





#### Expanded from Bill Attardi's EnergyWatch.com

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http://attardimarketing.com/ http://learnerslive.com/

Success is not the key to happiness. Happiness is the key to success. If you love what you are doing, you will be successful. Kevin O'Leary

*Practice isn't the thing you do once you're good. It's the thing you do that makes you good.* Malcolm Gladwell

#### Something to Think About... Mobile Content Marketing Must Do These Things

- 1. Content must be SIMPLE: a clear and simple call to action. You just cannot get all the content you want on a mobile screen no matter how small you make it. You really have to be good at more with less. Focus on messages that entice them to download your app, or to view that video that visually sells your value proposition, or to click on that link with more detailed content. Your target audience is most likely walking and/or talking when they get a glimpse of your text or tweet, so don't make them overthink it. Just tell them the one thing you want them to do, and if there is a need, they'll do it.
- 2. Integrated Marketing Communications (IMC): bring it all together in a clear, organized way. Carefully integrate and coordinate the content message about your organization and your offering across the many communications channels, not only to your target customers but to your employees and stakeholders as well. Engage, entertain, inform and persuade to action....
- **3. Must be QUICK:** instant gratification is just not quick enough these days. Download NOW. Watch the video NOW. Visit our website NOW. Order NOW. Provide a link that is quick and easy to access. A quick effective message is all you need to get their attention and the desired response. Even the larger mobile screens can't handle a lot of stuff, so IF IT DON'T FIT, don't add it to your mobile content.
- 4. Must create RELEVANCY: how many emails, text messages, tweets, posts, ads do you get every day? With me, it's hundreds... it's getting harder and harder to access the things we actually care about. Things I don't care about get directed to the trash file. Make sure your content doesn't suffer this fate. The best way to be relevant is to think about what people do on their devices. Are you talking to your target audience that need your products and services? Are you solving their problems, relieving their "pain points", not just selling your stuff? Do you matter to your mobile users? If you do, they will listen.... customer-centric!
- 5. Must measure the RESULTS: it's a digital game....the analytics are there. Evaluate how you are doing. Open rate, hits, click rate, unique clicks, visitors: new & returning, referrals, SEO, etc. Do more of what works, change what doesn't. Very important in the era of Big Data. Oh, hire AI Certified...

#### **Market News**

- 1. Trump Secures Historic \$1.4 Trillion Investment from UAE to Boost U.S. Economy by Mike Jenkin - In a major economic development, the United Arab Emirates (UAE) has announced a landmark \$1.4 trillion, 10-year investment framework in the United States, following a high-level meeting with President Donald Trump this week at the White House. The announcement came after Trump hosted UAE National Security Advisor HH Sheikh Tahnoon bin Zayed in the Oval Office on Tuesday. The UAE's commitment marks one of the largest foreign direct investment pledges in U.S. history and is expected to supercharge growth in key sectors such as artificial intelligence, energy, semiconductors, mining, and manufacturing. A consortium led by MGX (Abu Dhabi), BlackRock, Microsoft, and Global Infrastructure Partners (GIP) welcomed NVIDIA and Elon Musk's xAI into a partnership aimed at building next-generation AI data centers and energy infrastructure to solidify U.S. leadership in artificial intelligence. The massive economic commitment highlights the deepening relationship between the Trump administration and the UAE. The announcement is expected to generate tens of thousands of U.S. jobs, accelerate construction of AI and energy hubs, and position the United States as a top destination for strategic investment in emerging sectors. Trump Secures Historic \$1.4 Trillion Investment From UAE To Boost U.S. Economy
- 2. *Investments in the US Economy Committed in \$Trillions So Far* President Trump has received commitments to the US economy of trillions of dollars of investments:
  - 1. UAE \$1.4 T 2. APPLE \$500B 3. NVIDIA \$500B 4. TSMC \$100**B** 5. J&J \$55**B** 6. HONDA \$20B 7. AVANGRID \$20B 8. HYUNDAI \$20B 9. CLARIOS **\$6B 10. HITACHI** \$250M **11. SCHNEIDER ELECTRIC \$700M**
- 3. White House Narrows April 2 Tariffs The White House is narrowing its approach to tariffs set to take effect on April 2, likely omitting a set of industry-specific tariffs while applying reciprocal levies on a targeted set of nations that account for the bulk of foreign trade with the U.S. President Trump has declared his April 2 deadline to be "Liberation Day" for the U.S., when he will put in place what is called reciprocal tariffs that seek to equalize U.S. tariffs with the duties charged by trading partners, as well as tariffs on sectors like automobiles, pharmaceuticals and semiconductors he repeatedly said would be enacted on that day. The administration is now focusing on applying tariffs to about 15% of nations with persistent trade imbalances with the U.S. Despite economic concerns and global pushback, Trump reiterated his goal of using tariffs to restore trade balance and economic strength. White House Narrows April 2 Tariffs WSJ

- 4. Artificial Intelligence Can Be America's Strategic Advantage by Manisha Singh The world is shifting from great power competition to global strategic advantage, and artificial intelligence can be America's great strategic advantage. Like every other significant innovation in the last century, AI was created in the U.S. Both allies and adversaries are racing to surpass our economic and security capabilities. America must accelerate in the race to mobilize AI for great strategic advantage. President Trump has made the point about American dominance in AI emphatically. Among the flurry of initial executive orders is an EO focused specifically on "Removing Barriers to American Leadership in Artificial Intelligence." It directs the development of an AI Action Plan to "act decisively to retain global leadership in artificial intelligence." The unwritten part being that th The AI face off is between the land of the free and the Chinese communist party. America cannot afford to lose.e most sinister challenge emanates from the People's Republic of China (PRC). Artificial Intelligence Can Be America's Strategic Advantage
- 5. AI Is Coming for Your Job...Posting by Aaron Szymanski The construction industry is struggling to keep up with the rate of change occurring in society today. To truly embrace innovation, the industry must recognize that AI isn't working against you. It's an agent that works with you and for you completing monotonous tasks that humans aren't generally good at, such as calculation and data storage. Electrical contractors have a unique opportunity to lead the way in AI adoption, and the tools available today only scratch the surface of AI's potential. By embracing this transformative technology, electrical contractors can improve their efficiency and productivity and inspire other trades to follow suit. The future of construction isn't about choosing between human expertise and artificial intelligence; it's about combining both to build better, faster, and more sustainably than ever before. <u>AI Isn't Taking Your Electrical Job | EC&M</u>
- 6. DOE Green-Lights \$57M Loan to Restart Michigan Nuclear Plant by Francisco "A.J." Camacho - The Department of Energy has approved a \$57 million loan disbursement to restart the Palisades Nuclear Plant in Michigan, marking the first financial commitment from the Trump administration for nuclear revival. DOE's disbursement is part of an existing \$1.52 billion loan guarantee aimed at restoring the 800-megawatt facility, which, if successfully restarted, would be the first U.S. commercial nuclear reactor to resume operations after being shut down. DOE green-lights \$57M loan to restart Michigan nuclear plant - E&E News by POLITICO
- 7. EV Charger Rebate Trends for 2025 by BriteSwitch Here are the trends we are seeing in EV charger rebates for 2025: EV Charger Rebate Trends for 2025
  - EV Charger Rebate Program Coverage Has Increased
  - Level 2 Rebates Rise While DCFC Sees a Modest Dip
  - Federal Programs Prove Unpredictable
  - Technical Standards and Approved Chargers
  - Beyond Chargers: Incentives for Electric Vehicles

- 8. *GE HealthCare Advances Its Cloud Strategy by Unveiling the Genesis Portfolio to Improve Speed of Digital Innovation Adoption* - GE HealthCare today announced its new Genesis solutions, a portfolio of cloud enterprise imaging software-as-a-service (SaaS) solutions. Four features will be offered when commercially released – edge, storage, vendor neutral archive and data migration. These cloud solutions, are designed to help enhance healthcare organizations' efficiency and precision, streamline workflows, and optimize the use of capital and IT resources. The growing volume and complexity of patient cases are putting increasing pressure on hospitals' IT systems, driving the need for healthcare organizations to accelerate their digital transformation efforts through rapidly evolving technologies and operational infrastructure. However, budget constraints and staffing shortages make managing this quickly growing body of data challenging. The Genesis portfolio will help hospitals and health systems streamline workflows, and support radiologists and caregivers in delivering precise and timely patient care. <u>GE HealthCare Advances Its Cloud Strategy by</u> Unveiling the Genesis Portfolio to Improve Speed of Digital Innovation Adoption | GE HealthCare
- 9. Sollum Technologies and Leaficient Introduce the First Plan-Responsive Dynamic LED Lighting Solution Sollum Technologies and Leaficient are pioneering a breakthrough technology that redefines how LED lighting adapts to plant growth. Today's traditional lighting strategies rely on Daily Light Integral (DLI) as the primary metric for optimizing plant growth, based on the premise that plants absorb and use light with the same efficiency throughout the day and at all growth stages. However, recent research has shown that plant productivity can change significantly based on a myriad of factors relating to the environment, resources provided and internal biological processes. In response, Sollum and Leaficient are collaborating to develop the first closed-loop, plant-adaptive dynamic lighting system, which adjusts lighting in real time based on plant productivity and growth rates. [News] Sollum Technologies and Leaficient Introduce the First Plan-Responsive Dynamic LED Lighting Solution LED inside
- 10. Energy Department Acts to Lower Prices and Increase Consumer Choice with Household Appliances - Led by President Donald Trump, U.S. Secretary of Energy Chris Wright announced the Department of Energy will postpone the implementation of seven of the Biden administration's restrictive mandates on home appliances. The Feb. 14 actions are a key step in undoing the previous administration's burdensome policies that have driven up costs, reduced choice and diminished the quality of Americans' home appliances.ma | Energy Today's actions postpone the efficiency standards for the following home appliance rules:
  - Central Air Conditioners
  - Clothes Washers and Dryers
  - General Service Lamps
  - Walk-In Coolers and Freezers

- Gas Instantaneous Water Heaters
- Commercial Refrigeration Equipment
- Air Compressors

Perma | Energy Department Acts to Lower Prices and Increase Consumer Choice with Household Appliances | Department of Energy

- 11. DLC Updates its Technical Requirements for LED-Based Horticultural Lighting A new version of the DesignLights Consortium's (DLC) Horticultural Lighting Technical Requirements released today strengthens efforts to improve the efficacy and quality of <u>LED</u> products used in the controlled environment agriculture (CEA) industry. Taking effect April 18, 2025, the DLC's new requirements come at a time of burgeoning growth in the CEA sector. Valued at \$7.8 billion last year, the global CEA market is expanding at a compound annual growth rate of 12.2 percent and expected to reach \$22 billion by 2033, according to a February 2025 market research report. With lighting being the largest operational expense in CEA facilities, there are significant opportunities to increase energy efficiency and cost savings with the right lights. [News] DesignLights Consortium Updates its Technical Requirements for LED-Based Horticultural Lighting LEDinside
- 12. More Electricity Needed Faster to Further National Energy Security, Says S&P Global Report by Kim Riley The summary of the U.S. National Power Demand Study which will be released in its entirety in the coming weeks highlights the extent of the electricity demand growth facing the United States, and presents some of the tools that can be tapped to meet the moment in furtherance of national energy security. Electricity demand in America will surge by 35 percent to 50 percent between 2024 and 2040, primarily driven by AI data centers, new manufacturing activity, electric vehicles (EVs), space-heating electrification, and broad economic growth, according to the S&P Global study. A key finding is that the demand is growing faster than the supply of new energy solutions that could power it, creating an urgent need for faster policy action on permitting grid interconnection. More electricity needed faster to further national energy security, says S&P Global report Daily Energy Insider
- 13. DOE Green-Lights \$57M Loan to Restart Michigan Nuclear Plant by Francisco "A.J." Camacho - The Department of Energy has approved a \$57 million loan disbursement to restart the Palisades Nuclear Plant in Michigan, marking the first financial commitment from the Trump administration for nuclear revival. DOE's disbursement is part of an existing \$1.52 billion loan guarantee aimed at restoring the 800-megawatt facility, which, if successfully restarted, would be the first U.S. commercial nuclear reactor to resume operations after being shut down. DOE green-lights \$57M loan to restart Michigan nuclear plant - E&E News by POLITICO
- 14. Data Center Boom Impacting the Lighting Industry by David Shiller The data center sector has exploded into a major force in construction, fueled by the increasing demands of artificial intelligence. This surge is significantly boosting nonresidential construction planning, with projections indicating it could add substantially to U.S. economic growth in the coming years. This data center construction boom hasn't gone unnoticed in the lighting industry. Some manufacturers are beefing up their product lines for the data center vertical. Some are increasing their marketing to position themselves as leaders in the data center lighting vertical, and some manufacturers are hiring specification salespeople to specialize in just the data center spec market. Major tech companies are leading the data center expansion with massive investments. Data Center Boom Impacting The Lighting Industry | LightNOW

- 15. Will Nuclear Power Be the Answer for Data Centers' Voracious Energy Needs? by John Caulfield - The need to balance energy demands with carbon footprint reduction goals is motivating Big Tech companies to explore nuclear as an alternative power source. That is what's motivating Big Tech companies—which pumped more than \$180 billion into data center expansions and related infrastructure in 2024, according to the research firm Dell'Oro Group—to turn to nuclear as a future alternative power source. Several companies have struck strategic investment agreements to secure their access to this cleaner power, and to support the development and potential commercialization of advanced nuclear reactors. Will nuclear power be the answer for data centers' voracious energy needs? Building Design+Construction
- 16. States in a Race Against Big Tech for Power Plants by Marc Levy, Associated Press -

Facing projections of spiking energy demand, U.S. states are pressing for ways to build new power plants faster as policymakers increasingly worry about protecting their residents and economies from rising electric bills, power outages, and other consequences of falling behind Big Tech in a race for electricity. Some states are dangling financial incentives. Others are undoing decades of regulatory structures in what they frame as a race to serve the basic needs of residents, avoid a catastrophe and keep their economies on track in a fast-electrifying society. The spike in demand for electricity is being driven, in large part, by the artificial intelligence race as tech companies are snapping up real estate and seeking power to feed their energy-hungry data centers. Federal incentives to rebuild the manufacturing sector also are helping drive demand. States in a Race Against Big Tech for Power Plants – electrifiED

- 17. EPRI Launches Consortium to Wrangle the 'Wild West' of Power Sector AI The Open Power AI Consortium aims to "drive the development and deployment of an open AI model tailored for the power sector." The consortium is global in scope and includes companies such as AWS, Microsoft, Constellation Energy, Duke Energy, PG&E, and NVIDIA. The group will work to develop and maintain the models, as well as the datasets and libraries necessary to train them. It also includes the creation of a "sandbox environment" for AI applications, in collaboration with startups, academia, national labs, utilities, and technology companies. New EPRI consortium wrangles the 'Wild West' of power sector AI | Latitude Media
- 18. Secretary Wright Approves LNG Export Authorization U.S. Secretary of Energy Chris Wright today approved a liquefied natural gas (LNG) export authorization to the Venture Global CP2 LNG export project proposed for Cameron Parish, Louisiana. Today's authorization conditionally grants CP2 authorization to export LNG to non-free trade agreement countries from the proposed CP2 LNG project. In the order, DOE finds that LNG exports from CP2 LNG are likely to yield economic benefits to the United States, diversify global LNG supplies, and improve energy security for U.S. allies and trading partners over the course of the export term through 2050. DOE expects to issue a final order to CP2 LNG in the coming months. Once constructed, CP2, owned by Venture Global, will be able to export up to 3.96 billion cubic feet per day (Bcf/d) of LNG. Secretary Wright Approves LNG Export Authorization electrifiED

- 19. AI Developers Transform into Energy Developers The global race to develop next-level AI products is driving a surge in demand for new energy sources to sustain data centers used by tech giants. Because AI-focused data centers consume significantly more power, major tech firms are investing in solutions that range from gas and oil to renewable sources to expand the electrical grid and boost output. Video at: The New York Times <u>AI developers</u> transform into energy developers
- 20. Google Announces Gemini 2.5, its Next-Gen AI model Google announced Gemini 2.5 on Tuesday, its next-generation family of artificial intelligence large language models that can "think." "Gemini 2.5 models are thinking models, capable of reasoning through their thoughts before responding, resulting in enhanced performance and improved accuracy," Google said in a blog post. "In the field of AI, a system's capacity for 'reasoning' refers to more than just classification and prediction. It refers to its ability to analyze information, draw logical conclusions, incorporate context and nuance, and make informed decisions." Google announces Gemini 2.5, its next-gen AI model
- 21. U.S. Electrical Grid Infrastructure to Gain \$20B Investment from Avangrid By Kim Riley Avangrid Inc., a leading energy company and member of the Iberdrola Group, said Wednesday it plans to invest \$20 billion in United States electrical grid infrastructure through the end of the decade. Executives discussed how growing energy demand requires a critical need to invest in energy infrastructure, and that the U.S. is a top investment destination as Avangrid and Iberdrola modernize and expand the country's electrical grid. Avangrid has about \$50 billion in assets in the United States across 23 states and employs over 8,000 people. Its eight electric and gas utilities in the Northeast serve more than 3.3 million customers. Avangrid also owns and operates about 10.5 gigawatts of electric generation capacity, capable of producing enough electricity to power over three million homes. U.S. electrical grid infrastructure to gain \$20B investment from Avangrid - Daily Energy Insider
- 22. Schneider Electric to Invest Over \$700 Million in the U.S. The company's investments support the country's focus on bolstering the nation's energy infrastructure to power AI growth, boost domestic manufacturing, and strengthen energy security. The investment is the largest planned single capital expenditure commitment by Schneider Electric in its <u>135+ year history</u>. This new planned investment is expected to create over 1,000 new jobs and help Schneider Electric continue to play a leading role in shaping a more innovative, affordable, and energy-efficient future in the U.S. Schneider Electric to Invest Over \$700 Million in the U.S. tEDmag
- 23. Hitachi Energy Commits \$250M to Address Transformer Shortage Electricity demand associated with artificial intelligence and data center development mean "the need for transformers has surged beyond initial projections," Hitachi Energy said. Hitachi Energy on Monday announced a \$250 million investment to expand global production of critical components for electrical transformers, including "enhancing production capacity at the company's transformer factories in Virginia, Missouri, and Mississippi." Power management company Eaton announced in February that it will invest \$340 million to increase U.S. production of its three-phase transformers. Production and hiring is expected to begin in 2027 at the company's production facility in Jonesville, South Carolina. <u>Hitachi Energy commits</u> \$250M to address transformer shortage | Utility Dive

## e-Learning Showcase

24. SWOT Analysis and Generative AI – Virtual learning: **SWOT** Analysis and Generative AI.mp4

#### Why Use AI

- 1. Efficiency and Automation: AI can automate repetitive tasks saves time and reduces human effort
- 2. Data Processing: AI excels at analyzing large datasets quickly uncovers patterns and insights that humans might miss
- 3. Scalability: AI systems can handle growing workloads without a proportional increase in costs or resources
- 4. Accuracy: AI can perform tasks with high precision, reducing errors in areas like diagnostics or forecasting.
- 5. 24/7 Availability: AI tools can operate continuously improving productivity and customer support

#### How AI Can Improve SWOT Analysis

- 1. Identifying Strengths
  - > AI can process vast amounts of performance metrics financial reports / employee feedback / historical data
  - customer feedback / satisfaction / survey ratings
  - competitor advantages & comparisons
  - > monitor ongoing operations / provide real-time updates
- 2. Detecting Weaknesses
  - > AI can pinpoint areas of underperformance through analytics
  - > finds inefficiencies in operations
  - > analyzes supply chain data / dissatisfaction
  - > unbiased assessment of customer complaints
  - > identifying trends, such as declining sales or rising costs
  - **Employee Feedback Mining: uncover hidden weaknesses**
- 3. Spotting Opportunities
  - > AI-driven market research
  - > can discover emerging trends
  - identifies new customer needs
  - > pinpoints business expansion possibilities
  - finds untapped markets based on rising demand
- 4. Recognizing Threats
  - > AI detects potential risks
  - > identifies new competitors
  - addresses regulatory changes
  - > spots cybersecurity threats by analyzing external data
  - > warns about declining consumer interest in a product



#### **Education Resources**

- **25.** 2025 Lighting Resource Guide by Jim Lucy Our 2025 picks for where to go when you need to learn more about lighting, from A-Z. With all of the technological changes in lighting over the past few years, getting the latest available information on products and trends is critical. The associations, government resources, publications, websites and universities listed are *EW's* updated picks for the best lighting education, information on trends and new products, and networking/educational opportunities at lighting industry events. The trade associations listed capture the diversity of business interests in the lighting industry. 2025 Lighting Resource Guide | Electrical Wholesaling
- **26.** *The NAED Digital Center of Excellence* DCoE is focused on driving industry transformation through digital innovation. Its mission is to provide education and develop solutions using cutting-edge technologies to optimize operational efficiency and improve customer experiences. <u>NAED Digital Center of Excellence</u>
- **27.** *NAED Creating a Culture of Learning* The NAED Learning Center houses all of the training your employees need to succeed within the electrical industry. Employees at every level can benefit from the vast array of training offered in the NAED Learning Center:
  - <u>NAED-developed industry courses</u>
  - Business skills courses
  - <u>Curriculums by position</u>
  - <u>Manufacturer product training courses</u> <u>NAED - NAED Learning Center</u>
- 28. Education Express to Become NEMA Academy Big news! The Lighting Controls Association's Education Express is moving to NEMA's new learning platform: NEMA Academy. This transition will provide an improved user experience and new opportunities for professional development, with the same Education Express courses combined with a growing curriculum of courses in lighting and other electrical fields. If you are one of our tens of thousands of Education Express students, your account will automatically transition to the new NEMA Academy platform, which will officially launch on May 1, 2025. Education Express to Become NEMA Academy

**29.** Lighting Controls Association Announces New Course on Home Automation Authored by *C. Webster Marsh* - The Lighting Controls Association has published a new offering in its popular Education Express system, EE306: Introduction to Home Automation. Home automation is technology that enables homeowners to integrate, manage, monitor, and control their lighting, shading, HVAC, security, entertainment, electric-vehicle charging, circuit breakers, and appliances. Solutions range from standalone devices to scalable systems allowing homeowners to control the entire home from a centralized platform. The primary benefit is comfort, convenience, and lifestyle enhancement through customized automation, with additional benefits such as lower energy costs, reduced carbon footprint, and enhanced security. Lighting Controls Association Announces New Course on Home Automation

## **Publications of Learning**

- 30. Memo: Clarifications to the NLC 2020 Report 2025 Update "Energy Savings from Networked Lighting Control (NLC) Systems With and Without LLLC" Key updates include refined clarification of the definition of luminaire-level lighting controls (LLLC) used in the report, elaborated explanations on several important aspects of the control savings factors (CSFs), and distinguishing the calculation methodology between high-end trim savings and other control strategies (occupancy sensing and daylight harvesting). The memo emphasizes that the documented CSFs reflect average savings across a diverse set of projects, where optimal programming varied, and highlights considerations for small sample bias in evaluations. Building-specific CSFs and their limitations are explained, and the memo differentiates findings from a related redesign study to avoid misinterpretation. Lastly, an updated executive summary and errata sheet correct clerical errors, reaffirming that NLC systems with LLLC offer higher energy savings potential but encouraging ongoing updates as technology and datasets evolve. Memo: Clarifications to the NLC 2020 Report - 2025 update
- **31.** Honeywell Study Reveals More Than 80% of Commercial Building Managers Plan to Increase the Use of AI to Optimize Operations - Honeywell released the findings of its AI in Buildings study, which revealed that 84% of commercial building decision makers plan to increase their use of AI in the next year to help them improve security, streamline energy management and integrate predictive maintenance. In this study of U.S. building managers and decision makers with more than 250 building occupants, Honeywell found that across property types, respondents are increasingly using AI to help improve process efficiency, productivity and operations. However, since most respondents (92%) reported challenges in hiring skilled, tech-savvy individuals, a greater opportunity remains ahead for building operations to tap into AI's capabilities to enhance employee training, augment their current workforce and ultimately help upskill labor to support the sector's rapidly changing needs. Honeywell study reveals more than 80% of commercial building managers plan to increase the use of ai to optimize operations

32. 5 Trends That Will Transform the Building Industry in 2025 by Michael Westerfield and Brent Lowe - Keeping up with building industry trends is essential for reducing costs, streamlining operations, and improving equipment efficiency. Commercial building management is undergoing seismic change as advanced technology with deep-data analysis becomes more affordable and available. Analysts estimated the smart building software market at nearly \$7.3 billion at the close of 2022 and forecast it to reach \$11.8 billion by 2028. This change affects everything in the building management space. We track shifts carefully through our conversations with systems integrators and facility executives, and these are five trends we expect to gain traction throughout this year:

- 1. Cybercrime Will Make Digital Security A Priority For Facilities Managers In 2025
- 2. Shrinking Labor Pool Will Drive Consolidation And Out-Sourcing
- 3. Leveraging Technology To Navigate Compliance Costs
- 4. Energy Efficiency Will Increase As A Selling Point In Office Spaces
- **5. Preparing For Fluctuating Energy Costs**

5 Trends That Will Transform The Building Industry In 2025

Something you may not know!



Prepared for:
Yorthwest Progy Diasency Alker
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Yas Jung Wen, Lineny Schuttons
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**33.** *Implementing AI in Electrical Applications—Part 1 Michael Morris -* From the *EC&M* e-books library: How the industry is incorporating artificial intelligence into the electrical space. Ever since the rise of ChatGPT in November 2022, artificial intelligence (AI) has been unavoidable. Just about every industry is developing ways to incorporate AI into their field, and the electrical industry is no different. EC&M has followed the rise of AI in order to keep our readers informed on how the technology is impacting the electrical industry. This content has been immensely popular, so we decided to collect some of the best articles into our first e-book of 2025. The topic of artificial intelligence and its role in the electrical industry is such an important and rapidly evolving one that we decided we'll need two e-books to do it justice. Stay tuned for "Implementing AI in Electrical Applications — Part 2" releasing later in 2025. 67d1dc96c1db52f96511aefc-ecm ebook implementing ai (1).pdf

#### 34. Andy Jassy Just Shared 5 Career Tips for Amazon Staff Who Want to Get Ahead at Work.

*Check It Out* - In a blog post published on Friday, Amazon CEO <u>Andy Jassy</u> rounded up five of career tips for staffers who want to build successful careers. His tips largely boil down to being experimental, driven, and open to learning.

- 1) Seek out work that builds on your passions, which will allow you to do work you find fulfilling.
- 2) Adopt an experimental approach to your career by trying out different fields.
- 3) Don't fear failure. Instead.....be self-aware and learn from mistakes.
- **4)** Have a strong work ethic and be a good team player. Position yourself as someone people can trust.
- 5) Be a "great learner" to excel. You should be learning all the time.

Lastly, he added: *A person's success often hinges on their attitude to work. There's so many things you can't control in your work life, but you can control your attitude.* Andy Jassy just shared 5 career tips for Amazon staff who want to get ahead at work. Check it out.

**35.** *Trump's AI Robot Swarm Signals Bold Future for U.S. Manufacturing* - President Donald Trump is spotlighting a dramatic overhaul in the automotive sector, where a partnership between UBTech Robotics and Zeekr has unleashed a fleet of humanoid robots that team up to churn out vehicles at a pace that leaves traditional methods in the dust. These machines, humming along in Zeekr's state-of-the-art factory powered by 5G connectivity, aren't working solo—they're a synchronized swarm, pooling their smarts to handle complex tasks with jaw-dropping efficiency. The system's backbone is a slick blend of cloud-based brainpower and onboard controls, letting these robots think big-picture while nailing the details. They sort parts with laser-sharp precision using advanced vision tech, juggle heavy loads despite tricky weight shifts, and finesse delicate components without a hiccup—skills already proving their worth in everything from quality checks to full-on vehicle assembly. Beyond cars, the potential is massive—logistics, healthcare, even farming could see a boost from this swarm approach. <u>Trump's AI Robot Swarm Signals Bold Future for U.S. Manufacturing | The Political Movement</u> A video you have to see to believe: <a href="https://www.youtube.com/watch?v=qlV9EWPe910">https://www.youtube.com/watch?v=qlV9EWPe910</a>

# **New Technologies**

**36.** *Agentic AI Explained: Definitions, Benefits & Examples of AI Agents -* Agentic AI refers to a new class of artificial intelligence systems designed to act with autonomy, making decisions and taking actions without direct human intervention. These systems can accomplish specific goals with limited supervision, processing vast amounts of data and adapting to real-time changes in their environment. Unlike traditional AI, agentic AI demonstrates a high degree of adaptability and can handle complex tasks such as strategic planning, dynamic problem-solving. reasoning, and learning from experience much like a human agent. Agentic AI Explained: Definitions, Benefits & Examples of AI Agents

**37.** *SATCO/NUVO LED Entryway Wall Pack Integrated By-Passable Photocell -* Elevate the lighting of your entryways with SATCO/NUVO's premium LED wall packs that combine durability, versatility, and style. Featuring an integrated by-passable photocell, these fixtures



are crafted with robust die-cast aluminum construction and a resilient IK08 polycarbonate lens, ensuring reliable performance in demanding conditions. Available in sleek black, bronze, and white finishes, these wall packs seamlessly blend with a variety of architectural styles, enhancing both modern and traditional exteriors. With field-selectable wattages of 10W, 15W, and 20W and adjustable CCT options of 3000K, 4000K, and 5000K,

these wall packs provide customized illumination for any setting. Rated for wet locations and IP65 certified, they deliver dependable performance for up to 50,000 hours. Backed by a 5-year warranty and DLC Premium certification, these wall packs are a stylish and reliable solution for modern outdoor lighting. <u>SN1751 LED Entryway Wall Pks\_12-30-24.indd</u>

**38.** *LED Flood Lights by US LED* - Introducing the US LED's Night Guard series of LED flood lights, the ultimate solution for versatile outdoor lighting. The Night Guard series offers field-adjustable CCT and wattage options, allowing custom illumination for project needs.



Installers can choose from 3,000K to 5,000K, creating a warmer tone for a welcoming atmosphere or enhancing visibility with a daylight setting for security. The integrated photocell ensures automatic dusk-to-dawn operation, providing worry-free lighting control and additional energy savings. Engineered with specialized optics, the Night Guard series delivers precision lighting for any application, from security areas to exterior facades

and offers multiple mounting accessories for maximum effectiveness. Embrace the perfect blend of performance, adaptability, and convenience with Night Guard LED flood lights. Night Guard Series | Energy Efficient, Long-life LED Flood Light | US LED

**39.** *Bridgelux Unveils DriveLux*<sup>™</sup>: A *Groundbreaking Light Engine Series Integrating COB and Driver Technology* - Bridgelux, a global leader in LED innovation, proudly expands its renowned Chip-on-Board (COB) product line with the launch of DriveLux<sup>™</sup> - a revolutionary series of Light Engine products. By seamlessly integrating COB technology with an advanced driver, DriveLux<sup>™</sup> redefines lighting solutions with its compact,



replaceable design, exceptional CRI90 efficacy, and versatile mounting options for large, selectable optical lenses in various sizes and beam angles. The DriveLux<sup>™</sup> launch reinforces Bridgelux's commitment to advancing LED technology, empowering lighting designers,

manufacturers, and end-users to create sustainable, impactful environments. Additional DriveLux<sup>TM</sup> series, including enhanced wireless control options, are in development and slated for announcement later this year. <u>Welcome | Bridgelux, Inc. LED Lighting</u>

**40.** *The naturaLED*® *RCM 10" Round Outdoor Canopy* - The naturaLED® RCM low-profile round canopy is a durable, cost-effective lighting solution ideal for parking garages, walkways, and outdoor canopies. This IP65-rated fixture provides excellent protection



against dust and water, ensuring reliability in various environments. With selectable wattages and color temperatures (CCT), it allows customization for optimal brightness and ambiance. Designed for versatile installation, it supports direct surface mounting on ceilings or walls. Additionally, optional accessories, including a motion sensor, photocell sensor, and emergency NOTES: driver, enhance energy efficiency, automation, and backup lighting for added convenience and safety. APPLICATIONS Breezeway, Parking Garages, Pathway, Perimeter, Entryway, Area Lighting, Building Facades <u>RCM – naturaLED</u> Spec Sheet: <u>RCM 7670 7671</u>

**41.** *Nvidia Unveils 'Rubin' Superchip* - Nvidia confirmed at its GTC conference Tuesday that Vera Rubin will succeed its Grace Blackwell lineup as the next generation of the company's artificial intelligence systems. Blackwell chips have only recently started shipping in high volume, with the enhanced Blackwell Ultra lineup due to launch later this year. Rubin chips



are expected to start shipping in the second half of next year. They'll be monsters—at least according to the specs Nvidia CEO Jensen Huang laid out in his GTC conference keynote on Tuesday. The Vera Rubin systems will sport 3.3 times the computing performance of Blackwell Ultra. Vera Rubin Ultra—the enhanced version of the lineup expected to ship in the later half of 2027 will offer 14 times Blackwell's computing performance. Analysts

expect this series of Nvidia's chips to generate nearly \$40 billion in revenue in their first year of sales and more than \$95 billion in their second year. <u>Nvidia Unveils 'Rubin' Superchip</u>

### LearnersLive Special Feature

Implementing AI in Electrical Applications—Part 1 by *Michael Morris* - From the *EC&M* e-books library: How the industry is incorporating artificial intelligence into the electrical space.

Stay informed on how artificial intelligence is impacting the electrical industry, or risk falling behind.

Ever since the rise of ChatGPT in November 2022, artificial intelligence (AI) has been unavoidable. Just about every industry is developing ways to incorporate AI into their field, and the electrical industry is no different. According to the results from our annual Top 40 Electrical Design Firms survey published in June 2024, 43% of respondents were "already using" AI tools in some capacity with their electrical design work. Similarly, in our annual Top 50 Electrical Contractors survey from September 2024, 25% of electrical contractor respondents said they were "already using AI" and more than three-quarters indicated they would be using AI "within two years."

While our 2025 surveys won't go out until a bit later this year, it's likely those percentages will continue to grow. EC&M has followed the rise of AI in order to keep our readers informed on how the technology is impacting the electrical industry. This content has been immensely popular, so we decided to collect some of the best articles into our first e-book of 2025.

The first three articles in this e-book are by freelance writer Tim Kridel, all of which look at the rise of AI and how the electrical industry has incorporated it. These pieces offer valuable insights into how industry leaders have embraced AI. The next two articles in this e-book offer practical information on how electrical professionals can utilize AI themselves.

First on page 24 is Sal Paraltore's article "Harnessing AI to Empower Electrical Contractors," which gives insight into how the electrical contracting industry is using AI. Finally, on page 28, "Intelligent Design" by Tim Kridel was the cover story of our November 2024 issue and explores how AI is driving innovation in the electrical industry two years after the debut of ChatGPT.

The topic of artificial intelligence and its role in the electrical industry is such an important and rapidly evolving one that we decided we'll need two e-books to do it justice.

Stay tuned for "Implementing AI in Electrical Applications Part 2" releasing later in 2025. Implementing AI in Electrical Applications—Part 1 | EC&M

Something you may not know!

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New ebook from EC&M: YOUR GUIDE TO AI AND THE ELECTRICAL INDUSTRY

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