

NATIONAL ENERGY ISSUES TO WATCH:

1. **Shedding Light on the Lighting Category** - No surprise here: the warehouse home center channel dominates the interior and exterior lighting category, as well as ceiling fans, a category where big boxes enjoy a whopping 73.5 percent dollar share. But based on consumer data from NPD Research, the story in these bright categories seems to be a move to the middle price points from the discount/mass merchants on one extreme and the specialty lighting and electrical supply stores on the other. According to research, the average price paid for a lighting purchase was \$44.82 in 2007, up from \$40.22 in 2006. Broken down by channel, consumer spending at mass merchants jumped \$6.20 to \$28.88, while consumer spending at lighting and electrical supply stores declined from \$88.29 to \$74.50. "Specialty retailers seem to be coming down, while warehouse clubs and mass merchants are going a little upscale," said Mark Delaney, NPD Group's director of home improvement. "These shifts may be driven by competition, or just a result of the overall economy." Energy efficiency has played an increasingly large role in the sale of lighting across the country in recent years, but NPD's research shows an opportunity for Energy Star or other energy-focused marketing programs. Consumers who purchased 42.4 percent of lighting units did not know if their purchases were Energy Star compliant. 03/04 HCN

2. **Welcome to GreenBiz** - The editors of Electrical Construction & Maintenance and Electrical Wholesaling magazines welcome you to GreenBiz, a twice-monthly online newsletter covering the latest news in the green market of interest to the readers of our magazines. Concerns over oil and gasoline prices, lucrative utility rebates, the LEED certification program, green legislation and exciting new developments in R&D are creating new opportunities for the design, installation and sale of energy-efficient electrical products. GreenBiz will inform electrical contractors, maintenance personnel, electrical engineers, electrical distributors, reps, manufacturers and other electrical professionals about the latest news in this fast-changing market. <http://www.greenbiz.com/>



3. **DOE Releases Report on FAA Demonstration of LED Walkway Lighting** - The U.S. Department of Energy (DOE) has published the final report from the Federal Aviation Administration (FAA) demonstration of LED walkway lighting. This report, prepared by Pacific Northwest National Laboratory, provides an overview of project results which include energy savings of more than 25% over existing lighting, improved illuminance uniformity, and positive user feedback. The study furthermore found that energy savings could be cost-effectively increased to 50% through a slight reduction in the existing lighting levels, while still easily meeting IESNA minimum recommended illumination levels for walkways. <http://www.netl.doe.gov/ssl/techdemos.htm>

4. **Solid-State Lighting R&D Multi-Year Program Plan FY'09-FY'14 (PDF 3 MB)** - Provides a description of activities the Department will undertake during FY'09 through FY'14, and includes an overview of the status of SSL technology, the current DOE SSL portfolio, the technology R&D plan, the SSL portfolio management plan, and the SSL portfolio evaluation plan. (174 pages, March 2008) http://www.netl.doe.gov/ssl/PDFs/SSLMYPP2008_web.pdf

5. **New Guidelines Launched for Green Home Remodeling** - The American Society of Interior Designers Foundation and the U.S. Green Building Council (USGBC) launched new guidelines for green remodeling of residential properties in mid-March. The new "REGREEN" guidelines are organized by the ten most common remodeling projects and can be applied to a wide variety of projects, from remodeling a kitchen to a full-scale home renovation. The guidelines are accompanied by case studies and address the major elements of any green renovation project, including the home's location, green building materials, and the project's impacts on energy efficiency, water efficiency, and indoor environmental quality. According to the USGBC, additional electronic resources will be available online starting in early summer, with a comprehensive educational lineup for the interior design, contractor, and consumer to follow. 03/26 EERE http://www.greenhomeguide.org/guide_for_green_renovation/index.htm



REGREEN GUIDELINES 2008

6. **Home Depot Makes \$30 Million Pledge to Habitat for Humanity** - The five-year, \$30 million donation will provide funding and resources with the aim of building 5,000 "energy-efficient and sustainable homes" by Habitat for Humanity affiliates. Green building has been the hottest topic of late in the construction industry, as highlighted at February's International Builders' Show, which saw the unveiling of a new green building initiative by the National Association of Home Builders. 03/27 HCN

NATIONAL ENERGY ISSUES TO WATCH (continued):

7. **GE Creates Organic LEDs** - GE Global Research announces the successful demonstration of the world's first roll-to-roll manufactured organic light-emitting diode (OLED) lighting devices. This demonstration is a key step toward making OLEDs and other high performance organic electronics products at dramatically lower costs than what is possible today. OLEDs are thin, organic materials sandwiched between two electrodes, which illuminate when an electrical charge is applied. They represent the next evolution in lighting products. Their widespread design capabilities will provide an entirely different way for people to light their homes or businesses.



03/14 Live Design Wire

8. **Wal-Mart Opens Its 'Most Energy Efficient Store'** - Wal-Mart Stores has announced the opening of the company's "most energy-efficient store" this week in Las Vegas. The company said the new store, which it calls the "HE.5 prototype," uses 45 percent less energy than the typical supercenter. The Las Vegas store is the first of a new series of prototypes designed for specific climates; in this case, the building is western climate-specific. The new store features advances in heating, cooling, refrigeration and lighting to conserve energy and reduce greenhouse gas emissions, the company said. The HE.5 store format will only be available to certain regions in the United States.
- 3/20 HCN
9. **EC&M's Top 40 Electrical Design Firms Pushed Their Limits in 2007** - making market and geographical expansions a high priority. The firms reported \$13.7 billion in overall design services revenue, making an average increase of 14.7% over the firm's disclosed totals for 2006. See the March issue of EC&M for the Top 40. This is the Top 10.....

Top 40 Design Firms:					
2008 Ranking	2007 Ranking	Company	Location	2007 Design Services Revenue (millions)	% Change (2006-2007)
1	1	URS Corp.	San Francisco	\$5,383.0	28.2%
2	4	CH2M Hill Companies	Englewood, CO	\$1,875.0	-18.4%
3	6	Parsons Brinckerhoff (PB)	New York	\$1,289.0	17.3%
4	7	Black& Beatch	Overland Park, Kan.	\$1,000.0	9.4%
5	8	Stantec	Edmonton, Alberta, Can	\$888.0	23.4%
6	10	Burns & McDonnell	Kansas City, Mo.	\$491.0	17.7%
7	13	Sargent & Lundy	Chicago	\$380.8	18.2%
8	15	Burns and Rose Enterprises	Oradell, NJ	\$240.0	9.8%
9	14	Gannett Fleming	Harrisburg, PA	\$236.5	-2.6%
10	16	RTKL Associates	Baltimore	\$231.5	18.5%

10. **Bernie Erickson to Expand Energy Solutions within the FSG Network** - Facility Solutions Group (FSG), headquartered in Austin Texas, announced that Bernie Erickson CLEP, LC, CLMC, will expand his Energy Solutions activities within FSG to focus on lighting upgrades on a national basis. FSG acquired Bernie Erickson's company O.K. Electric Supply in September 2006 and established the 22nd branch location at the time in the Northeast. FSG currently has 29 locations. O.K. Electric was founded in 1919, serving industrial and commercial customers in the NY and NJ metropolitan areas; promoting energy saving projects through their Energy Solutions division. Bernie Erickson has been in the electrical industry since high school, when his late father was in the business. Erickson and the O.K. Electric / Energy Solutions division has done it all with a turnkey package of services refined over the past two decades. You would be hard pressed to find anyone in this industry that has walked more miles doing lighting audits in offices, schools, distribution center, parking lots, casinos, churches and even Navy Vessels. Bill Graham, CEO of FSG says, "Bernie is known in the industry as the "B" of the EW's A to Z of energy (Al Gore is the "A") and has upgraded thousands of facilities, uncovering millions of dollars in rebates for his customers. We are very lucky to have someone of his talent at FSG when energy conservation and environmental compliant issues are top of mind with our customers."



STATE ENERGY ISSUES TO WATCH:

11. **Vermont Approves a Wide-Ranging Clean Energy Bill** - Vermont Governor Jim Douglas approved a bill last week that will promote energy efficiency and renewable energy throughout the state. Called the Energy Efficiency and Affordability Act of 2008, the new legislation creates a new \$4 million fuel efficiency fund that will be financed from existing revenues and from the sale of emission credits under the Regional Greenhouse Gas Initiative. The fund will provide energy efficiency services to the state's consumers of heating and process fuels. The state will use a competitive process to award the funds to service providers under performance-based contracts. The new legislation also assures that the state's residential and commercial building energy standards are upgraded to keep pace with changes to the international energy conservation code, and it doubles the spending cap for weatherization projects in homes of low-income families. See the full text of the bill: <http://www.leg.state.vt.us/docs/2008/bills/passed/S-209.HTM> 03/26 EERE
12. **Build More Green. Save More Green. Make More Green (June 17 – 18 Jacob Javits Convention Center, New York, NY)** – Green is red hot. GreenBuildingsNY, the only New York Metro area event focused on green and sustainable products for the building and design community, provides the best tools, resources and education to green up your buildings and your business. An easy-to-access and competitive source for local and national green building products and services, GreenBuildingsNY is an architects, developers, engineers and builders show. <http://greenbuildingsny.com/>
13. **Lawrence County, PA to Make Buildings Energy-Efficient** - A year-long renovation of Lawrence County government-owned buildings may go unnoticeable everywhere except the budget's bottom line. Earlier this month, the commissioners selected Johnson Controls Inc. of Youngstown to develop and implement energy savings strategies and infrastructure improvements in county-owned buildings. The company's bid of \$2.23 million was chosen over the lower bid of a second company, because Johnson Controls guaranteed a greater savings to the county and involved more energy-saving work. The project's investment carries a guaranteed savings over 15 years of \$4.46 million, which means the yearly debt payments on a bond will be paid from the energy savings. The buildings in which the improvements will be made include the government center, old courthouse section, the jail, the Almira building and the adult and juvenile probation/domestic relations offices, Krause Shelter and Central Court facilities. More than 3,700 older fluorescent lights will be replaced by high-efficiency lighting fixtures. 03/22 New Castle News
14. **PA DEP Launches Campaign to Improve Convenience of CFL Recycling** - Compact fluorescent light bulbs can save up to 75 percent of the energy used by traditional light bulbs, said Environmental Protection Secretary Kathleen A. McGinty, but a lack of options on where to recycle the bulbs may make some consumers reluctant to adopt the increasingly popular technology. To help spur the use of CFLs, and make it easier for the public to recycle the swirly tubed bulbs, DEP is providing receptacles to municipalities, small businesses and community organizations across the state hoping the experience will lead participants to continue with their own programs. The department is partnering with 43 counties, townships, environmental groups and small businesses statewide in setting up CFL collection programs. For more information, www.depweb.state.pa.us keyword: Household Hazardous Waste. 04/04 PRNewswire-USNewswire
15. **Dominion Virginia Power, The Home Depot Sell 1,000,000th Energy-Saving Light Bulb** - Jenna Caudillo of Falls Church, Va., today purchased the 1 millionth compact fluorescent light (CFL) bulb sold under Dominion Virginia Power's discount program for the energy- and money-saving bulbs. Caudillo purchased the bulb at The Home Depot in Reston. Dominion initiated the discount program in October 2007 at The Home Depots in its service area in Northern, Central and Eastern Virginia. Demand for the bulbs exceeded initial expectations, and Dominion expects the program's growth to continue. Dominion is providing a \$1.50 discount on single and \$3 on multi-packs of Energy Star-qualified CFL bulbs purchased at The Home Depot stores in its Virginia service area. In 2008 Dominion added five more of The Home Depot stores to the program, increasing the total to 38 stores. <http://www.dom.com/>
16. **Environmental Group Says Green Buildings Could Stimulate Economy** - With energy prices rising, the economy slowing and worries about global warming growing, an environmental advocacy group says increasing energy efficiency in buildings and homes could help with all three problems. A report issued by Environment Illinois <http://www.environmentillinois.org> Tuesday outlines energy efficiency opportunities in three Midwestern states - Illinois, Wisconsin and Iowa. Increasing energy efficiency in residential, commercial and industrial construction; replacing inefficient appliances; and upgrading existing heating, cooling and lighting systems could create jobs, Environment Illinois said. It would also save Americans money they could spend in other ways, and help ease global warming. 3/18 AP

STATE ENERGY ISSUES TO WATCH (continued):

17. **Eastern Iowa Colleges Focus on Going Green** - High energy costs and concerns about global warming have pushed colleges in the Quad Cities to consider going green. The steps vary in sizes, but colleges are embracing broad goals like reducing their own energy consumption. Among other efforts:
- Augustana College in Rock Island, Ill. has pledged to reduce its energy consumption by 2 percent per year for 15 years. The goal is that, by 2023, it will be using almost 30 percent less energy than it does now.
 - Black Hawk College hopes to build a multimillion-dollar, 2-megawatt wind turbine at its East Campus near Kewanee, Ill., that would provide 100 percent of the electrical needs there, with construction beginning as early as 2010.
 - St. Ambrose University, in Davenport, has buried seven 3,000-gallon tanks on its campus that will store rainwater from down spouts on a new hall now under construction. 03/24 AP
18. **Dallas Plans Green Building Guidelines** - By Oct. 1, 2011, the ordinance requires that all new construction in Dallas be approved under LEED standards set by the U.S. Green Building Council or commensurate programs, such as the local Green Built North Texas program. The ordinance's first phase would go into effect Oct. 1, 2009. Under the law, builders would have to create structures (under 50,000 square feet) that use 15 percent less energy and 20 percent less water than current Dallas codes. By Oct. 1, 2011, the ordinance requires that all new construction in Dallas be approved under LEED standards. The city council has yet to vote on the matter, pending a comment period set aside for developers who wish to address the issue. 03/27 HCN
23. **States Approve Green Legislation** - Washington, Oregon, and South Dakota are among the latest states to encourage renewable energy development and the reduction of greenhouse gas emissions. Washington Gov. Chris Gregoire recently approved the Climate Change Framework/Green-Collar Jobs Act. Oregon and South Dakota will offer tax incentives for renewable-energy equipment and wind energy facilities, respectively. 03/31 EC&M
24. **WA State PSE's Aggressive Energy Efficiency Plans Means More Customer Incentives, Bigger Energy Savings** - With climate change issues of increasing concern and wholesale energy costs on the rise, Puget Sound Energy is launching new energy efficiency offerings and increased incentives to help customers conserve electricity and natural gas and save on their energy bills. Commercial and industrial energy efficient retrofits, as well as small business lighting retrofit projects, now qualify for up to 70 percent funding, up from last year's 50 percent. New construction projects now qualify for incentives up to 100 percent of the cost difference between complying with current codes and building to highly energy efficient standards. 04/01 BUSINESS WIRE

MONTHLY FEATURE:



Equipment Incentives - In addition to the design incentives and technical support available through New Jersey SmartStart Buildings financial incentives for qualifying equipment are also available. These incentives were developed to help NJ customers offset some of the added cost to purchase qualifying energy-efficient equipment, which provides significant long-term energy savings. A wide range of incentives is available for qualifying equipment (depending on type, size and efficiency). Listed below are the types of qualifying equipment and ranges of incentives. For details on equipment requirements and full listings of incentives, refer to the online application forms. Please note that almost all equipment incentives require pre-approval before equipment is purchased. To start the pre-approval

process, submit a completed Registration Form, an Equipment Application, and appropriate Equipment Worksheets, for the type or types of equipment you are planning to install along with equipment specification sheets and a current utility bill.

Electric Chillers

- Water-cooled chillers (\$12 - \$170 per ton)
- Air-cooled chillers (\$8 - \$52 per ton)

Gas Cooling

- Gas absorption chillers (\$185-\$450 per ton)
- Gas Engine-Driven Chillers (Calculated through Custom Measure Path)

Desiccant Systems (\$1.00 per cfm - gas or electric)

MONTHLY FEATURE (continued):

Electric Unitary HVAC

- Unitary AC and split systems (\$73 - \$92 per ton)
- Air-to-air heat pumps (\$73 - \$92 per ton)
- Water-source heat pumps (\$81 per ton)
- Packaged terminal AC & HP (\$65 per ton)
- Central DX AC Systems (\$40 - \$72 per ton)
- Dual Enthalpy Economizer Controls (\$250)

Ground Source Heat Pumps

- Closed Loop & Open Loop (\$370 per ton)

Gas Heating

- Gas-fired boilers < 300 MBH (\$300 per unit)
- Gas-fired boilers 300 MBH - 1500 MBH (\$1.75 per MBH)
- Gas-fired boilers 1500 MBH - 4000 MBH (\$1.00 per MBH)
- Gas-fired boilers > 4000 MBH (Calculated through Custom Measure Path)
- Gas furnaces (\$300-\$400 per unit)

Variable Frequency Drives

- Variable air volume (\$65 - \$155 per hp)
- Chilled-water pumps (\$60 per hp)
- Compressors (\$5,250 to \$12,500 per drive)

Natural Gas Water Heating

- Gas water heaters 50 gallons (\$50 per unit)
- Gas-fired water heaters > 50 gallons (\$1.00 - \$2.00 per MBH)
- Gas-fired booster water heaters (\$17 - \$35 per MBH)

Premium Motors Three-phase motors (\$45 - \$700 per motor)

Prescriptive Lighting

- T-5 and T-8 lamps with electronic ballast in existing facilities (\$10 - \$30 per fixture, depending on quantity of lamps)
- Hard-wired compact fluorescent (\$25 - \$30 per fixture)
- Metal halide w/pulse start (\$45 per fixture)
- LED Exit signs (\$20 per fixture)
- T-5 and T-8 High Bay Fixtures (\$16 - \$284 per fixture)

LED Traffic Signal Lamps

- 8-inch red or green (\$20 per lamp)
- 12-inch red or green (\$35 per lamp)
- Pedestrian Signal Lamp (\$20 per fixture)

Lighting Controls

- Occupancy Sensors
 - Wall mounted (\$20 per control)
 - Remote mounted (\$35 per control)
 - Daylight dimmers (\$25 per fixture controlled)
 - Occupancy controlled hi-low fluorescent controls (\$25 per fixture controlled)
- HID or Fluorescent Hi-Bay Controls
 - Occupancy hi-low (\$75 per fixture controlled)
 - Daylight dimming (\$75 per fixture controlled)

Other Equipment Incentives*

- Performance Lighting (\$1.00 per watt per square foot below program incentive threshold, currently 20% more energy efficient than ASHRAE 90.1-2004 for New Construction and Complete Renovation.)
- Custom electric and gas equipment incentives (not prescriptive)