

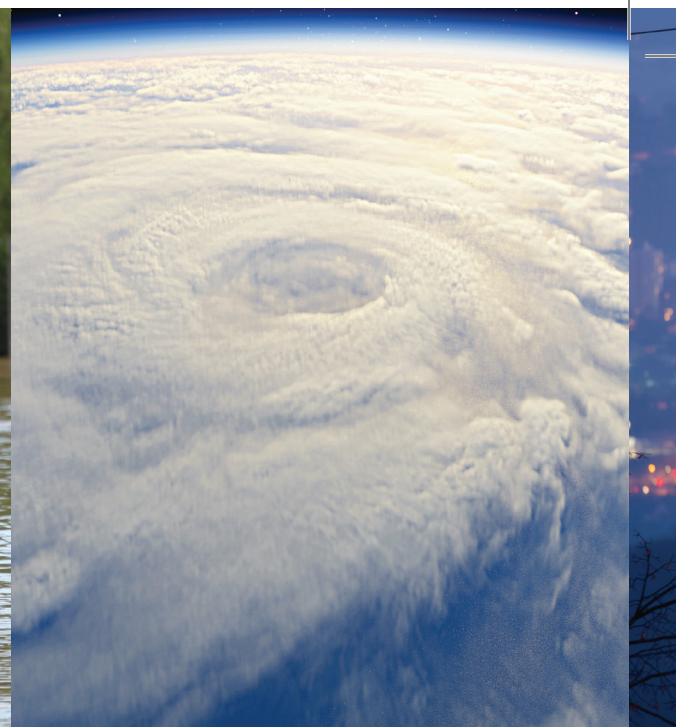


# DON'T LEAVE YOURSELF **IN THE DARK**

**3 reasons** why industrial light sticks should be  
a part of every community's emergency planning.

Cyalume Technologies, Inc.





**Emergency management plans** at state, county and city levels are critical to the well-being of any community. Since 1980, the occurrence of weather-related disasters alone has increased more than 230%. FEMA has made 146 major disaster declarations in just the last two years – more than one a week.<sup>1</sup> Planners cannot discount the possibility of other emergencies unrelated to weather.

But planning can be prohibitively complex.

First, planners must contend with potentially staggering numbers of organizations and governments with whom to interface. Consider Los Angeles County, which contains 88 cities and must be prepared to work with dozens of outside organizations, including the Red Cross, FEMA and the National Guard, in the event of a disaster.<sup>2</sup>

Then, planners must dive into a seemingly bottomless pool of considerations. FEMA's "Comprehensive Preparedness Guide 101"<sup>3</sup> – which is intended to serve as a guide to creating a custom Emergency Operating Procedure (EOP) – lists 26 separate functional areas that must be considered, like transportation, fire-fighting, search and rescue, and public security. And that's before you get the hazard-, threat- and incident-specific functional areas.

## SO, WHEN OPTIONS COME ALONG THAT CAN BOTH ENHANCE AND SIMPLIFY EMERGENCY PLANNING, MOST PLANNERS TAKE NOTICE.

This article is going to shed light on an aspect of emergency planning that's not even listed as an independent functional area by FEMA: emergency lighting. Specifically, we're going to address how industrial-grade light stick devices can improve most emergency plans.

After all, out of 26 listed functions, zero can be properly executed if emergency managers, first responders, police, firefighters, health care workers and others lack good, reliable lighting.

## 01

**EMERGENCY LIGHTING****MUST BE PART OF ANY EMERGENCY RESPONSE PLAN**

There are just three grids in the lower 48 states – east, west and Texas – with just 12 points of connectivity among them. The threat of catastrophic power loss is quite real: “I am surprised it hasn’t already happened,” says Benjamin Sovacool, senior researcher for energy security and justice at the Institute for Energy and the Environment at Vermont Law School, told *Emergency Management*.<sup>4</sup>

With some 160,000 miles of high-voltage lines, 5 million miles of distribution lines, and tens of thousands of separate pieces of equipment in the U.S. energy grid, potential points of vulnerability abound. As The Wall Street Journal notes, “It is difficult to imagine hardening so massive a structure against random, natural disturbances; it is almost inconceivable that it could be hardened against deliberate and intelligent attacks.”<sup>5</sup>

And the interconnectedness of the power grid means even a single sustained failure could affect huge numbers. The consequences should give any emergency planner pause.

“As law enforcement knows, dark neighborhoods are more vulnerable to crime,” writes Emergency Management. “First responders have to keep order, but they also must be aware of the profound social consequences that will play out as the background to their efforts. Even if citizens are not running riot in the streets (and they may well be), there still will be new and often unprecedented challenges to order.”<sup>6</sup>

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# 02

## LIGHT STICK DEVICES CAN

## MEET A BROAD RANGE OF NEEDS

Emergency lighting is crucial; but not all emergency light solutions – which range from flashlights to generator-backed lights to military-grade light stick devices – are equivalent. Planners must carefully evaluate the emergency light source against specific needs.

For example, emergency lights may need to last through prolonged blackout conditions, survive a variety of environmental conditions, and potentially endure years of storage – yet they must be fully, optimally functional at a moment's notice. Here, we're going to spotlight the ways in which light stick devices can fill usability and functional gaps other light sources can miss. Note that we're talking about industrial light sticks designed for commercial and military applications, not the weak glow sticks from the party store.

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### SEARCH AND RESCUE

Highly portable lights need to be distributed quickly. Flashlights are common here, but they can go missing or fail. Light sticks work well too: they're visible from 360 degrees from a distance, while also illuminating a broad area.

### DIRECTING TRAFFIC

Easily visible but not blinding, these lights can help emergency responders direct traffic; in fact, different colors could be used creatively to ease traffic flow.

### CROWD CONTROL AND PERSONAL LIGHTING

It can help to distribute hand-held lighting devices to individuals to ease crowd control, calm anxiety, and ease evacuations. In fact, hotels routinely hand out personal light stick devices during power outages. They help put people at comfort, according to the Four Seasons' Tiffani Cailor. Light sticks are ideal: they can be obtained at quantity inexpensively, pose no fire hazard, and require neither batteries nor maintenance.



## IN AN EMERGENCY, UNPREDICTABLE CONDITIONS ARE GOING TO PLACE A BROAD RANGE OF DEMANDS ON THE EMERGENCY LIGHTING USED.

### FIRST RESPONDERS

First responders are the people who must keep working during a power outage or emergency situation. They need reliable, flameless and waterproof lights that are bright enough to work on broken machinery and injured people, so that responders can get their job done safely, indoors and out.

### TACTICAL RESPONSE

Police and SWAT teams already routinely make creative use of light stick devices. They can also be used to designate spaces that have been cleared, or to illuminate rope and rescue ladders

While flashlights definitely have their place, they alone are insufficient to meet all needs. Other emergency light sources should always be part of the EOP, and industrial-grade light sticks should top that list. They can be stored for years on end and then still work with a level of reliability that completely outshines flashlights. Consider:

- |                    |   |
|--------------------|---|
| <b>Storage:</b>    | Unlike batteries that lose power and corrode in storage, light sticks endure flawlessly for years.    |
| <b>Parts:</b>      | Relying solely on chemistry to produce light, they contain no mechanical or electrical parts to fail. |
| <b>Duration:</b>   | A single light stick can work for up to 24 hours, some times even longer at diminished brightness.    |
| <b>Brightness:</b> | With devices as large as 15", industrial light stick devices emit light that rivals flashlights.      |
| <b>Hardiness:</b>  | Light sticks can weather adverse environments, including extreme temperatures and water.              |
| <b>Mobility:</b>   | These devices can easily fit in the hand or slip into a pocket or bag, with negligible weight.        |

To be clear: light sticks should not necessarily edge out other emergency light solutions. Rather, planners must simply account for the full range of needs an emergency situation might dictate and make sure they have an appropriate solution on hand. Industrial light sticks are an excellent part of any emergency plan.



# 03

## PREPARE IN ADVANCE

STOCK UP BEFORE THE  
LIGHTS ARE NEEDED.

Whatever solution you choose, do it before you need it. By the time disaster strikes, it will be too late. And even if you don't need them for years (hopefully), that's okay: light stick devices will last up to half a decade and still function at full force at a moment's notice.

Sometimes communities will luck out. Light sticks, for example, proved to be helpful during both Hurricane Katrina and Superstorm Sandy, just to name a couple of events – but Cyalume (the designated manufacturer of light stick devices for the U.S. military) just happened to be in the right place at the right time to deliver trucks of light sticks to local first responders and shelters. Not all emergency planners will be able to count on delivery trucks already being en route when a disaster strikes.

And making sure you have a solution at hand is key to successfully navigating any emergency event.

For example, in the aftermath of the 2013 Boston Marathon bombing, Boston was ready. James Baker, the president of security consultancy Cytel Group, points out that the city

of Boston had rigorously prepared itself for any emergency. ““They invested a lot of time and energy in getting ready for something that they never thought would happen.””

The result? “Everything that you saw happened within seconds of the explosion.”

However you choose to address your emergency plan's lighting needs, don't wait. Light sticks ordered today will be good for half a decade, during which time FEMA may declare well over 300 more disasters, if the past rate continues.

Make sure you're prepared, in case you're one of them.

## REFERENCES

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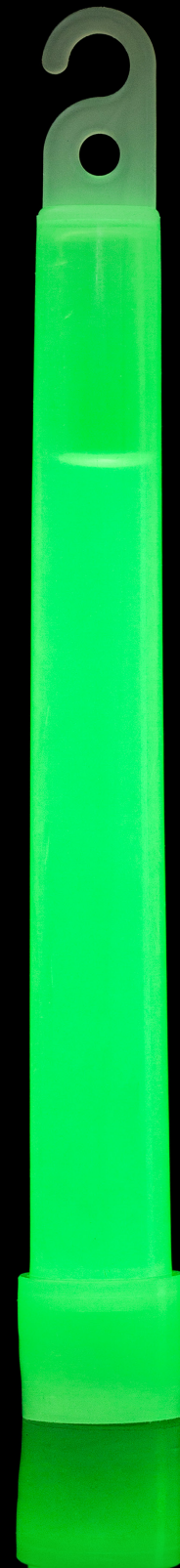
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