LONG ISLAND

Remembering the 2003 blackout, 15 years later

The largest power outage in U.S. history affected 50 million people in the Northeast, the Midwest and Canada, and led to changes that aim to prevent such problems in the future.

A Nassau county police officer tries to direct traffic during rush hour on Aug. 14, 2003, at the intersection of Old Country and Glen Cove roads during the blackout. The outage created problems for Long Islanders commuters. Photo Credit: Newsday / Paul J. Bereswill

By Mark Harrington
mark.harrington@newsday.com
Updated August 13, 2018 9:26 PM

On a muggy summer afternoon 15 years ago, former LIPA chairman Richard Kessel was on the phone with then-trustee Howard Steinberg when the lights went out at the power authority's Uniondale headquarters. Kessel knew the building to have a buggy electrical system, but realized it was a bigger problem when Steinberg, who was in his Manhattan office, reported his lights went out, too.

"I said, 'Howard, I've got to call you back,' " said Kessel, who Monday recalled the "chaos" that ensued following the nation's biggest blackout on Aug. 14, 2003. Traffic lights didn't work, and cars backed up on roadways. Subway cars stopped mid-tunnel. The outage left nearly 16 million New Yorkers in the dark for at least a day. Some, rattled less than two years after the 9/11 attacks, suspected terrorists had taken down the grid. "People had no idea what was going on," Kessel said.

On the 15th anniversary of the outage that affected 50 million people across the United States, from Ohio to the East Coast and southern Canada, officials and experts say much has been done to prevent a repeat performance, though new challenges loom. A new federal agency was created and given enforcement powers to improve reliability and redundancy, and local grid operators were given the task of enacting and monitoring those improvements.

In 2003, the trouble began when power lines drooped onto tree limbs in the Cleveland area, tripping circuits that led the system to draw large amounts of power from electric lines around Lake Erie to fill the gap. An alarm system intended to alert staff at Akron-based FirstEnergy failed, and cascading blackouts rippled east.

Investigators later reported FirstEnergy could have prevented the outage by monitoring and shutting down power to a limited region.

LIPA, then operated by KeySpan, managed to get the power back on within 26 hours. “We went to work quickly, we started to restore power that night and overnight and into the next day,” Kessel said. Then the investigations began and findings led to some concrete fixes.

Congress authorized creation of the North American Electric Reliability Corp., which in 2005 set standards to prevent a recurrence by mandating computer systems and communications to monitor and respond to outsize power fluctuations, while requiring better tree trimming and system maintenance programs. Grid operators now have more authority to isolate their systems from outage-causing events. And power companies that don’t comply face fines of up to $1 million a day.

“We certainly increased our investment in infrastructure and hardening the system as best we could,” Kessel said. “I think LIPA and PSEG have done a good job at accelerating that,” particularly with the benefit of $730 million in federal funds that were used to harden the system after 2012's superstorm Sandy.

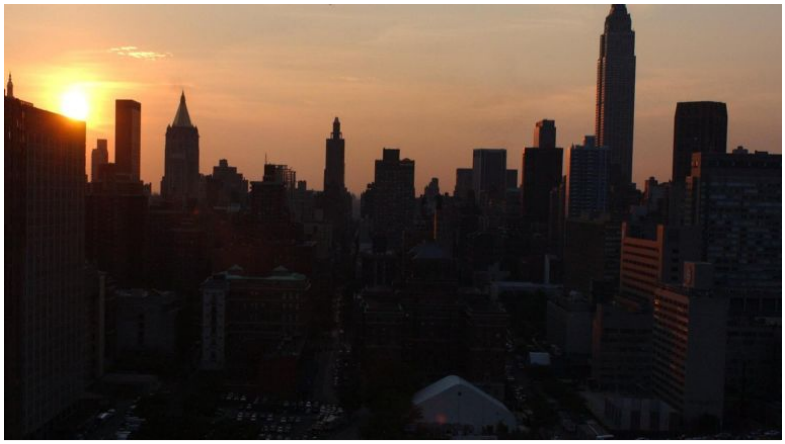
But not everyone’s convinced the nation’s grid is ready for the next big blackout. “We should have learned more and reacted more,” said utility expert Matthew Cordaro, a LIPA trustee and former head of the Midwest grid operator before the blackout. He said deregulation in the late 1990s spurred a flurry of disparate interconnected grids, with bottlenecks that can occur during high-congestion times.

"The network we have today was never anticipated to move power over hundreds or thousands of miles,” he said.

Current system operator PSEG Long Island said systems in place leave Long Island in much better shape. System operators can isolate the Long Island grid if need be, though interconnections can actually promote reliability and power quality, said PSEG spokeswoman Elizabeth Flagler.

The sun sets over Manhattan during the first hours of a widespread blackout through the Northeast on Aug.14, 2003. Photo Credit: Newsday / Daniel Goodrich

The Long Island grid operations center is in “constant contact” with the state grid operator to watch for events that might cause outages, she said, and PSEG has bulked up infrastructure with federal money following



superstorm Sandy, while increasing tree-trimming.

But new challenges like cybersecurity threats and even an abundance of new power sources loom. The North American Electric Reliability Corp. in a statement noted “nation-state adversaries have become a persistent threat to the entire grid.” That, combined with "a new and different resource mix" of power sources, can “create new challenges to bulk power system reliability and security.”

Flagler said there will “always be new challenges,” but PSEG is working to stay ahead of them, noting that despite the influx of sometimes variable solar power and pending wind-power projects, “Long island still has a strong percentage of traditional, fast-start combustion turbine power sources.”

As for cybersecurity threats, she said, “Cyber systems are isolated and access is tightly controlled.”

Atlantic Hardware in Freeport does a brisk business selling batteries, flashlights and radios during the blackout on Aug. 14, 2003. The store itself was without electricity because of the outage. Photo Credit: Newsday / Jim Peppler

But Cordaro said unforeseen threats may hinder even the best-laid plans.

“There will be complications here, because of cybersecurity threats,” said Cordaro. “People will be wandering around chasing their tails, thinking it’s Russia. It happened in the Ukraine."

By Mark Harrington
mark.harrington@newsday.com