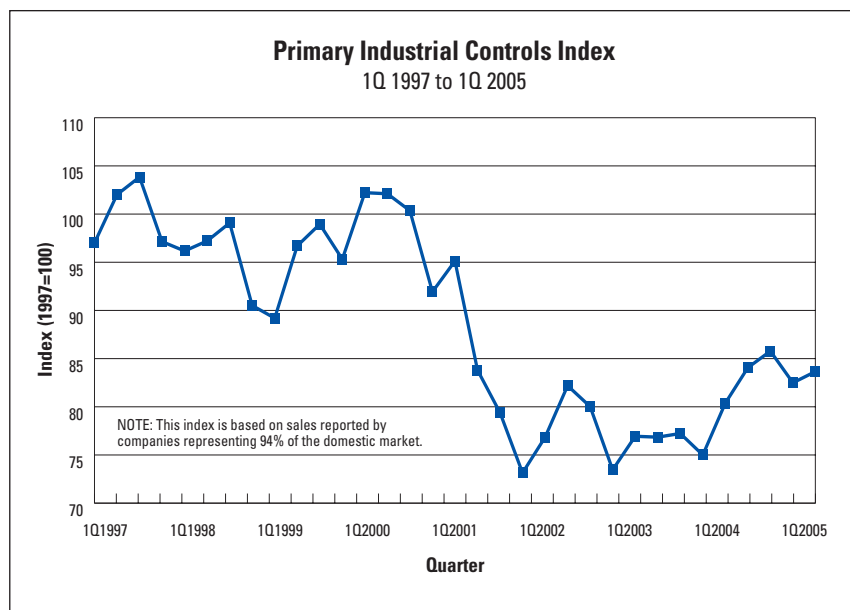
although the index still remains well below its peak from the first quarter of 2000, it has increased more than 14 percent from the trough observed at the end of the U.S. economic recession, posting year-over-year gains in 9 of the last 12 quarters. "Overall, this reflects a nascent rebound for an industry that was hit hard by the nation's economic downturn," says Brian Lego, NEMA's director, economic analysis.

Similarly, the Primary Industrial Control and Adjustable Speed Drive Index received a seasonal bump in the first quarter of 2005, rising just above three percent. Moreover, the index expanded nearly three percent on a year-over-year basis and has remained above 100 for the past five quarters.

Despite the index's first-quarter gain,

interest rates have become a visible headwind for sales of industrial control products and systems. Rates for 3-month Treasury bills have increased measurably over the past year, with the rate of increase accelerating significantly since the second half of 2004. Indeed, rates were below 1 percent as recently as May 2004 but managed to finish the first quarter of 2005 nearly 200 basis points higher. Since short-term interest rates are only expected to move higher, as the Fed continues to pursue a 'measured' pace of monetary tightening via increases in the federal funds rate, the interest rate environment is likely to serve as a mild damper on growth for the next several quarters.

Other factors will have a mixed impact on the index going forward, says Lego.



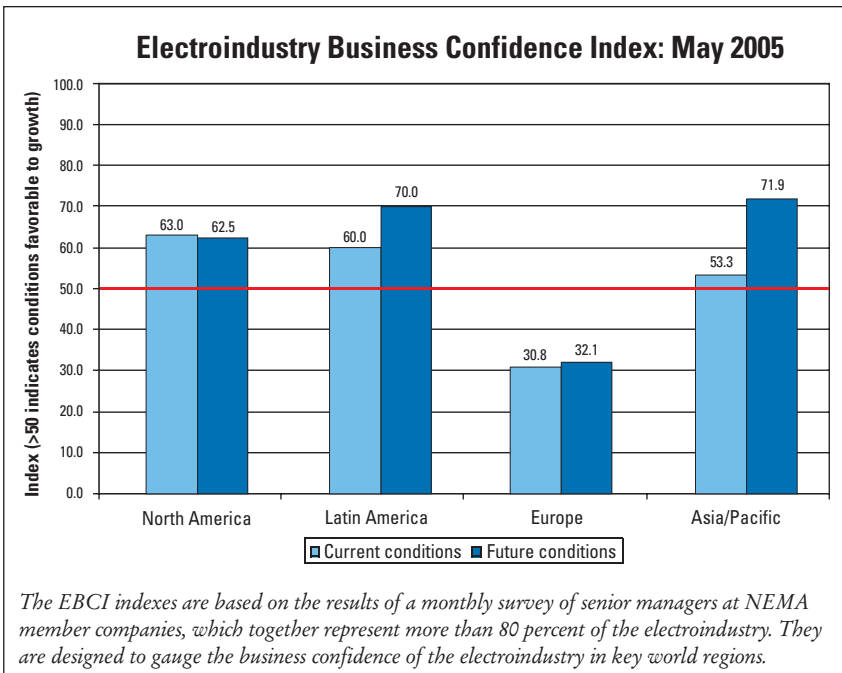
“Capacity utilization rates have increased strongly since the end of the recession, as the U.S. and global economic recoveries gained momentum in 2003 and 2004. While the factory operating rate is expected to rise above 79 percent for the first time since 2000, it will likely begin to level off in 2006 and possibly even decline as the pace of economic expansion decelerates.”

By contrast, production of industrial machinery is expected to provide more of a boost to industrial control products. Preliminary data indicate industrial machinery output increased at a 1.4 percent annualized rate in the first quarter of 2005, following a 14 percent gain for all of 2004. With corporate profits still strong, companies are expected to ratchet up investment in order to replace old equipment or expand capacity, particularly since spending on industrial machinery fell so sharply during the recent national economic downturn.

### May 2005 NEMA Electroindustry Business Confidence Index

NEMA’s Electroindustry Business Confidence Index (EBCI) for current conditions in North America continued strong in May, surpassing the 50-point level indicative of growth in the industry for the 25th month in a row. At 63.0, the North America index recorded a gain of almost 8 points from one month ago. In two of the other three regions surveyed, current conditions were viewed as positive by respondents, though confidence retreated from April’s levels. The Latin America and Asia/Pacific indices both remained above the 50-point growth threshold, at 60.0 and 53.3 points, respectively, though both declined by a mild 6 points on the month. Only the Europe index pointed to markedly lower expectations, plunging nearly 28 points to 30.8. That marked its first drop below 50 points since December 2004 and the lowest level since July 2003.

Expectations for conditions six months hence were largely similar to those reported last month, and again conveyed positive sentiment in all regions surveyed save for Europe. The North America and Asia/Pacific indices saw very slight declines from a month ago to 62.5 and 71.9, respectively. Future sentiment for Latin America registered an upward tick



to 70 on the month. Europe’s index, meanwhile, fell precipitously. At 32.1, it dropped from 53.8 in April to its lowest level since November 2001.

Tim Gill, (703) 841-3298  
e-mail: tim\_gill@nema.org

### IDEA launches second-generation data warehouse platform at NAED meeting

For IDEA customers and the electrical community, the future of e-commerce is now. IDEA, an industry backed e-commerce service provider, today announced that Industry Data Warehouse (IDW), version 2.0, or IDW2 as it is called, was launched on May 16, 2005, at the NAED Annual Meeting in Boston. As the successor to the current

electronic data repository, the IDW2 features many improvements and new functions, including:

- Full featured web interface
  - Four product options
  - Ease-of-use and flexibility
  - Mapping and transformation
  - Simplified authorization
  - Data delivered in user’s ERP format
  - Trade data option
  - Data validation and certification embedded function
  - Full messaging and reporting
  - Web data tools
  - Catalog look-up with Excel extract
- IDW2 was developed from recommendations made by IDEA customers and after a thorough review of the original IDW

*continued on page 21*



## European industry delegation visits NEMA headquarters

A high-ranking delegation of European industry association counterparts recently visited NEMA for the first time since 2001.

Under the auspices of the Brussels-based confederation ORGALIME, the group consisted of David Dossett from the British Electrotechnical association BEAMA, Gotthard Grass from the German electrical and electronic association ZVEI, Enrico Malcovati from the Italian mechanical association ANIMA, ORGALIME's Secretary General Adrian Harris, and ORGALIME Senior Advisor Philippe Portalier.

In addition to discussions with NEMA staff on topics such as intellectual proper-



ty rights protection, international standardization, competitiveness, WTO negotiations, environmental regulation and expanding the World Electronics Forum (WEF), the ORGALIME group also met with (1) the U.S. Chamber of Commerce to review anti-counterfeiting measures; (2) the Office of the U.S. Trade Representative to discuss transatlantic relations; (3) the National Association of Manufacturers (NAM) to learn about U.S economic innovation and dynamism; and (4) the Confederation of Indian Industries to explore future cooperation. The group also enjoyed

a tour of the U.S. Capitol, courtesy of House Majority Whip Roy Blunt (R-MO).

*John Meakem, (703) 841-3243*

*e-mail: joh\_meakem@nema.org*

## FERC issues small generator interconnection rule in May

The Federal Energy Regulatory Commission (FERC) in mid-May issued a Final Rule, Order No. 2006, thus establishing standard procedures for the interconnection of small generators, defined as 20 MWe or less, to the electric transmission

# Varflex Sleeving

## Electrical Insulating Sleeving for:

- High & Low Temperature Applications
- High & Low Voltage Applications
- Abrasive & Other Physically Demanding Applications
- Flame Resistance
- Static Flexibility Requirements
- Military, UL and CSA Requirements
- Harsh Environments
- Compatibility with Polyester, Acrylic, Epoxy, Phenolic, Formvar & Other Wire Enamels
- Oil, Chemical, Moisture, Fungus & Radiation Resistance

## Sleeving are available in a complete range of:

- Sizes (.010" to 3" I.D. with larger sizes made to order)
- Grades                      • Types
- Colors (solids or stripes)
- Coils, Lengths, Cut-Pieces or on Spools

## Also available:

- Special Coatings and Treatments
- Heavy Walls
- Double- and Triple-Wall Construction
- Special Braiding
- Custom Overbraiding on:
  - Plain or Coated Wire (solid or stranded)
  - Cable    • Hose    • Flexible Rod
  - Multiple-Conductor Ribbon Wire
- Sleeving braided from Kevlar®, Spectra®, Polyester and Other Exotic Yarns & Wire
- Twisted & Plied Yarns, Braider Packages and Uncoated Fiberglass Braid



## Varflex Corporation

512 West Court Street, Rome, New York 13440  
 Phone 315-336-4400 • Toll Free 1-800-648-4014 • Fax 315-336-0005  
 E-mail: sales@varflex.com • Web Site: www.varflex.com

system. Electric utilities must revise their open access transmission tariffs to comply with this order. Existing FERC Order 2003 applies to generators over 20 MWe. These orders are intended to speed the connection of generators to preserve electric reliability, lower prices, and facilitate deployment of renewable energy sources, according to Ed Gray, NEMA director of energy infrastructure.

NEMA has participated in the FERC generator interconnection rulemaking for several years. When the large generator rule was issued, FERC also proposed a small generator process. Stakeholders including NEMA, utilities, project developers, and state regulators, voiced strong objections to it, noting that it differed little from the large generator process. In the three years since, substantial progress on resolving issues was made. A meeting at NEMA on April 14, 2005, led to stakeholder agreement on a product certification process, settling a major remaining issue and leading to completion of an overall stakeholder consensus that FERC was able to use as a basis for the new rule (see story on page 4).

Order 2006 includes three approaches: 1) a default process for any small generator; 2) a fast track process for a certified generator 2 MWe or less; and 3) a process for certified inverter based generators of 10 kW or less. Certification requires testing and listing by a nationally recognized testing laboratory. NEMA and some, but not all, participating manufacturers pushed for self-certification of electrical equipment. Others, especially state regulators and electric coop utilities, strongly disagreed, "Like any stakeholder process," says Gray, "not everybody got everything they wanted. On balance, however, project developers are better off than before, which bodes well for manufacturers. Manufacturers are free to choose the certification route if they think it is good for their business."

The new rule, being based on stakeholder consensus, includes much from the best practices of the National Association of Regulatory Utility Commissioners (NARUC). It should thus help facilitate uniform requirements at the state level, in addition to establishing uniform federal requirements. The Solar Energy Industries Association reports that simplified proce-

dures in New Jersey have helped fuel a 550 percent three-year growth in solar installations in that state.

*Ed Gray, (703) 841-3265*

*e-mail: edw\_gray@nema.org*

## USTR Portman jumps into fray

Only hours after his confirmation, U.S. Trade Representative Rob Portman departed for a meeting of trade ministers in Paris. Next on the agenda will be securing passage of the U.S. free trade agreement with the Dominican Republic and Central America; getting World Trade Organization talks moving in a meaningful way; handling some very high-level trade disputes, particularly with Europe; and addressing a host of concerns related to China.

*John Meakem, (703) 841-3243*

*e-mail: joh\_meakem@nema.org*

## EU agrees on framework for regulating product design

The final form of Brussels' Energy Using Products ("EUP") framework directive was recently agreed upon, launching several years of product specific negotiations. The EU Commission will work with industry to develop product-area-specific "implementing measures" for the integration of environmental aspects in the design and development of all energy-using equipment (except autos). Environmental aspects include, but are not limited to materials consumption, emissions, waste, and recyclability. The European Parliament won agreement on a list of product areas that should be addressed first, including electric motor systems, residential and commercial lighting systems, and HVAC equipment.

*Craig Updyke, (703) 841-3294*

*e-mail: cra\_updyke@nema.org*

## U.S. TAG to TC 111 formulates environmental action plan

Twenty member company representatives discussed via teleconference the outcome of the first meeting of TC 111, a new committee established by the International Electrotechnical Commission to develop technical standards on environmental issues. NEMA hosts the U.S. Technical Assistance Group to this committee, which held its first

meeting in Milan in mid-March. During the TAG follow-up conference call, Mike Loch of Motorola reviewed his head-of-delegate report, which led into a broad discussion of the TAG's plan to devise formal U.S. positions and take other actions with respect to the formation of workgroups that will address the primary elements of the standards development process. These include materials declaration, an environmentally conscious design standard, and a standard that specifies test procedures for materials determination. The latter group is in place and the TAG is designating U.S. technical experts to attend forthcoming meetings in Barcelona and Paris to participate in the TC 111 workgroup discussions. The next meeting of IEC TC 111 is scheduled for October 2005 in Capetown, South Africa.

*Mark Kohorst, (703) 841-3249*

*e-mail: mar\_kohorst@nema.org*

## NEMA testifies at public hearing in opposition to Massachusetts mercury content legislation

NEMA's Mark Kohorst, senior manager for environment, health, and safety, recently testified at a public hearing in Boston opposing a series of proposed bills that would restrict, ban, or require the take-back of mercury-containing products in Massachusetts. Other provisions include labeling and mercury-content notification requirements. Collectively, the bills would impose a heavy burden on manufacturers of mercury-added thermostats, button cell batteries, lamps, and mercury switches in imaging equipment. Pamela Horner of OSRAM SYLVANIA also appeared before the Joint Committee on Environment, Natural Resources and Agriculture. They argued generally that mercury-containing products are a *de minimis* and a declining portion of mercury deposition both within and outside of Massachusetts. In addition, the legislation would ban many popular and beneficial products, for which there are few, if any alternatives, that provide assurances of safety, efficiency, and dependability. There has been no further action on these pending bills, which NEMA will continue to track. ■

*Mark Kohorst, (703) 841-3249*

*e-mail: mar\_kohorst@nema.org*



## New ANSI committee to be formed for arc welding and cutting equipment

NEMA's Arc Welding Section has applied to ANSI to establish an Accredited Standards Committee (ASC) to address American National Standards for arc welding and cutting equipment. This application to form a new ASC is the first one NEMA has submitted in more than 15 years.

Tentatively designated as W1 with a title of "Requirements for Apparatus Designed for Use in Arc Welding, Plasma Arc Cutting, and Allied Processes," the committee will serve as a nationally recognized, visible forum to address standardization of welding and cutting equipment where none has existed before. "Until the mid-1990s several NEMA 'EW' standards were approved as American National Standards through use of ANSI's Canvass Method," notes Greg Winchester, program manager for the Arc Welding Section. "Since then, a number of IEC standards for welding and cutting equipment have been developed or revised, and these standards are being continually updated. NEMA's Arc Welding Section decided that a permanent body accredited to generate American National Standards was the best way to keep pace with this external activity."

W1 will focus on the development or adoption of standards covering construction, performance, safety, testing, rating, marking, and labeling of any of the following apparatus designed for use in arc welding, plasma arc cutting, and allied processes:

- Power sources, including those currently covered by the ANSI/UL 551 and ANSI/UL 60974-1 standards;
- Liquid cooling systems;
- Arc striking and stabilizing devices;
- Wire feeders;
- Torches;
- Gas consoles;
- Electrode holders;
- Cable coupling devices.

Final approval from ANSI for this committee is expected by June, at which time invitation letters for W1 membership will be sent to a variety of end users, government agencies, professional societies, certification laboratories, trade associations, academic institutions, and manufacturing companies. A first meeting of W1 is slated for September 2005, to coincide with a meeting of the Arc Welding Section's Welding Apparatus Technical Committee. At that meeting, the committee will establish the initial membership, approve committee operating procedures, and agree on project priorities and timelines.

Greg Winchester, (703) 841-3299  
e-mail: gre\_winchester@nema.org

## Community supporting NTCIP standards tops 1,000

After a standard is developed, how many people use it? That's a question asked by all standards developers. The internet is a useful tool with which to find an answer. By looking at website statistics, standards development organizations and their committees can get a good idea about the size of their standards-using target audience.

The U.S. DOT-sponsored NTCIP standards project at NEMA has been in progress since 1996. A recent review of the NTCIP website visitor statistics for 2004 shows an encouraging trend within the community of transportation management device manufacturers and users. The NTCIP's own website at [www.ntcip.org](http://www.ntcip.org) has 71 separate library pages, including a page for each of the 58 active standards in the "NTCIP family." Monthly visits to the site ranged between 4,500 and 6,500, as tracked by WebTrends software. The number of individual visitors is tracked by their IP addresses and domain names.

In 2004, there were 5,177 visitors who visited more than once, which was a 19 percent increase over 2003. Hardcore NTCIP users, those users who visit the site ten or more times, numbered 993. So the size of the NTCIP audience is judged to be between 1,000 and 5,000 users, which is a respectable user community for this family of non-consumer technology standards.

That census of users is further supported by the number of document views. The NTCIP website library includes many PDF documents for no-cost download. In 2004, the most popular document was NTCIP 9001, *The NTCIP Guide*; the 250-page tutorial was downloaded 3,100 times. In the first six weeks of the new "no-cost" special offer of the jointly approved NTCIP standards (previously available only for purchase), 245 users registered to make over 2,000 downloads.

The NTCIP (the National Transportation Communications for ITS Protocol) is a family of data communications protocols used for the remote command and control of field-deployed traffic management sensors and devices. NTCIP protocols are also used for center-to-center information exchange between traffic management centers and other command centers. The NTCIP family is



an open, vendor-neutral, consensus-based set of standards based on internet protocols.

The NTCIP family includes data dictionaries for 12 different end devices, and profiles that select the communications network features of internet and other protocol standards. NTCIP is extensible, meaning vendor-unique features can be added to the standardized core functions. The NTCIP series is being developed by three standards developing organizations—NEMA, the American Association of State Highway and Transportation Officials (AASHTO), and the Institute of Transportation Engineers (ITE).

*Bruce Schopp, (703) 841-3231  
e-mail: bru\_schopp@nema.org*

### Minnesota Board of Electricity moved under authority of Department of Labor and Industry

On May 16, in a move that shocked the electrical industry in Minnesota, the state's governor Tim Pawlenty made the Minnesota Board of Electricity part of the Minnesota Department of Labor and Industry.

Pawlenty wants to reorganize state government to make it more accessible and efficient. One of his goals is to move all six construction codes and licensing agencies into one common location to better serve the construction industry and the citizens of the state.

The new construction services division will include the electricity board, building codes and standards, plumbing, building contractors, fire codes, and boiler pipefitting licensing. The building construction industry makes up 20 percent of the Minnesota economy.

Currently, all board activities, addresses, and telephone numbers will remain the same, although the board anticipates move to Labor and Industry headquarters within the year, necessitating change. A governor's order created the Minnesota Board of Electricity in



1917. The board has been a separate agency and has been basically self-sufficient, supporting itself with licensing and inspection fees. At the time the board was transferred to the Department of Labor and Industry, it had \$4 million in its escrow fund. This money was transferred to the general fund. It will soon be necessary for the board to budget from the general fund in the future.

Executive Director John Schultz will remain as head of the electrical department, working under Assistant Commissioner Roslyn Wade, who reports to Commissioner Scott Brener. The 11-member citizen board will remain, but will serve only in an advisory capacity.

The National Electrical Code® is adopted as part of the State Building Code; the reorganization will not affect the adoption process. It is anticipated that the 2005 NEC® will be adopted in July of this year.

*Mike Forister, (307) 638-0307  
e-mail: Mforiste@wyoming.com*

### Massachusetts fire board votes to enact emergency amendment to electrical code

At the May 5, 2005, Statutory Public Hearing, the Massachusetts Board of Fire Prevention Regulations (BFPR) voted to enact an emergency amendment to the Massachusetts Electrical Code and issued a formal interpretation on Section 250.50.

The 14-member board is responsible for promulgating the Massachusetts Electrical Code for the Commonwealth. The 2005 Massachusetts Electrical Code is the 2005 National Electrical Code (NEC®) with 63 amendments.

Prior to its vote on the emergency amendment, the board heard an advisory committee's recommendation to amend Section 680.26 of the recently adopted Massachusetts Electrical Code to the BFPR. The committee is made up of 26 electrical industry representatives, including one from NEMA. The advisory committee held a special meeting in late April to discuss several requirements in the 2005 Code including NEC® section 680.26.

Section 680.26 of the 2005 NEC® contains a provision for an alternative means to eliminate voltage gradients in the pool and deck areas, where conductive mate-

rial is not available to bond all metallic parts of the pool structure. Section 680.26(C)(3) describes an alternative means for the equipotential bonding grid to which these parts are to be connected. This equipotential bonding grid is to be constructed of minimum 8 AWG bare solid copper conductors in a 12x12 inch network, with the conductors bonded to each other at all points of crossing. The grid must cover the contour of the pool and the pool deck extending 3 feet horizontally from the inside walls of the pool.

The committee did not see a need for the grid to follow the contour (bottom and vertical walls) of a nonconductive pool, but agreed that the deck area needs to be addressed. Previous editions of the Massachusetts Electrical Code have required 8 AWG or larger bare solid copper conductors run in the pour around the perimeter of the pool below the waterline and through the pour at other locations such that no point, measured through the pour, is more than 15 feet from a bonding conductor.

In May 2005, the National Fire Protection Association published a proposed Tentative Interim Amendment (TIA) to this section. A TIA is an amendment that has not been processed through the entire codes-and standards-making process and, if passed, is effective only between editions of the NEC. A TIA automatically becomes a proposal for the next edition of the NEC. A TIA issued by the NFPA is not enforceable in Massachusetts, however, unless it is formerly adopted by the BFPR. The committee anticipates that the NFPA TIA process will not conclude in time for this year's pool installation season and therefore recommended that Massachusetts revert back to the 2002 version of this section.

The BFPR unanimously accepted the committee's recommendation. The BFPR will file the emergency amendment with the secretary of state at which time it becomes effective and will remain in effect for 90 days. The committee is anticipating that the NFPA process will have concluded by this time and the committee will have an opportunity to assess the outcome and make a final decision to either accept the outcome or amend this section to include other alternative equipotential bonding grids.

Gil Moniz, (508) 996-3225

e-mail: gmoniznema@verizon.net

## Massachusetts fire board issues a formal interpretation on grounding electrode system

On May 5, 2005 the Massachusetts Board of Fire Prevention Regulations (BFPR) issued a formal interpretation on Section 250.50. The



interpretation is the result of a special meeting of the Massachusetts Electrical Code Advisory Committee held in late April to discuss several requirements in the 2005 Massachusetts Electrical Code, including NEC®

section 250.50. This section was revised in the 2005 NEC to require all grounding electrodes as described in 250.52(A)(1) through (A)(6) that are present to be bonded together to form the grounding electrode system. Section 250.52(A)(3) describes a concrete-encased electrode as at least 20 feet of one or more electrically conductive steel reinforcing bars or rods of not less than one half inch in diameter, or 20 feet of bare copper conductor not smaller than 4 AWG, encased by at least two inches of concrete, located within and near the bottom of a foundation or footing that is in direct contact with the earth. Several construction methods employed in foundation construction result in multiple structural components meeting this definition of a concrete-encased electrode, prompting local inspectors and contractors to question whether it is necessary to bond together all these independent components. The committee agreed that the NEC text may be ambiguous, but did not feel an emergency amendment was warranted to clarify the requirement. The committee decided that the best way to resolve this situation was to recommend to the BFPR that they issue a formal interpretation. The formal interpretation rendered reads as follows:

"Where multiple concrete encased electrodes, as described in 250.52(A)(3) are present, and at least one of the concrete encased electrodes is connected to the grounding electrode system, is it permitted to omit from the grounding electrode system any additional such electrodes? Yes." ■

Gil Moniz, (508) 996-3225

e-mail: gmoniznema@verizon.net

## DAC BOX SCORE

The Data Audit Certification (DAC) program examines more than 24 criteria



to ensure that information submitted to the Industry Data Warehouse (IDW) meets business data specifications.

NEMA and NAED applaud the following Data Audit Certified (as of May 31, 2005) companies for their commitment to providing quality data to the electrical distribution channel:

ABB Low Voltage Products	Hubbell Wir. Dev-Kellems
Advance Transformer	Hubbell Power Systems
Alcan	ILSCO
Allied Moulded	JUNO Lighting
Appleton (EGS)	Kichler Lighting
Arlington Industries	Killark (Hubbell)
B-Line Enclosures	Klein Tools
B-Line Systems	Leviton
Bridgeport Fittings	Littelfuse
Bryant Electric (Hubbell)	Lutron
Canlyte (Genlyte Group)	Milbank
Cantex	Nsi
Capri Omega Div. (Genlyte Group)	Osram Sylvania (US)
Carlson (Lamson & Sessions)	O-Z/Gedney (EGS)
Cerro Wire Inc.	Panduit (US)
Columbia Lighting (Hubbell)	Panduit (Canada)
Cooper Lighting (HALO)	Pass & Seymour
Cooper Lighting Canada	Permacote (Robroy)
Cooper Wiring Devices	Philips Lighting (US)
Cooper Bussmann	Prescolite LIFE Safety Prod (Hubbell)
CRC Industries	Prescolite Lighting, Inc. (Hubbell)
Day-Brite (GT)	Progress (Hubbell)
Dual-Lite	RAB Electric
EATON Electric (Cutler-Hammer)	RACO (Hubbell)
Edwards Signaling Devices	Republic Conduit—Maverick Tube
Engineered Products Co.	Robroy Ind
Exitronix	Rockwell Automation Inc.
FCI/Burndy	Shattshield
Federal Signal	Siemens
GE Lighting	Southwire
GE Industrial	Schneider (SQD) Electric (US)
General Cable	STI
HALCO Lighting	The Bodine Co.
Hammond Power (US)	The Wiremold Co.
Hammond Power (Can)	Thomas & Betts (US)
Hoffman Encl (US)	Thomas Lighting (GT) (US)
Hubbell Building Automation	TPI Corp.
Hubbell Canada	Unity Manufacturing
Hubbell Lighting	Universal Lighting Tech. (US)
Hubbell Premise Wiring	Walker (The Wiremold Co.)
	Westinghouse Lighting
	Wheatland Tubes
	Weidmueller
	Wiegmann (Hubbell)

# U.S. electrical equipment output up 3.6 percent in March

	Feb 2004	Mar 2004	Apr 2004	Feb 2005	Mar 2005	Apr 2005
<b>INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION</b>						
Industrial production, manufacturing (Index, 1992 = 100)	115.5	115.6	116.4	120.8	120.4	120.5
Percent change, year over year				4.6%	4.1%	3.5%
Industrial production, electrical equipment (Index, 1992 = 100)	85.4	84.8	85.1	86.7	87.9	—
Percent change, year over year				1.5%	3.6%	—
Capacity utilization, manufacturing (percent)	75.9	75.9	76.3	78.3	78.0	77.9
Purchasing Managers' Index (value > 50 indicates expanding economy)	62.1	62.3	62.3	55.3	55.2	53.3
<b>CONSTRUCTION</b>						
Housing starts, single family (millions of units, SAAR)	1.485	1.638	1.624	1.808	1.538	1.635
Percent change, year over year				21.8%	-6.1%	0.7%
Housing starts, multi family (millions of units, SAAR)	0.367	0.369	0.344	0.420	0.298	0.403
Percent change, year over year				14.4%	-19.2%	17.2%
Nonresidential construction, Lodging (billions of dollars, SAAR)	10.139	11.06	11.374	11.495	11.424	—
Percent change, year over year				13.4%	3.3%	—
Nonresidential construction, Office (billions of dollars, SAAR)	32.010	32.249	33.107	33.198	34.063	—
Percent change, year over year				3.7%	5.6%	—
Nonresidential construction, Commercial (billions of dollars, SAAR)	56.801	56.4	58.906	61.020	62.263	—
Percent change, year over year				7.4%	10.4%	—
Nonresidential construction, Healthcare (billions of dollars, SAAR)	23.950	25.167	26.973	25.225	24.982	—
Percent change, year over year				5.3%	-0.7%	—
Nonresidential construction, Communication (billions of dollars, SAAR)	12.623	12.455	12.635	15.415	14.918	—
Percent change, year over year				22.1%	19.8%	—
Nonresidential construction, Electric Power (billions of dollars, SAAR)	19.699	18.939	18.096	17.011	16.392	—
Percent change, year over year				-13.6%	-13.4%	—
Nonresidential construction, Manufacturing (billions of dollars, SAAR)	13.793	13.854	13.430	17.195	19.132	—
Percent change, year over year				24.7%	38.1%	—
<b>EMPLOYMENT</b>						
Employment, electrical equipment, NAICS 335 (thousands)	448.0	445.3	445.8	445.3	445.3	446.1
Percent change, year over year				-0.6%	0.0%	0.1%
Unemployment (percent, SA)	5.6	5.7	5.5	5.4	5.2	5.2
<b>PRICES AND INTEREST RATES</b>						
Consumer price index (percent change, prior period)	0.3	0.4	0.2	0.4	0.6	0.5
Percent change, year over year				2.9	3.2	3.5
Producer price index, finished goods (percent change, prior period)	-0.1	0.5	0.7	0.4	0.7	0.6
Percent change, year over year				4.7	4.9	4.8
Interest rate, 3-month Treasury (constant maturity, annual yield)	0.94	0.95	0.96	2.58	2.80	2.84
Interest rate, 10-year Treasury (constant maturity, annual yield)	4.08	3.83	4.35	4.17	4.50	4.34
Spread (10-year yield minus 3-month yield)	3.14	2.88	3.39	1.59	1.70	1.50
<b>MANUFACTURERS' SHIPMENTS AND INVENTORIES</b>						
Value of Shipments: Electric Lighting Equipment (billions of 1996 dollars, SA)	1.050	1.110	1.091	1.078	1.080	—
Percent change, year over year				2.7%	-2.7%	—
Value of Shipments: Electrical Equipment (billions of 1996 dollars, SA)	2.534	2.562	2.667	2.832	2.724	—
Percent change, year over year				11.8%	6.3%	—
Value of Inventories: Electric Lighting Equipment (billions of 1996 dollars, SA)	1.394	1.405	1.411	1.512	1.509	—
Percent change, year over year				8.5%	7.4%	—
Value of Inventories: Electrical Equipment (billions of 1996 dollars, SA)	4.246	4.306	4.279	4.568	4.663	—
Percent change, year over year				7.6%	8.3%	—
Inventory to Shipment Ratio: Electric Lighting Equipment (billions of 1996 dollars, SA)	1.328	1.266	1.293	1.403	1.397	—
Percent change, year over year				5.6%	10.4%	—
Inventory to Shipment Ratio: Electrical Equipment (billions of 1996 dollars, SA)	1.676	1.681	1.604	1.613	1.712	—
Percent change, year over year				-3.7%	1.9%	—

Tim Gill, (703) 841-3298; e-mail: tim\_gill@nema.org

**Brief...** *from page 1*

utors, with a wide variety of end customers, electrical manufacturers might be tempted to make all discounts the same, reducing opportunities for truly competitive bidding.

The U.S. Court of Appeals in St. Louis, in a split decision, affirmed the jury verdict in favor of the plaintiff last July, and, in its opinion, noted that it was Volvo's policy to offer the same special discount to each Volvo dealer bidding to win the same contract to supply Volvo trucks. The plaintiff's evidence, however, largely consisted of cases where it was the only Volvo dealer bidding on a contract in competition with dealers representing manufacturers of other brands of heavy duty trucks.

To prove price discrimination, the plaintiff pointed to other sales made by different Volvo dealers in different states, to different customers, in the months surrounding the plaintiff's bid for contracts, where the other Volvo dealers received greater discounts off Volvo's book price than the plaintiff did. In several of these instances, the plaintiff was actually the winning bidder, but he claimed he would have earned even greater profits but for the alleged price discrimination.

In only two cases did the plaintiff show that it was in head-to-head competition with another Volvo truck dealer. In one case, both Volvo dealers lost the contract to a Freightliner dealer and Volvo sold no trucks. In the second case, Volvo offered the same discount to the plaintiff and the second Volvo dealer, and only after the other Volvo truck dealer was selected did it offer an additional discount when the customer asked for it. There was no evidence that the plaintiff would not have received that same additional discount had it been selected by the customer.

The dissenting judge criticized the majority opinion for failing to recognize that the competitive bid transaction represented a "unique marketplace" that was different



**"The handful of lower courts that have considered this issue as well as the views of legal scholars have concurred with the views expressed in NEMA's brief."**

—NEMA Counsel Clark Silcox

than the traditional type of wholesale and retail competition that the price discrimination law was designed to protect. The Robinson-Patman Act requires that there must be a discrimination in price "between different purchasers," and it further requires that the discriminatory price injure or prevent competition between the plaintiff and the person who "receives the benefit of" a discriminatory price.

NEMA's brief argues that when a court considers the competitive process inherent in competitive bidding, leading to a winner-take-all outcome, there are not realistically two "different purchasers" of a given manufacturer's product. There is only one, and therefore the statute does not apply.

NEMA's brief also argues that there can be no injury to competition unless the price discrimination involves head-to-head competition among competing dealers selling the same manufacturer's product that results in a diversion of sales from the plaintiff to the person who "receives the benefit of" a

discriminatory price. "The handful of lower courts that have considered this issue as well as the views of legal scholars," notes NEMA counsel Clark Silcox, "have concurred with the views expressed in NEMA's brief. Over the years, there have been many competitive transactions, beneficial to both customers and distributors, involving price discounts for competitive bids on the understanding that these courts and scholars were right."

"The real concern here," according to Silcox, "and this is a concern shared by both electrical manufacturers and electrical distributors, is that if a manufacturer is forced to consider that every one of its resellers is a potential competitor of the other, even though their competition is non-existent or at best remote, then special pricing allowances for competitive bids and contracts are in jeopardy. That would be bad for the ultimate customer, whom the antitrust laws are intended to benefit, and it could lead to less efficient distribution patterns."

NEMA's brief points out that the consideration of whether one reseller is a possible competitor of another reseller is more complicated in electrical distribution. Unlike truck distribution, there are many resellers who serve as intermediaries with the end customer, e.g., electrical distributors, electrical contractors, systems integrators, panel shops and fabricators, and some OEMs, all of whom offer a different set of services to the end customer.

"In this mix of resellers, it is both complicated and expensive for manufacturers to analyze whether a price difference might injure competition," says Silcox. "In view of the possible legal risk, manufacturers might decide it is simpler to have a fixed price schedule and not vary from it, which can lead to price rigidity."

The Supreme Court will hear oral argument in the Volvo case this fall and a decision will follow a few months later. ■

**Energy...** *from page 3*

House approved a federal budget for fiscal year 2006 that allowed the Senate to proceed with its consideration of energy legislation. The budget agreement includes an \$11 billion tax package for energy-related incentives to be incorporated into the energy policy legislation. The incentives should help spur development of domestic energy resources, including wind, solar, biomass, and nuclear. It also provides a \$2 billion reserve fund for non-tax policy provisions.

Domenici noted that the Senate bill will contain a number of bipartisan provisions, including incentives to increase renewable energy production and clean coal technologies, renewal of energy savings performance contracts in federal buildings, new product efficiency standards, a rebate program for purchasers of energy-efficient products, and a building efficiency program.

The early draft of the Senate legislation did not, however, include a provision for product liability protection for manufacturers of the fuel additive methyl tertiary butyl ether, or MTBE. Senate Democrats opposition to the MTBE provision in the last energy policy legislation was partly responsible for its demise. The existence of the MTBE waiver in the H.R. 6 could make negotiations in conference committee more difficult.

NEMA was successful during Senate Energy Committee mark-up of the bill on May 19th, securing inclusion of several key provisions. These include new federal energy efficiency product standards, provisions to improve the transmission and distribution grid, and energy efficiency funded research. NEMA's energy tax incentive provisions are to be debated in the Senate Finance Committee, likely in June. Upon the conclusion of the Senate Energy and Finance Committee work, the energy bill will then be ready for consideration by the full Senate. ■

*Kyle Pitsor, (703) 841-3274  
e-mail: kyl\_pitspr@nema.org*

**Distributed power...** *from page 4*

2. Implementation of the conformance test procedures for interconnection equipment by nationally recognized testing laboratories (NRTLs) and the use of a standardized form to confirm which tests were conducted, and what testing procedures were employed; and,
3. Inclusion of interconnection equipment in the standards of the National Electrical Code so that electrical inspectors could readily confirm that interconnections were composed of equipment that had been tested, labeled, and listed.

The group concluded that no further efforts were needed to determine how to accredit laboratories testing interconnection equipment or to develop equivalen-

cy testing for accredited laboratories. Certification of interconnection equipment through testing, labeling, and listing by NRTLs could begin in the next few months if these three steps are taken.

"The stakeholders were able to express their opinions, and we had a very productive discussion," said Paul Wang, principal technical advisor at Concurrent Technologies Corporation, who worked with Ed Gray of NEMA and others to organize the meeting. "A consensus framework was established to which all attendees agreed. The three steps discussed and the agreement reached were incorporated in supplemental comments by the National Association of Regulatory Utility Commissioners filed with FERC on behalf of the stakeholders." ■

**China...** *from page 5*

world, so the opportunities for savings are enormous.

One simple, but effective means of increasing energy efficiency, is the use of insulation. Chinese experts said that thermal insulation is only required in areas of the country with higher heating requirements, not in areas where air conditioning is widespread. Installing insulation would help prevent obvious energy loss, as well as help reduce pollution.

One Hong Kong bank official said that about 10 percent of the bank's investments the previous year had been for environmental projects. The annual environmental investment by this one bank was 3.1 billion renminbi. Other bankers indicated a willingness to share the investment risk with several players. The U.S. Export-Import Bank program calls for a 10-12 year repayment schedule and gives high priority to environmental and energy efficiency projects. An Asian Development Bank official said that the bank's specialty was assuming political risk and

that it is willing to entertain off balance sheet financing.

Ed Gray, NEMA's director of energy infrastructure, spoke on reduction of energy use in electrical manufacturing in the U.S., basing his remarks on Department of Energy funded case studies. NEMA members GE, Honeywell, and Siemens also gave presentations. Eaton was represented as well. Shanlin Wen, NEMA's chief representative in Beijing, was accompanied by representatives of the Chinese National Institute of Standardization and the China Electricity Council.

"The conclusion one could draw from this conference," says Gray, "is that opportunities abound, and that financing for energy efficiency and pollution projects is widely available. These projects produce numerous winners: citizens get cleaner air and water; electrical reliability is increased; electricity users save money; manufacturers sell more products and services; and banks make greater profits." ■

*Ed Gray, (703) 841-3265  
e-mail: edw\_gray@nema.org*

**Electrotechnology...** *from page 9*

end of the 1990s. Pre-heat ballast technology required the filament to heat up before the lamp would start; the pre-heating caused an annoying “blink” before the lamp came on.

- New lamp phosphors, providing efficiency and good color rendering, were developed in the 1980s. Prior to the invention of these newer “tri” phosphors, lamps with good color were significantly less efficient than lamps using standard phosphors. Standard phosphors, while efficient, provided a poor color appearance. Compact fluorescent lamps, and newer T8 and T5 style linear fluorescent lamps, all use the new “tri” phosphors exclusively, providing very good color rendering and high energy efficiency.

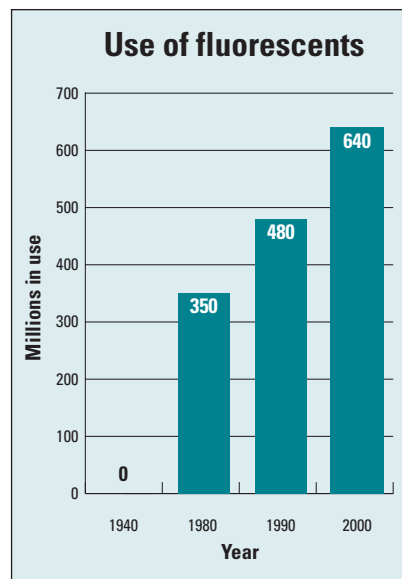
So, what about the future?

NEMA Program Manager Ron Runkles says, “The NEMA Lighting Systems Division is working on

several projects to further expand the fluorescent lighting market: improved color designations to ease consumer selection, a dimming standard to provide longer lamp life, and a communications protocol to facilitate lighting control. NEMA is also collaborating with the Department of Energy and the Environmental Protection Agency to develop performance levels for compact fluorescent lamps that will augment their residential use through the Energy Star Program.”

Howley says, “Fluorescent lamps have a bright future. With many of the past technical problems resolved, they will gain far greater acceptance in the home, offering energy savings and long life. Fluorescent lamps will continue to be the lamp of choice for most commercial buildings for many years into the future.”

Due to consumers becoming more energy conscious and to the recent functional improvements in



lamp design, fluorescents have now become a compelling lighting choice, as well as an aesthetic statement. The Flavin show at the National Gallery of Art marks an important cultural milestone, the point in time when our practical inventions meld with our art. ■

**In the News...** *from page 12*

specification and needs of manufacturers, distributors, and other authorized end users. IDEA issued an IDW2 RFP in July 2004, and conducted an extensive review process with an industry team. Activant Solutions, IDEA’s IDX2 and IDW contractor, was selected to develop and support the IDW2. The IDW2 expands on the original IDW concepts by focusing on ease-of-use and flexible integration with the distribution management systems. This second generation IDW will take the industry to the next level of data synchronization.

“The IDW2 will deliver a powerful advantage to companies that want to streamline their business information processes,” said IDEA President Mike Rioux. “The principal by which IDW was founded remains the same—a single source repository of manufacturer owned and managed data. The IDW2 operating system is greatly improved, however, making it much easier to deliver data to the IDW2. More importantly, distributors will be able to bring information into their business system using their own software ERP for-

mat. Data will be accepted in any electronic format and will be continuously validated against industry standards and requirements enabling a continuous data certification process. This will greatly improve data synchronization and chop order management costs out of the channel.”

*Rita Hagopian, (703) 841-5910  
e-mail: rit\_hagopian@nema.org*

**OSRAM SYLVANIA pledges \$250,000 to NAED Foundation**

The National Association of Electrical Distributors (NAED) recently announced a \$250,000 contribution by NEMA member OSRAM SYLVANIA to the NAED Education & Research Foundation.

“OSRAM SYLVANIA believes that this contribution to the NAED Education & Research Foundation is an investment in the future of the electrical wholesale industry and, therefore, good for both our company and the industry,” said Francis Piscitelli, senior vice president of sales & service for OSRAM SYLVANIA.

OSRAM SYLVANIA is the North Amer-

ican operation of Osram GmbH, one of the world’s leading lighting manufacturers, and a member of the Siemens international family of companies.

“The leadership shown by OSRAM is vital to the success of this endeavor. We appreciate them joining with us to establish this endowment fund. The cooperation we have enjoyed throughout our industry will ensure that NAED can continue to improve all parts of the supply chain,” said Bill Elliott, chairman of the Channel Advantage Partnership council and president of Elliott Electric Supply in Nacogdoches, Texas.

The company’s donation will become part of an endowment fund for the NAED Education & Research Foundation. The principal amount of the endowment will remain untouched, while the interest will be used to commission future projects and studies. As a \$250,000 donor, OSRAM SYLVANIA will be recognized at the Guarantor Level and have a permanent position on the Channel Advantage Partnership Council, which will help select future educational programs and research projects. ■

# NEMA says traffic signal report card confirms need for improved transportation infrastructure

**NEMA** said the recent release of the National Traffic Signal Report Card underscores the need for more efficient and well-integrated traffic signal operation to handle the growing traffic demand in the U.S. The report card, issued by the National Transportation Operations Coalition (NTOC), gives traffic signal operation a grade of D-minus, based on responses from 378 agencies that represent about one-third of all signals in the U.S.

“Traffic safety, reducing congestion, and improving mobility are important to the economic life of our nation, and the NTOC report card confirms that belief as well,” said David St. Amant, chair of NEMA’s transportation management product group. “With a grade of D-minus, the nation and its transportation leaders must look

at how we manage traffic signals. We need additional resources, training for technicians, and better coordination and communication with travelers.”

The need for efficient traffic signal operation is even greater today with congestion on the rise. According to the report, roadway capacity increased by only one percent per year between 1980 and 1998, while the amount of travel grew by 72 percent during the same time period. Many cities are unable to build or widen roads because of

space constraints, environmental concerns, or limited funds.

The low grade doesn’t mean the traffic signals fail to turn green, yellow, and red, says the report; they just do not operate as effectively to meet the needs of the travelers.

“NEMA and its member companies can play an important role in raising the nation’s grade by providing products that assist transportation agencies in reducing traffic delays, fuel consumption, and harmful emissions, which are the unwanted byproducts of ineffective signaling and unnecessary traffic jams,” said NEMA President Malcolm O’Hagan. “Federal, state, and local governments, working in tandem with signal manufacturers, can bring to bear resources and new technologies that can help resolve gridlock in our nation’s cities and on our highway network.”

“NEMA stands ready to assist by providing sound technical standards that will benefit the transportation community,” said St. Amant.

“Through its own standards, and in partnership with the AASHTO and ITE for the NTCIP and Advanced Transportation Controller standard families, NEMA members are actively working together to provide safe and sound transportation products. We must commit to investing wisely in our nation’s transportation future. For manufacturers, this means developing standards that promote interoperability, interchangeability, and building products to those standards. With standards-based products, transportation agencies are able to purchase the best, most effective products possible.”

A copy of the National Traffic Signal Report Card can be found at [www.ite.org/reportcard/](http://www.ite.org/reportcard/). ■



**Editor in Chief**

Rae Hamilton .....703/841-3256

**Managing Editor**

Natalie Fern.... nlfern@worldnet.att.net

**Contributing Editors**

Imola Ekart .....703/841-3283

Edith Kolodny-Nagy ...703/841-3225

Jason Peak .....703/841-3222

Cheryl Smith.....703/841-3286

**Design and Production**

The Magazine Group ....202/331-7700

Chad Townsend, Art Director

**DEPARTMENT EDITORS**

**Spotlight on the Economy**

Tim Gill .....703/841-3298

**Standardization Trends**

Al Scolnik .....703/841-3282

**Washington Report**

Kyle Pitsor .....703/841-3274

**ADVERTISING**

**National Advertising Director**

Holly Townsend .....301/215-6710

*electroindustry* (ISSN 1066-2464/USPS 009-669) is published monthly by the National Electrical Manufacturers Association, 1300 North 17th Street, Suite 1847, Rosslyn, Virginia 22209; (703) 841-3200. FAX: (703) 841-5900. NEMA members receive 12 issues of *electroindustry* with their membership dues. Subscriptions are \$95 per year. ©2005 by NEMA. Periodicals postage paid at Arlington, VA, and additional mailing offices. **POSTMASTER:** Send address changes to: National Electrical Manufacturers Association, 1300 North 17th Street, Suite 1847, Rosslyn, VA 22209. [www.nema.org](http://www.nema.org)

The opinions or views expressed in *electroindustry* do not necessarily reflect the positions of NEMA or any of its subdivisions.

NEMA encourages the widespread use of the material contained in this publication. For permission to reprint, send requests to the Managing Editor.

## Advertisers Index

CSA International. ....	24
Global/IHS . . . . .	23
Met Labs . . . . .	7
Underwriters Laboratories . . . . .	2
Varflex. ....	13

# Wasting Valuable Time Searching?

## Relief is at hand!

Global Engineering Documents, the retail arm of IHS, will help you find the information you need, fast! Your project's success is our mission. Critical to your project foundation and universal applicability is the use of industry standards. Global Engineering Documents provides you with the worldwide specifications and standards you need. As our project partner, you will have immediate access to the largest selection of standards and specifications available from over 450 standards developing organizations, including API, ASME, ASTM, AWS, BSI, IEC, ISO, JAA, NEMA, SAE, TIA, and UL. Our webstore, [global.ihs.com](http://global.ihs.com), with over 500,000 most popular documents available electronically, has ordering tools that will help you do all your standards shopping in one stop. Order your hardcopy before noon MST and your order will be shipped the same day. Your project success is our business.

**Global Engineering Documents,  
the retail arm of IHS, ensures:**

**Fast Access  
Faster Ordering  
Fastest Delivery**

**Global Engineering Documents  
is your project partner.**

Priority Code W046



# Not All Manufacturing is Moving to China

At CSA International, we are committed to expanding our staff and capabilities in the Far East and Europe. But we are also committed to expanding in North America. While the other leading laboratory is eliminating technical positions and consolidating operating divisions in the U.S., our investments in service are providing us with the ability to serve you regardless of where you design or manufacture your products.

## Our Investments in Service Are Significant:

- A Leadership Team and Staff strategically aligned to deliver customer-focused solutions to you.
- Key management appointments, including the first-ever President of CSA International, focused on removing barriers, streamlining processes and expanding services to you.
- An expanded Cleveland laboratory with special capabilities for the lighting industry.
- A new Chicago service office to provide you with local support in this dynamic product development and manufacturing center.
- New IT systems, work processes, and capacity planning initiatives across our network of ten North American offices and laboratories improve your access to information.

- OnSpeX™ Consumer Product Evaluation, a new division for product performance testing, inspection, and related data management.
- Expanded global service to meet your needs outside of North America — including expanded capabilities “on the ground” in Europe, Asia, India, and other regions.

## Record-High Customer Satisfaction

These investments are already providing results you can see and appreciate. CSA International earned record-high scores for customer satisfaction in our most recent surveys — scores exceeding 90%! Can our chief competitor say the same?

If you are disappointed in the testing and certification service you are receiving today, it's time to call CSA International, North America's “other” fully qualified and accredited testing and certification organization. Call today for fast, friendly, expert consultation and a proposal for your next project.

Call toll free

**1-866-797-4272**

Or visit us online at [www.csa-international.org](http://www.csa-international.org)



**CSA INTERNATIONAL**