A MONTHLY NEWSLETTER FROM AMERLUX®

**NEMA: America Needs to Work Its Way Through This Crisis... and It Will Rely on Electricity to Do So** - There are 16 <u>critical</u> infrastructure sectors in the United States, according to the U.S. Department of Homeland Security. While electrical equipment manufacturers are considered "Critical Manufacturing," they also directly support every other sector by making the products needed to assure the reliable and consistent flow of electricity. Without on-demand electricity, which depends on a steady supply of equipment for maintenance and upgrade of existing systems and construction of new buildings and capabilities, our nation's current situation would go from bad to worse. And without electricity, millions of American workers will face an uncertain employment and economic future.

Some states responding to COVID-19 have referenced the DHS guidance related to critical manufacturing, including those producing electrical equipment. This is particularly important to keeping America working where/when able. So we encourage all states to follow the guidance of the <u>U.S. Department of Homeland Security</u>, which acknowledges electrical manufacturers as critical infrastructure that must remain operational during this outbreak. NEMA recently issued a <u>letter</u> to the nation's governors, state, and local leaders detailing the essential nature of electrical manufacturers, distributors, and installers to encourage all levels of government considering restrictive policies to allow the electroindustry to continue operations.

Electrical manufacturers and their distributor and installer partners promptly instituted policies to protect employees who cannot telework to prevent the spread of COVID-19. Other techniques, as recommended by the will be adopted just as rapidly.

We do not know how long this outbreak will last, but we do know we cannot afford to shut down critical electrical manufacturing, power production, and distribution that drives the economy. We need a steady supply of equipment to maintain a reliable electric system and keep the power on for homes and hospitals, and workers need their jobs during these economically uncertain times.

Safeguards can and are being put in place to protect workers from spreading COVID-19. With protections in place, states must exempt critical sector manufacturers from shelter-in-place restrictions. Yes, this is for the sake of the power system, but also for the sake of economic security for millions of Americans working across the country. <u>https://blog.nema.org/</u>

#### National Energy Market Observer:

1. Lightfair 2020, Originally Scheduled for May 3-7, Has Been Canceled - The May 3-7, 2020 LightFair trade show and conference, previously announced as postponed, are now canceled reports the International Association of Lighting Designers (IALD), the Illuminating Engineering Society (IES) and International Market Centers (IMC). The next LightFair will be in May 2021 at the Jacob K. Javits Convention Center in New York during NYCxDESIGN – New York Design Week. LightFair returns to the Las Vegas Convention Center in June 2022. <a href="https://www.lightfair.com/">https://www.lightfair.com/</a>

2. **NAED Distributors Provide More COVID-19 Safety Tips** - On March 22, tedmag.com posted a story providing best practices by distributors to keep their employees safe and healthy, and to keep supplying necessary products to their customers. In the past week, the NAED Member Engagement Team has been in contact with a number of distributors and is providing tedmag. com an update on some of those practices. <u>https://tedmag.com/naed-distributors-provide-more-covid-19-safety-tips/</u>

3. **ASHRAE Establishes Epidemic Task Force** - ASHRAE has launched a society-wide effort to respond to the current global COVID-19 pandemic and provide guidance on how to ensure that buildings are prepared for future epidemics. The ASHRAE Epidemic Task Force was established to help deploy ASHRAE's technical resources to address the challenges of the current pandemic and future epidemics as it relates to the effects of heating, ventilation, and air-conditioning systems on disease transmission in healthcare facilities, the workplace, home, public and recreational environments. The task force will also provide recommendations for setting up temporary field hospitals in convention centers, arenas, and indoor stadia to deal with surges. https://facilityexecutive.com/2020/04/ashrae-establishes-epidemic-task-force/



MAY 2020

A MONTHLY NEWSLETTER FROM AMERLUX®

4. **LED Magazine Top 5 – Outdoor Lighting Takes the Spotlight** - Ever Google yourself? Our version of that at LEDs Magazine is using the Google search results on our website to find out what is coming up as most read and most recommended by Google with regard to a particular topic or keyword phrase. A quick review of our search results brings together the top 5 articles and blogs on outdoor lighting on our website within the past three years that came up highest in the results.

- 5. Decision makers let LEDs speak for themselves in outdoor lighting
- 4. Tackle the top 5 challenges in municipal outdoor lighting
- 3. IES and AMA debate outdoor lighting at Strategies in Light
- 2. Prioritize photometrics in outdoor lighting retrofits
- 1. Major study finds outdoor lighting cut crime by 39%

5. **The Best LED Light Bulb for Every Room in Your House in 2020** - Light bulbs have an enormous, everyday impact on the way our homes look and feel, and with a flood of new energy efficient LED bulbs filling the lighting aisle, you've got more options than ever. Plus, they can help you save on your electricity and energy bills. But how do you pick the right lights for the job? The trick is to think for a long time about how you typically put light to use in the different rooms in your home. That, more than any-thing, will dictate your lighting needs. CNET Review's top tips at: <u>https://www.onet.com/news/best-led-light-bulb-for-2020-for-every-room-in-your-house/</u>

6. **Sleep Better & Feel Better While Working From Home** - The Lighting Research Center (LRC) has released a new video on how to maintain good sleep while working from home, or quarantining indoors, which is becoming commonplace during the coronavirus pandemic. Good sleep is essential for good health, and may even have a protective effect against coronavirus because a healthy, regular sleep pattern promotes a strong immune system. The video features tips from LRC Director Dr. Mariana Figueiro about how to use the power of light to help you sleep better and feel better every day. <u>https://www.youtube.com/watch?v=-</u> OAdudlypSg&feature=youtu.be

7. How Rebate Programs Are Responding to COVID-19 - As we all struggle to deal with the implications of the past few weeks, we wanted to provide insight into how the rebate programs are being affected by the pandemic. The main topics to keep in mind are....

- · Most programs are still taking applications and issuing checks
- Inspection requirements changed in many programs
- Program deadlines still in effect
- Don't forget about your projects

https://briteswitch.com/news/RebateProgramsRespondToCovid.php

8. Electroindustry United to Ensure Essential Businesses Operating - The leading trade associations representing America's electrical supply chain, including manufacturers, distributors, and installers, united to ensure that lawmakers at the state and local levels keep the power on for everyone as they make decisions related to the current COVID-19 health crisis. Last week the U.S. Department of Homeland Security categorizing workers in the electrical manufacturing supply chain as essential. http://lightingcontrolsassociation.org/

9. **DLC Seeks Technical Manager** - This position will support the DLC's networked lighting controls (NLC) platform and expansion into smart/intelligent buildings and exterior environments. The Technical Manager will develop system-level technology standards and strategic approaches to advance the adoption of connected lighting and building systems. Technology focus areas will include interoperability, IoT applications, energy optimization and data management, and grid integration and services. The right candidate will have a deep technical understanding of connected lighting and building technologies/systems and applications, familiarity with connected lighting and smart building markets, utility and energy services markets, construction value chain, and specification and design practices. Resume with a cover letter should be submitted to Stephen White, Chief Operating Officer <a href="http://lightingcontrolsassociation.org/2020/04/09/dlc-seeks-technical-manager/">http://lightingcontrolsassociation.org/2020/04/09/dlc-seeks-technical-manager/</a>



10. UL COVID-19 Regulatory Updates for Product Certification - Up-to-date information on regulatory changes, deviations, exceptions and extensions that may impact access to your target markets. The regulatory landscape is changing rapidly and

staying on top of market entry requirements is more challenging than ever before. With new information emerging daily, having the most current insights can help you better manage product certifications and approvals in uncertain times.

### https://www.ul.com/contact-us/181621

- Obtaining certifications and renewal acceptance
- Regulatory deviations, exceptions or extensions
- · Contact details to access information about smaller markets and specific certification status

11. **IES Releases New Report on Germicidal Ultraviolet (GUV) and How it Could Reduce the Spread of COVID-19** - Written to help protect healthcare workers and patients, the free download is available on the IES website, [click here], with an accompanying tutorial video explaining germicidal UV technology, its application, and safety considerations. Germicidal UV can successfully and safely be deployed to disinfect air in occupied hospital spaces such as waiting rooms, intensive care units and operating rooms. In unoccupied controlled-access environments, germicidal UV can be used as a supplemental measure to disinfect room surfaces, to reduce the spread of healthcare associated infections. Germicidal UV is also being applied for disinfection of some personal protective equipment (PPE) for limited reuse during the pandemic. The FAQs emphasize the need for GUV to be applied correctly and monitored for output and safety, and that training on the operation and maintenance of the systems over time is also important. The IES report addresses these topics and recognizes that additional GUV technologies are in development, including efficacy and safety testing. https://www.ies.org/

12. **IDA and IES Announce Strategic Collaboration to Advance Quality Lighting to Reduce Light Pollution** - In recent years, light pollution has increased globally by two percent per year. The indiscriminate use of electric lighting at night leads to at least \$3BN in wasted energy in the U.S. alone. This wasted light can harm wildlife, imperil important astronomical research, and can obscure our view of the star-filled sky. "The Five Principles for Responsible Outdoor Lighting that unite our organizations are based on simple ideas; limit light at night to where and when it is needed, don't overlight, and be sensitive to environmental concerns," said Brian Liebel, Director of Standards and Research for the IES. <a href="https://www.ies.org/">https://www.ies.org/</a>

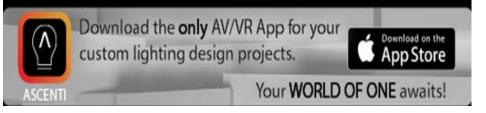
13. **LEDucation Trade Show and Conference Cancels for 2020** - The Designers Lighting Forum of New York and the LEDucation committee announced the LEDucation 2020 Trade Show and Conference, previously rescheduled for August 18–19, 2020, will not take place due to the ongoing impacts of COVID-19. LEDucation 2021 is scheduled for March 16–17 at the New York Hilton Midtown pending improved conditions. <a href="https://leducation.org/">https://leducation.org/</a>

14. **Chicago Buildings to Light Up to Support Essential Workers** - Starting this weekend, as many as 19 Chicago buildings, including iconic structures of Chicago's skyline like the John Hancock Center and the Willis Tower, will light up in support of essential workers, first responders, and front-line healthcare workers. The initiative is the latest in BOMA/Chicago's Illuminate Chicago Lighting Program, an initiative that helps Chicago buildings coordinate to show support for charitable causes and encourage "greater consistency in lighting across downtown Chicago." The Light It Up Blue for Essential Workers campaign, which will run through May 1. First responders will then be recognized as buildings light up red from May 2 through May 5. https://www.facilitiesnet.com/



A MONTHLY NEWSLETTER FROM AMERLUX®

15. **Ascenti Lighting App Enables Lighting Design with Social Distancing** - An innovative app which combines augmented reality (AR) and virtual reality (VR) has been developed to allow lighting professionals to create designs while remaining safely distant from projects. Using the Ascenti app software, end users, FMs, architects and designers can view and modify custom luminaires in real-time, eliminating the need to visit project sites in person. They can also use the app to show their management and clients what the design would look like in the intended space. US manufacturer Ascenti Lighting says its app is the industry's first to combine AR and VR in one package. It says the platform 'provides a safe and secure solution for architects and designers to keep projects moving forward and meet deadlines during and after the coronavirus health crisis'. The app superimposes their custom luminaires directly onto the live space through their screen. Users can adjust the custom light's size and placement with their fingers to meet their exact specifications before finalizing their specifications. <u>https://www.ascentilighting.com/</u>



16. LRC Issues Guidance on LED Area Lighting Intended to Enhance Safety - The Lighting Research Center (LRC) at Rensselaer Polytechnic Institute has announced the availability of guidance for solid-state lighting (SSL) design in area lighting with the goal of enhancing safety and the perception of safety in parking lots. Researchers discovered that uniformity can be more important than light levels in safe LED-based lighting installation outdoors; that conclusion supports energy and cost savings as well through the possibility of reduced light levels in luminaires that operate for long hours each night. One of the presumed benefits of LED-based outdoor lighting has always been improved uniformity due to the beam control achievable via optics that can go far beyond the reflective chambers used with legacy sources. <a href="https://www.lrc.rpi.edu/programs/energy/pdf/ParkingLot-LightingGuide.pdf">https://www.lrc.rpi.edu/programs/energy/pdf/ParkingLot-LightingGuide.pdf</a>

17. LRC Online Calculator Helps Horticultural Growers Choose Luminaires - It's no secret that indoor farming using LED grow lights can be a costly operation. Among other reasons: As energy efficient as solid-state lighting (SSL) is compared to conventional light sources, the electricity requirements of all those hundreds or thousands of luminaires under the roof adds up. And the lights themselves are not cheap, nor is the installation and optimization process. Now, the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute (RPI) has developed a free online calculator to help growers assess which brand and alignment of horticultural luminaires would be best for their needs, whether the growers are upgrading their facility or installing for the first time. <a href="https://hortcalc.lrc.rpi.edu/instructions/">https://hortcalc.lrc.rpi.edu/instructions/</a>

18. **Get Educated on Lighting Control** - Current stay-at-home regimes resulting from the COVID-19 pandemic has had a significant impact on how the construction industry works, including education, with online distance-education becoming more popular. The Lighting Controls Association is proud to offer Education Express, a free, robust series of courses covering all aspects of lighting control, including technology, application, design, and commissioning. Authored by Craig DiLouie, LC, CLCP, IES; Steve Mesh, LC; and Kevin Willmorth, PE, Education Express courses offer more than 50 hours of learning and education credit. Each course is registered with the AIA Continuing Education System (CES) for Learning Units (LU)/Health, Safety, Welfare (HSW) credits, and recognized by NCQLP for Lighting Education Units (LEUs). All courses are downloadable as PDF files for offline reading and printing. http://aboutlightingcontrols.org/EducationExpress/

19. **IES Presents Germicidal Ultraviolet Disinfection in the Days of COVID-19** - Amidst the current uncertainty of the global pandemic, the Illuminating Engineering Society (IES) has facilitated a special FREE educational program on germicidal ultraviolet (GUV), photobiological basics, carcinogenicity risk, UV-C lamp sources, relevant research, and more. Participants viewing this entire program are eligible to receive up to 4 IES Continuing Education Units (CEUs). <u>https://www.ies.org/</u>

- DATE: Thursday, May 7, 2020
- TIME: 11:00 am ET 3:00 pm ET
- COST: FREE for all attendees



A MONTHLY NEWSLETTER FROM AMERLUX®

#### Global LED Market Observer:

20. Lockdown Cuts Lighting Industry Activity by 55 Per Cent in UK - The cost of the lockdown on the UK's lighting sector was spelled out this morning in an industry report which revealed that overall activity is down by 55 per cent. The number tallies with figures recently reported to WEEE compliance bodies and component manufacturers supplying manufacturers. The stark calculation was the headline in a Lighting Industry Association survey of its members conducted during April. It reveals that lighting businesses are running at a capacity of around 45 per cent compared to that before the government's lockdown to reduce the rate of infection of the coronavirus. The report also reveals that approximately 44 per cent of staff are currently furloughed under the UK government's Job Retention Scheme which funds 80 per cent of employees' salaries. https://www.luxreview.com/2020/04/17/lockdown-cuts-lighting-industry-activity-by-55-per-cent/

21. **China Government Issues Subsidies to LED Companies** - Chinese LED companies including chip makers Sanan Optoelectronics and HC Semitek and LED packager MLS reported that they have received subsidies from the government. Despite the continuously affecting coronavirus epidemic, the Chinese government does not stop its cash support to its domestic business. The government also request manufacturing sites to fully resume work even though many workers still have difficulties returning to their position. In March, the work resumption rate in China was around 50-60%, estimated LEDinside. With increasing subsidies from the Chinese government and decreasing demands in the end market, oversupply in the LED industry might continue despite the production slowdown. <u>https://www.ledinside.com/news/2020/4/led\_subsidies</u>

22. AquiSense Launches UVC LED Surface Disinfection System to Defeat COVID-19 - UV LED technology expert Aqui-Sense Technologies announced the launch of the PearlSurface 24G9<sup>™</sup>, one of the first UVC LED surface disinfection products designed for health care applications such as reuse of N95 face mask and other PPE. According to AquiSense, the new product PearlSurface 24G9 can deliver high UV exposure up to 1,000 mJ cm-2 in less than 20 minutes and offer consistent irradiance distribution over complex surfaces. The system can start operation instantly and is mercury free. <u>https://www.ledinside.com/</u> products/2020/4/uvc\_led\_aquisense

23. **8 Effects of the Crisis on the Lighting Sector by Ray Molony** – The lighting industry, already in the throes of a painful adjustment to a post-LED world, has been thrown into further turmoil by the Covid-19 pandemic. predicts eight ways the crisis could change the sector. Shuji Nakamura's invention of the blue LED in 1993 swept away many of the lighting industry's most treasured certainties: a high barrier to entry, the lucrative replacement lamp market, significant product differentiation and, crucially, healthy profit margins. For most of the 2000s, CEOs and executives have been scrambling to restructure their businesses to reflect the new reality. Much of this re-engineering was reactive, painful and incomplete. Already it's painfully clear that the covid-19 crisis of 2020 will make a more dramatic and longer-lasting impression on the sector than Nakamura's discovery almost 30 years ago. Ray Molony predicts eight of the most immediate effects at: <u>https://www.luxreview.com/2020/04/14/8-effects-of-the-crisis-on-the-lighting-sector/</u>

24. **Nichia Extends UV-C LED Product to Support Evolving Markets** - Nichia is aiming to extend its dominance to the UV market following its impressive showcase at the recent RadTech 2020 conference and exhibition in Orlando, Florida, USA. The company's latest solutions remain ideal for curing applications, but an extended portfolio is of particular benefit, as UV is known to be incredibly effective in killing viruses, bacteria, fungi and protozoa. Nichia is extending its offerings to a new wide range of both SMD and COB LEDs. Additionally, Nichia's portfolio is now being bolstered by the 2019 introduction of its 280nm Deep UV / UV-C LED. UV light technology has momentum and is a hot topic in the industry, as the light emitted kills biological impurities. In particular, LEDs in the UV-C band promise to revolutionize sterilization and disinfection, and could bring safer conditions to medical facilities – much needed in the current global environment. Medical equipment OEMs can benefit from UV-C technology as it delivers infection prevention and control in portable devices. https://www.ledinside.com/products/2020/4/nichia\_uvcled



A MONTHLY NEWSLETTER FROM AMERLUX®

25. Increased Demand for Disease Prevention Products Causes Overall Shortage Across Entire UV-C LED Supply Chain - According to the latest report by the LEDinside research division of TrendForce, the demand for UV-C LED (wavelength 280 nm), a type of LED with disinfection/sterilization properties, has skyrocketed since the Lunar New Year, in turn causing massive shortages across the entire supply chain. Given the extreme shortage of UV-C LED chips, LED package suppliers looking to place orders for these chips need to exercise caution when setting chip specifications; these suppliers may also need to bear the risk of possible chip shortages. The current shortage in the UV-C LED market has led to an adjustment to UV-C LED chip quotes, in turn resulting in purchasers being unable to procure chips even with at high bid prices. TrendForce thus projects the UV-C LED packaging market revenue to reach 60% CAGR during 2019-2024. <a href="https://www.ledinside.com/node/31274">https://www.ledinside.com/node/31274</a>

26. Horticulture LED Lighting to Support Urban Farming - Panic buying has been reported in many countries during the coronavirus crisis. A report of Thomson Reuters Foundation pointed out that cities lockdowns across the globe due to CO-VID-19 pandemic has made people to rethink the way they obtain food. Urban farming taking places in rooftops or other spare spaces in the city may be the solution for food supply. Horticulture LED lighting can thus become a critical supporting equipment for household or community farming applications. Urban farming could be crucial for the growing population in cities all over the world. According to the forecast of the UN, more than two-thirds of the world population will live in cities by 2050. <a href="https://www.ledinside.com/news/2020/4/urban\_farming\_ledlighting">https://www.ledinside.com/news/2020/4/urban\_farming\_ledlighting</a>

27. How a New Energy Contract Can Fund an LED Upgrade - A ESSEX-BASED firm has come up with a novel concept for funding an upgrade to LED lighting. The Leerie Energy Fund links the award of an energy contract with the installation of low-energy lighting, with the 'commission' for the award of the account used to pay for the project. Leerie decribes itself as 'an energy reduction business' focused on lighting. It negotiates energy contracts with suppliers on behalf of clients and then also designs, supplies and installs low-energy lighting. <u>https://www.luxreview.com/2020/04/02/how-a-new-energy-contract-can-fund-an-led-upgrade/</u>

28. Acuva Suggests the Possible UV Dose to Diminish the Novel Coronavirus - Acuva, the Canada based UVC LED water disinfection solution provider, shared professional understanding about how much UV radiation is required to deactivate the novel coronavirus and how UVC LED technology may support the disinfection process. Dr. Babak Adeli, Director of R&D at Acuva Technologies, explained the ways of novel coronavirus (COVID-19 virus/SARS-CoV-2) transmission and its reaction to UV radiation, showing the possible approach of using UVC LED to diminish the virus. Based on the available data in the open literature, it is suggested that the COVID-19 virus can likely be categorized with SARS-CoV-1 under mildly resistant viruses to UV radiation, similar to the Influenza virus, Hepatitis virus, and MS2. It would then require a UV dose greater than 40 mJcm-2. According to Adeli, achieving such UV dose should be possible on the surface by extending the exposure time. <u>https://www.ledinside.com/</u> news/2020/4/acuva\_uvled\_covid19\_disinfection

29. **Signify Executives Take 20% Pay Cut, Ask Same of Employees** - In its ongoing adjustments amid the coronavirus pandemic, Signify's leadership and supervisory boards are taking a 20% pay reduction for three months, and the company has asked employees worldwide to do the same while also reducing employee workload by the same amount. Executives will continue to work at full speed. The measures started on Apr. 1, and run through the end of June. The Eindhoven, Holland-based company has also delayed merit pay increases until Oct. 1, and has implemented a hiring freeze until further notice. <u>https://www.ledsmagazine.com/</u>

30. **Signify Throws Its Weight Behind D4i Interface** - Signify says it has upgraded in premium drivers to D4i, allowing customers to easily exchange different IoT nodes or sensors on luminaires. The company, which contributed to development of the specification, has added it to its portfolio of compact Philips Xitanium Sensor Ready Xtreme LED drivers for outdoor applications. The D4i certification programme is designed to deliver standardisation in the market, drive wider adoption of IoT connectivity in lighting and aid smart city or building projects. It makes it attractive and easy for customers to switch to connected lighting or install Connect Ready luminaires with D4i certified drivers now, and upgrade to connectivity later. <a href="https://www.luxreview.com/2020/04/28/signify-throws-its-weight-behind-d4i-standard-interface/">https://www.luxreview.com/2020/04/28/signify-throws-its-weight-behind-d4i-standard-interface/</a>



### ENERGY OBSERVER A MONTHLY NEWSLETTER FROM AMERLUX®

### Monthly Feature:

### Lighting is Essential... https://www.nema.org/news/Pages/Lighting-is-Essential.aspx

ROSSLYN, Va.—The National Electrical Manufacturers Association (NEMA) and Members of its <u>Lighting Systems Division</u>, support the determination that electrical products/systems and medical imaging devices are "essential manufacturing" pursuant to the Department of Homeland Security's (DHS) guidance on Identifying Critical Infrastructure for purposes of reducing the public health threat presented by the coronavirus pandemic. Furthermore, this determination should be uniformly adopted by policy-makers at all levels of government.

This determination enables dedicated Member companies to support critical efforts to ensure the safety and security of all citizens while limiting the spread of this pandemic. Further, we support the determination that lighting and lighting system manufacturers are essential businesses and request that all government agencies explaining the details of "stay-at-home" policies explicitly include all lighting and lighting systems device manufacturers to avoid delays in meeting the public's need for these essential goods supporting critical infrastructure as well as the public's interest in a safe environment.

The electrical industry must provide properly lit, safe, and secure environments for medical workers, grocery stores, gas stations, banks, distribution centers, homes, and all other essential industries. Outdoor lighting is required to illuminate critical infrastructure and locations with national security implications including government facilities, roadways from interstate highways to municipal and local streets, bridges, toll plazas, utility substations and field offices, border crossings, security checkpoints, docks, transit stations/subways, parking garages and lots at essential locations. NEMA lighting company Members provide lighting for every indoor and outdoor environment, and any disruption in the supply chain of critical needs must be avoided. As suppliers that support essential infrastructure sectors, it is self-evident that lighting and lighting systems manufacturing, and its associated supply and distribution chain, is necessary to produce and distribute lighting to these businesses.

The lighting manufacturing sector has already taken proactive steps to assist in this current crisis. As facilities are being converted into medical centers, and factories are retrofitting to create emergency supplies, lighting and lighting system manufacturers are quickly supplying, through an existing supply chain, the necessary and specific products to support these efforts.

The supply chain for "essential manufacturing" must also be considered "essential". Manufacturing of components/raw materials used in essential manufacturing is necessary to keep up with demand. Distribution channels for essential goods get them to the front lines of defense including hospitals and emergency service centers. To ensure an uninterrupted supply of these critical goods, component/raw material suppliers and those distributing essential goods need to also be considered essential manufacturing and essential business.

As policies are being developed, we recommend as an essential reference the U.S. Department of Homeland Security guidance entitled "MEMORANDUM ON IDENTIFICATION OF ESSENTIAL CRITICAL INFRASTRUCTURE WORKERS DURING COVID-19 RESPONSE" that should be included in Executive Orders. DHS defines critical manufacturing as "Workers necessary for the manufacturing of materials and products needed for medical supply chains, transportation, energy, communications, food and agriculture, chemical manufacturing, nuclear facilities, the operation of dams, water and wastewater treatment, emergency services, and the defense industrial base." None of these critical businesses can operate without the lighting system devices and products produced by NEMA Member lighting companies, and this clearly identifies the need for continuation of lighting manufacturing.

