



[Amerlux - Supermarket Lighting | Supermarket Lighting Manufacturer](#)

Mouthwatering fresh meat, fish, and produce

The new Cylindrix III Mini (C3 Mini) is tiny, passively cooled, with an invisible heat sink and full dimming capacity.

Amerlux helps the nation's top supermarket brands transform into high-end retail destinations. Once upon a time, grocery stores craved evenly lit spaces, but now they request our versatile LED solutions, which give them a cool tone at full power while glowing warmer as the light is dimmed, emulating the familiar incandescent lamps.

Game-changing solution

Amerlux's SPEQ, which is a line of modern-styled track lighting solutions, incorporates the FreshFocus chip and the new Sundrop chip (100 CRI), producing a controlled, powerful and clean beam of light, which can be found in various high-end retailers, supermarkets and art galleries. The SPEQ track head balances clean, minimal aesthetic design with industry-leading optical performance. Its snoot perfectly matches the fixture to provide excellent glare control, while maintaining clean fixture lines. The product offers other options, such as hexcell louver, Solite beam softening lens, linear spread lens and cross blade.



National LED Market Observer

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 Tahnoun 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	\$14 T	7. AVANGRID	\$20B
2. APPLE	\$500B	8. HYUNDAI	\$20B
3. NVIDIA	\$500B	9. CLARIOS	\$6B
4. TSMC	\$100B	10. HITACHI	\$250M
5. J&J	\$55B	11. SCHNEIDER ELECTRIC	\$700M
6. HONDA	\$20B		

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 the AI face off is between the land of the free and the Chinese communist party. America cannot afford to lose. The 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. [AI Isn't Taking Your Electrical Job | EO&M](#)

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.

[GE HealthCare Advances Its Cloud Strategy by 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 – LEDinside](#)

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. [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 LED 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 – electrifED](#)

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 [AI developers 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](#)

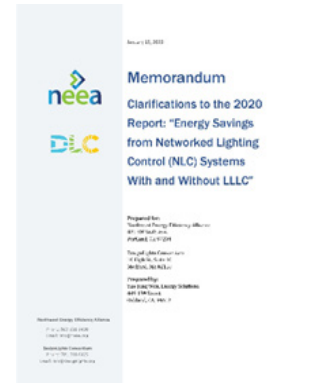
21. **U.S. Electrical Grid Infrastructure to Gain \$20B Investment from Avangrid By Kim Riley** - Avangrid Inc., a leading energy company and member of the Iberdrola Group, said Wednesday it plans to invest \$20 billion in United States electrical grid infrastructure through the end of the decade. Executives 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 135+ year history. [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. [Hitachi Energy commits \\$250M to address transformer shortage | Utility Dive](#)

Articles of Interest:

24. **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](#)



25. **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](#)

26. **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](#)

Industry Resources:

27. **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](#)

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](#)

Monthly 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](#)

