August 2024

http://attardimarketing.com/ http://energywatchnews.com/

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena,who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat. President Theodore Roosevelt

Something to think About...

As a follow-up to my inquiry about creating LearnersLive.com, I offer the following

What I've Learned Over Many Years Trying to Do the Right Thing by Bill Attardi

- 1. I have to start with what some say is the first commandment of success: *Get a good education / develop a skill in something you really love to do and work hard at it.* It really is that simple.
- 2. Never worry about your next job......work hard at the job you have and the promotions will come. A sports lesson: athletes understand that the best are playing in the playoff games. They just cannot worry about the next team they may play if they want to beat the team they are playing.
- 3. If you have a *manager* title, your primary responsibility is to develop the people who report to you......don't just manage, teach.
- 4. Critical: develop both your oral and written communications skills at the highest level of your capability. No matter your job or position, your ability to communicate effectively will determine your relationships and your success in those relationships.
- 5. When you are asked to present / teach what you know and give to others. Be sure to entertain as well as inform. In today's electronic information age, it's the only way they will listen.



- 6. If everyone agrees with you then you are doing all the thinking. Encourage others to debate the issues and make decisions based on divergent intelligent thoughts. Education happens when you learn from others.
- 7. Love your family and your friends and don't hate your enemies. Hate gets in the way of doing a good job as a parent, as a loyal friend, as a successful person.
- 8. Never stop learning. It should never be final. I'm learning something new every day, learning more and more as we go through life.
- 9. Make time to read for information and for pleasure too. It really helps to escape the pressures of everyday living.
- 10. Go to church or your chosen house of worship and give just one hour a week to God to thank him for your blessings. It may not have to be more than that. It can be that one hour when you can pray and meditate and feel a sense of calm that refreshes your thoughts and better prepares you for life's struggles.
- 11. Never retire! Why would you want to stop what you love to do and are good at it?



National LED EnergyWatch...

- 1. How a Landmark Supreme Court Decision Will Reshape the U.S. Energy Sector The Supreme Court's decision to toss out the Chevron doctrine will give courts more power to interpret ambiguous laws, which could have wide-ranging effects on the energy industry that could affect federal regulations of everything from power plant emissions to electric vehicles to transmission lines. The ruling could affect everything from Environmental Protection Agency power plant standards and Federal Energy Regulatory Commission transmission line orders to standards for vehicle emissions. "In the short run, we expect a significant increase in regulatory litigation, including challenges to existing regulations, ongoing rulemakings and existing precedents," said Gordon Todd, co-chair of Sidley Austin's regulatory litigation practice group. How the Supreme Court's 'Chevron Deference' Ruling Could Remake the Energy Sector | Scientific American
- 2. US Electricity Prices Rise Again as AI, Onshoring May Mean Decades of Power Demand Growth: BofA The year-over-year inflation rate for U.S. electricity prices reached 5.9% in May, up from 3.8% in January, according to Bank of America Institute, a think tank utilizing proprietary data to develop insights into consumer behavior and the economy. Electric vehicles and heat pumps are driving consumer electricity demand higher, while industrial onshoring and the rise of data centers and artificial intelligence are also putting upward pressure on prices, the analysts said. BofA Global Research estimates AI computing will require an additional 18 GW to 28 GW of generation capacity by 2026. Data centers could consume 9% of the United States' electricity generation by 2030 double the amount consumed today. US electricity prices rise again as AI, onshoring may mean decades of power demand growth: BofA | Utility Dive
- 3. Artificial Intelligence Requiring Unprecedented Power Consumption Artificial intelligence requires a lot of energy. That's no secret. But what's surprising is just how much computing power these AI systems require, and how energy demand is spiking faster than experts expected. The power consumed by data centers could represent up to 7.5 percent of all electricity by 2030, according to GovTech. This is an increase in data center power demand of as much as 160 percent, according to Goldman Sachs. Overall demand for power increase could increase as much as 20 percent by the end of the decade, according to CNBC, a demand increase not seen since the early days of the 21st century. Artificial Intelligence Requiring Unprecedented Power Consumption Facility Management Data Centers Quick Read (facilitiesnet.com)
- 4. Texas to Double \$5 Billion State Fund Aimed at Expanding the Power Grid The Electric Reliability Council of Texas estimated that the state's main power grid would have to provide nearly double the amount of power it currently supplies by 2030. Texas state governors have announced plans to raise financing available from the Texas Energy Fund from \$5 billion to \$10 billion amid those forecasts. A large portion of the funding will be allocated to low-cost loans for building new gas-fueled plants to the main grid by June 2029, and to offer grants for modernizing, weatherizing and managing vegetation growth around electricity infrastructure in Texas outside the main electricity market, which meets around 90% of the state's power needs. The state received notices of intent to apply for \$39 billion in loans almost eight times more than what was initially set aside. The average plant will take three to four years to complete, and new transmission lines will take three to six years to complete. Texas to double state fund aimed at expanding power grid | The Texas Tribune



5. New Study Finds 46% of EV Buyers in the US Want to Go Back to ICE - It appears that EV ownership isn't equally exciting for all buyers, as a great portion of them are considering going



back to ICE. According to a new survey by McKinsey & Co., a staggering 46 percent of EV owners in the US will likely opt for a combustion-powered vehicle for their next purchase. As reported by Automotive News, the results suggest that 29 percent of EV owners worldwide will likely go back to ICE for their next vehicle. The most crucial factor in abandoning EVs is the state of the public charging infrastructure, followed by the

high costs of ownership and the need to find a more suitable car for longer journeys. <u>New Study</u> Finds 46% Of EV Buyers In The US Want To Go Back To ICE | Carscoops

- 6. IMARK Electrical Shareholders Approve Merger with AD A landmark transaction in the electrical supply industry is another step closer to completion. Independent distributor buying groups AD and IMARK Electrical announced July 8 that IMARK Electrical's shareholders voted earlier that day overwhelmingly in approval of the group's merger with AD, previously announced on June 4. A news release stated that the transaction is scheduled to close later this year and is subject to customary closing conditions. AD and IMARK Electrical represent a combined 725 independently-owned electrical distributors in the U.S. IMARK Electrical Shareholders Approve Merger with AD Modern Distribution Management (mdm.com)
- 7. Lightstar Tapped to Build 10-MW Agrivoltaic Solar Portfolio for City of Detroit -At its core, this venture seeks to empower the local community by marrying solar power generation with agriculture also known as agrivoltaics. Potential crops such as lettuce, kale, carrots and a variety of berries are anticipated to thrive alongside solar panels, illustrating a harmonious balance between energy production and urban farming. Lightstar is actively seeking urban farming partners that can provide fresh, local and sustainably farmed produce and livestock products to the people of Detroit. These collaborations are intended to fortify Detroit's food distribution systems, ensuring that the fruits of this project nourish the city's residents for decades to come. Lightstar tapped to build 10-MW agrivoltaic solar portfolio for city of Detroit (solarpowerworldonline.com)
- 8. Updated National Energy Standard: New Rules Increase Efficiency in Commercial Buildings by Craig DiLouie While the United States does not have a national commercial building energy code, the Department of Energy (DOE) recognizes an energy reference standard and requires states to have a code that is just as stringent to receive code implementation funding. In February 2024, the DOE issued a determination that ANSI/ASHRAE/IES Standard 90.1-2022, Energy Efficiency Standard for Buildings Except Low-Rise Residential Buildings, increases energy efficiency in commercial buildings by nearly 10% over the previously recognized 2019 version. Within two years of publication, all states must have an energy code at least as stringent. While some jurisdictions write their own codes, the majority adopt a model such as 90.1 or the International Energy Conservation Code (IECC), both of which are updated every three years. Based on previous adoption, at least half the states are likely to eventually gain compliance. A majority will adopt a comparable version of the IECC, which recognizes 90.1 as an alternative compliance standard. Updated National Energy Standard: New rules increase efficiency in commercial buildings Electrical Contractor Magazine (ecmag.com)



- 9. DLC Controls Summit 2024 Integration for the Future October 15 16, 2024 Milwaukee, WI Everyone agrees that the potential to optimize savings by integrating lighting controls with other building systems is real, but getting alignment on how to do this is less clear. By convening different groups of professionals to discuss the possibilities and challenges, we can begin to solve the problem together. Integration is the last step on a larger pathway to connected lighting. Energy efficiency programs are starting to incorporate more than simple LED replacements, including controls, LLLCs, and NLCs plus other building systems such as HVAC. Summit attendees will have opportunities to network and discuss how controls can be used to optimize savings in a variety of building types, share experiences with installing NLCs and integrating lighting controls with other building systems, and explore new DLC resources that will encourage more NLC installations. 2024 Controls Summit DesignLights
- 10. A Contractor's Guide to Luminaire Level Lighting Controls by Craig Casey Over the last 20 years, LEDs have made lighting more efficient, smarter, and versatile. Luminaire level lighting controls (LLLCs) are helping to integrate these benefits into individual LED luminaires and redefine the way we think about lighting control in offices, classrooms, conference rooms, and more. While wired, fixture-level control has been possible for more than a decade, wireless technology puts flexible, adjustable, smart control well within reach for most projects from a budgetary and scheduling standpoint. From an industry standpoint, LLLCs are wireless lighting control devices integrated directly into a luminaire, typically by the manufacturer. Equipped with this device, the luminaire can be individually controlled (or digitally grouped) to create lighting zones that meet the customer's specific needs. For the contractor, using a digital solution LLLC devices or digital drivers simplifies the wiring and installation of controls and luminaires. A Contractor's Guide to Luminaire Level Lighting Control | EC&M (ecmweb.com)
- 11. PNNL's LED Lighting and Controls Guidance for Federal Buildings The Pacific Northwest National Laboratory (PNNL) has published a concise and informative guide to help designers and project managers select the most cost-effective and energy-efficient lighting and control systems, including lessons learned from evaluations conducted in federal buildings. LED Lighting and Controls Guidance for Federal Buildings supports the BRIGHT Act and provides practical guidance to federal agencies on choosing and using cost-effective and energy-efficient lighting systems, though the information is contains is helpful for anyone interested in upgrading buildings. Download it at: LED Lighting and Controls Guidance | GSA
- 12. Nora Lighting Launches Virtual Showroom Nora Lighting announced the launch of its cutting-edge Virtual Showroom, now live at noralighting.com/virtual-showroom. This high-tech digital space is designed to provide an immersive and interactive experience, allowing customers to explore Nora Lighting's state-of-the-art, newly renovated Los Angeles Learn & Experience Center from the comfort of their own space. The Virtual Showroom is an immersive online space that enhances the experience of visiting the physical showroom. It features 360-degree views of various lighting products, detailed product information, and high-resolution images. Customers can navigate through different sections, zoom in on specific products, and access descriptions, specifications, and product videos, enhancing any visit to Nora. Nora Lighting Launches Virtual Showroom tEDmag

- 13. Senate Committee Proposes Energy Permitting Reform Legislation U.S. Senators Joe Manchin (I-WV) and John Barrasso (R-WY), Chairman and Ranking Member of the Senate Energy and Natural Resources Committee, released the Energy Permitting Reform Act of 2024. This bipartisan legislation will strengthen American energy security by accelerating the permitting process for critical energy and mineral projects of all types in the United States. However, Senate Majority Leader Chuck Schumer (D-New York) says a deal to speed up the permitting process is dead. Read the text of the Energy Permitting Reform Act of 2024 Legislation electrifieD (tedelectrified.com)
- 15. Develop Serviceable Luminaires with Support from Zhaga Standards In the pursuit of sustainability, the lighting industry is undergoing a profound transformation, driven by the imperative to embrace circularity. As the world's demand for energy-efficient lighting solutions continues to soar, the need for serviceable indoor luminaires has never been more pressing. Zhaga Consortium is at the forefront of this paradigm shift, changing the way indoor lighting systems are designed, manufactured, and utilized. Zhaga's mission is clear: to enable luminaire manufacturers to create serviceable indoor luminaires with replaceable components, thus prolonging their useful life and contributing to a circular economy. INDUSTRY INSIGHTS | Develop serviceable luminaires with support from Zhaga standards | LEDs Magazine
- 16. Horticulture Lighting "It isn't all Cannabis!" By Dañiel R. Luna-Fuller While cannabis cultivation often garners significant attention in discussions about horticultural lighting, it's essential to recognize horticulture lighting's broader impact across various sectors. From traditional crops like tomatoes and lettuce to niche markets like microgreens and medicinal herbs, horticultural lighting plays a pivotal role in optimizing growth conditions and improving yields. And, it's a growing niche within the overall lighting market! LED lighting has revolutionized the way growers approach indoor farming, offering energy-efficient, customizable solutions that cater to the specific needs of different crops. In recent years, there has been a notable shift towards LED lighting in both controlled environment agriculture (CEA) and traditional farming practices. This transition is driven by factors such as the declining cost of LED technology, its longevity compared to traditional lighting sources, and the ability to precisely control light spectra and intensity. Horticulture Lighting "It isn't all Cannabis!" US Lighting Trends

Global LED EnergyWatch...

- 17. Tech Companies Use as Much Electricity as Countries Google and Microsoft are the second and fourth largest global companies, measured by market capitalization. Both these companies have carbon neutrality pledges which look increasingly unlikely as their energy consumption skyrockets. Advances in artificial intelligence adoption and use are causing massive spikes in electricity use, as well. Tech companies are now using so much electricity for data centers that the organizations' total energy spends rival those of entire nations. Comparing the energy spend of individual companies to entire countries illustrates the intense energy requirements of the computing power required for artificial intelligence. It also highlights the high environmental price of the move toward AI. Tech Companies Use as Much Electricity as Countries Facility Management Software Quick Read (facilitiesnet.com)
- 18. Big Brands Back Circular Lighting Live 2024 Major lighting brands including Signify, Holophane, Glamox, ASD, Bell Lighting, Prime Light, Mymesh, Stoane Lighting, Light Projects Evolve, Trojan Lighting and Silent Desing have thrown their weight behind Circular Lighting Live 2024. The companies have signed sponsorship and exhibiting deals for the one-day conference and exhibition, organised by lighting industry sustainability authority Recolight and billed as the UK's largest event dedicated to sustainable lighting. The event, taking place at the Royal College of Physicians in London on Wednesday 9th October 2024, is designed to inspire and educate in equal measure with a programme exploring innovation in best practice, inspirational projects and design and procurement. It brings together lighting specifiers and suppliers to consider the practical ways we can collaborate to drive sustainability. www.circularlighting.live
- 19. Efficient Rare-Metal-Free Phosphorescent Molecule Discovered Japanese researchers led by Osaka University have published the discovery of a family of significantly more efficient organic, rare-metal-free, phosphorescent materials: thienyl diketones. Room temperature phosphorescence (RTP) without using rare metals has been an area of intense research. Most commercial RTP materials today utilize iridium or platinum, both rare metals with high costs. RTP materials are currently used in OLEDs and cancer diagnostics. The material discovery and new design guidelines for developing organic, rare metal-free phosphorescent materials have the potential to lead to significant advancements in lighting, OLEDs, and medical diagnostics. The full research paper can be found <a href="https://example.com/here-en/material-free/hosphorescent/molecule/hosphorescent/lightNOW/lightnowblog.com/hosphorescent/hosphores
- 20. Exhibition Space for Light + Intelligent Building Middle East 2025 The 2025 edition of Light + Intelligent Building Middle East is set to illuminate the Dubai World Trade Centre from January 14-16, 2025, bringing together the brightest minds and latest innovations in lighting design, technology, and building automation. As the premier event in the region for these sectors, this 18th edition is a gateway to the burgeoning markets of the Middle East and North Africa (MENA). Industry reports forecast that the LED lighting market in the Middle East and Africa will reach USD 3.95 billion by 2030, while the intelligent building market is expected to hit USD 8.9 billion by 2029. This growth reflects the dynamic expansion and increasing investment in these fields. Light + Intelligent Building Middle East 2025 promises to be an essential platform for businesses looking to connect with potential clients, find new partners and distributors, and broaden their global network. Book your stand now and learn more at: Light + Intelligent Building Middle East Booking Form (mailingwork.de)



LED TechnologyWatch...

21. Barron Lighting PKR Series RXAR LED Area Light & Pole Light Kit

- The PKR Series is an RXAR LED area luminaire and pole kit.
RXAR features a sleek low-profile housing design in lumen packages ranging from 6,200 to 62,400 lumens. Its high-efficiency light engine is designed for optimal light control and illumination with four distribution types in two physical sizes. The RXAR family provides substantial energy savings with zero uplight and efficacies up to 172 LPW. The RXAR ships standard with a 5" arm and is designed for ease of installation on included poles. This product is ideal for large areas such as parking lots, walkways, roadways, etc. PKR Series RXAR LED Area Light & Pole Kit - Barron Lighting Group (barronltg.com)

22. Leviton LED Baffle Slim Downlights with Selectable CCT - Leviton Baffle Slim Downlights are



designed for a wide range of applications: Single- and Multi-Family-Residential, Hospitality, and Light Commercial spaces. A direct mount downlighting solution that does not require an existing housing or junction box that can be used in Retrofit, Remodel or New Construction applications. Direct mount downlighting solution for Residential, Multi-Family, Hospitality and Light Commercial applications. The Baffle Slim Downlights are ideal for remodeling or new construction, and do not require an existing housing or junction box. The Regressed Lens with Baffle and field selectable color

temperature (CCT) help reduce glare and improve visual comfort. Leviton Baffle Slim Downlights

23. Eaton New USB Receptacles Charges in Minutes - New USB-C based technology in Eaton's USB



Power Delivery (PD) receptacles allow users to charge larger devices such as laptops, directly from the USB PD receptacle without the need of a charging brick. Traditional USB charging receptacles offer up to a total of 25W of charging capacity, while Eaton's USB PD product single port charging capacity offers up to 60W. The higher available charging wattage equates up to two-times faster charging than traditional USB receptacles. What used to take hours to charge can now take minutes. Offered in a combination Type A/C and dual Type C configurations, the Eaton USB PD receptacle communicates with the device being charged to identify the appropriate voltage and current to charge the device quickly and efficiently. USBC charger | USB electrical outlet | USB wall outlet | Eaton

24. Acuity Brands Introduces Cell Connect™ Solution for Outdoor Lighting Acuity Brands, Inc. introduces the Cell Connect™ solution into the AutoConnect™ family of outdoor luminaires from American Electric Lighting®. The solution includes D4i certified photocontrols from Ubicquia, embedded within Acuity Brands luminaires, which make use of control, asset management, and diagnostics capabilities. With the ability to communicate over a cellular LTE network with Ubicquia's UbiVu® cloud-based asset management system, the Cell Connect™ solution provides reliable low voltage lighting control with digital switching, precise dimming, and revenue grade metering. This solution can help simplify intelligent lighting deployment. Cell Connect solution for outdoor lighting or AutoConnect connected lighting.

Attardi Marketing www.attardimarketing.com

Our business is changing your future...

Monthly Special Feature...

Lighting Controls Association Updates Education Express by Craig DiLouie - For nearly a quarter



century, the Lighting Controls Association has educated the building industry about lighting controls technology and applications. Last month, we completed a major update for Education Express, relaunching the site with robust features, including quicker loading speed and video versions of many courses. This article introduces the free content at Education Express and what's new.

Lighting control technology has evolved rapidly over the last 20 years. Commercial building energy codes have increasingly mandated detailed control. And best practices in application yield optimal results. This resulted in a powerful need for education to develop experts who could design, select, install, and commission lighting control systems.

Recognizing this need, the Lighting Controls Association introduced Education Express in 2006. Education Express is a free, online, 24/7 series of courses covering lighting control technology and applications. Starting with a handful of courses, it has since grown to 32 learning modules authored by experts Craig DiLouie, C. Webster Marsh, and Steve Mesh. Since its launch, 47,000 students have completed more than 450,000 learning modules and 320,000 tests for education credit.

Why enroll with Education Express? You can level up your expertise in a growing area of lighting and become more valuable and competitive, while acquiring or maintaining one of several key certifications.

The Education Express curriculum is designed to create lighting control experts—individuals and firms able to select appropriate lighting control strategies and solutions and effectively apply them to buildings and spaces.

All learning modules are updated based on evolving best practices and generally available technology. They are also written for a broad audience possessing a basic knowledge of lighting, offering accessibility and expedited education for individuals with lighting and control expertise ranging from fundamental to intermediate.

Each learning module is a readable course with plenty of helpful graphics. Eight learning modules now feature a video option to take the course as a narrated PPT presentation. Each learning module is available as a downloadable PDF document along with a single-page PDF summary. Students may provide feedback on learning modules and Education Express as a whole via a survey at the end of each module. Based on nearly 3,200 responses, the average student rates Education Express content highly in relevance, ease of understanding, comprehensiveness, and organization.

Start your education experience today—or return to level up with additional courses—at Education Express. Thank you for using this service to advance your lighting control education!

Lighting Controls Association Updates Education Express



The curriculum currently includes:

- EE101: Introduction to Lighting Control
- EE102A: Occupancy and Vacancy Sensors
- EE102B: Panel-based Lighting Control Systems
- EE103: Dimming Controls, Introduction to Dimming
- EE103: Dimming Controls, Dimming Controls & Systems
- EE103: Fluorescent Dimming Ballasts: Technology
- EE103: Fluorescent Dimming Ballasts: Application
- EE105: Lighting Control System Design, Programming
- EE105: Lighting Control System Design, Basis of Design
- EE105: Lighting Control System Design, Control Zoning
- EE105: Lighting Control System Design, Design Development
- EE107A: Lighting Controls for Existing Buildings
- EE107A: Lighting Controls and Commercial Lighting Rebates
- EE110: Commissioning and Lighting Controls
- EE115: Integration and Building Automation
- EE201: Daylight-Responsive Lighting Control
- EE202: Automatic Plug Load Control
- EE203: Lighting Controls and Commercial Energy Codes (90.1, IECC, Title 24)
- EE300: Lighting Control of LEDs
- EE301: Wireless Lighting Controls
- EE302: Centralized Intelligent Lighting Control, Technology
- EE302: Centralized Intelligent Lighting Control, Application
- EE302: A Year with a Networked Lighting Control System
- EE303: Tunable-White Lighting
- EE304: Lighting Control and the Internet of Things
- EE305: Lighting Control Protocols