



Newsletter

March 2022

eSource

How Utilities are Adapting to Supply Chain Issues



When lead time on getting a new transformer goes from three months to a year, and a bucket truck now takes twice as long to acquire — two years — versus one — it's not business as usual. Equipment shortages have become a challenge for public power providers all over the country. Here's a look at the problem and how some utilities are changing their processes to deal with it.

Putting Some Wait On

After two years of news about empty grocery store shelves, toilet-paper hoarding, and cargo ships unable to dock for unloading, it's no great surprise that supply chain shortages are impacting the power sector. The wait for equipment varies depending on the location and size of the utility and on the item being ordered.

For Huntsville, Alabama, shortages aren't new or exclusively COVID-19-related. This city of some 215,000 people is one of the fastest-growing in the country. What's in short supply for this booming town? Pad-mounted distribution transformers.

"As soon as shipments come in, we're getting them deployed to keep up with residential and commercial growth," said the utility's president and CEO, Wes Kelley.

"We've grown accustomed to fairly quick turnaround on traditional residential underground facilities, but recently we've encountered dramatically longer lead times, going from a month or two to a year or more for deliveries."

Justin Gibbons, purchasing agent for Denison Municipal Utilities in Iowa, has seen similar problems for more than a year for the town of about 9,000. "We order our transformers at the beginning of the year, and, in 2021, we did not get them until October," he said. Usually, that order takes only a few months. His 2022 order, which was sent to the vendor in September, is projected to arrive in nine months, too.

Steven Cook is senior electrical engineer for Rochester Public Utilities, which serves 57,000 electricity customers in Rochester, Minnesota. He said transformer delivery times now change. "We are provided with regular status reports from our supplier, and it is very common for the expected manufacturing date to push out from the date provided at order placement," he noted.

Continued, Page 2)



Needing Assistance?

Please Contact Us!

Municipal Electric Association

176 W. Logan St. #225

Duane Richardson, IMEA Executive Director

Follow Us!



(Continued, Page 2)

“Fiber-optic cable quoted lead times have gone from four months to more than 12,” said Cook. “We had issues sourcing conduits, cable, terminations, elbows, fuses and other items in 2021.”

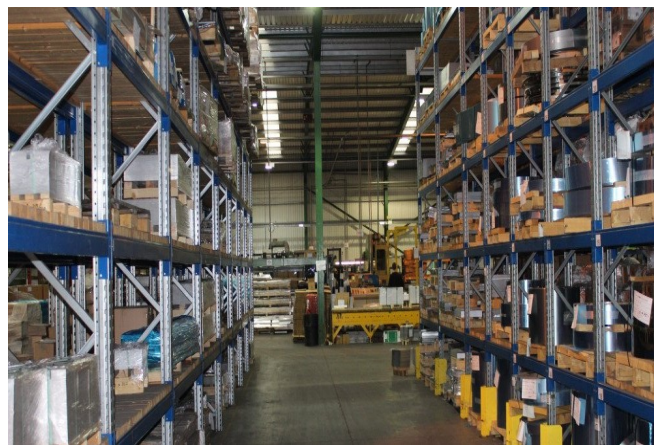
Service-related delays are hitting utilities, too. For instance, Gibbons said he sometimes sends transformers from his town in Iowa to a repair shop in Tennessee and usually gets the repaired transformers back within two months. “We shipped one out this past year and never heard anything about it, so after a while, we called the repair shop. They told us that our transformer was sitting in a warehouse in St. Louis because they didn’t have a truck to pick it up.” The device made it home to Iowa in about four months.

Depleted Supply

Several circumstances are driving the shortages. In the Southeast, part of the strain comes from continuing growth of local communities, like Huntsville. Weather has played a part, too. “We had a really bad hurricane season last year,” said Nathan Mitchell, senior director of operations programs for the American Public Power Association. “A lot of emergency stock was used up.”

Mitchell added that the hurricanes that hit the South and Southeast weren’t the only culprits, as floods and wildfires affected supplies in other parts of the country, too.

This happened at the same time manufacturers struggled to get the specialized “core” steel used in transformer production, much of it coming from overseas. There’s also competition for that steel from the auto industry, and some of the steel plants and manufacturing facilities are grappling with labor shortages. “The transformer manufacturers can’t keep up with typical demand. With extra transformers being required to restock emergency supplies, it’s amplified the problem,” Mitchell said.



Transformers aren’t the only critical equipment in short supply. “Even getting a pickup truck is going to be a struggle in 2022,” Kelley said, “and there’s about a two-year lead time on bucket trucks right now.” That’s due to the chip shortage, he explained.

Gibbons has seen delays with equipment made of plastic, and so has Kelly. “That problem seemed to be attributed to the Texas freeze last winter,” Kelley said. “With so many facilities in Houston, that industry was heavily impacted.”

Along with delays in receiving materials and equipment, utilities are facing rising costs. “The cost of transformers is going up two to three times what it typically would be,” Mitchell said.

“Without knowing how long the increases will last and if there are going to be any offsetting price decreases in other items required to provide service, it is too early to tell what the rate impacts will be,” Cook said.

Kelley added that cost impacts won’t be immediate. “We won’t pay the increased cost until we actually get the material,” he explained. “When the material comes, we’ll pay the higher prices, but because we are getting less material, we’re probably not spending all of the money we had budgeted now.” In other words, cost increases could be mitigated by reduced spending and creative workarounds.

(Continued, Page 3)

Indiana Municipal Electric Association

176 W. Logan St. #225

Needing Assistance?

Please Contact Us!

Duane Richardson, IMEA Executive Director

duane@imea.com / (765)366-5506

Follow Us!



Coping Strategies (Continued)

Utilities know lead times on critical grid equipment has grown considerably, but their customers don't. In Rochester, Minnesota, Cook said his team has made educating developers a priority. "At predevelopment meetings, we inform the developer or project owner of the lead-time issues with distribution transformers," he explained. "For commercial projects, we provide the customer and their engineer or electrician with a load data sheet, and we will not start sizing the transformer until we receive it back."

Cook added that the information on the data sheets is similar to what developer electricians need, so it should be available early in the project, giving time for equipment to arrive, provided the developers comply with new processes and don't wait until the last minute to turn in those load data sheets.

Huntsville also educated developers and wound up with what Kelley joked was its own "toilet paper rush." This prompted the utility to put in some new rules and controls. "We won't allocate any transformer to a project until a curb and gutter is already poured at the facility. We don't need a bunch of transformers sitting in the field," he said.

In Denison, Gibbons is educating his crews, making sure people know about the supply issues so they can be proactive in requesting material. He's also taking inventory more often to "stay on top of things." In the past, he said, he'd order some items if his utility was down to a handful of units. "Now, if we get down to 20 items, we should probably be reordering."

The Rochester team has also increased stock levels for the most common sizes of three-phase and single-phase transformers. Huntsville has increased deployment of reconditioned transformers. "Even if these last only half as long as new ones, it's plenty long enough to get us through this shortage," Kelley said.

In addition, Huntsville is less rigid with its bid specifications. "We, like so many municipal systems, go out for bid and take the low bid.

But now we're buying from anyone who meets our bid specs at a reasonable price, low bid or not," Kelley said, adding that his utility will pay more for speedier delivery.

Even Huntsville's transformer specifications are a little more lenient given today's market. "Every utility is very particular in the way the transformer connections are designed because crews are accustomed to certain connectors," he explained. Now, however, the utility will take a transformer with connectors oriented a little differently and make up for it with good training and signage on the equipment.

Other actions public power utilities are taking include:

- Working with mutual aid organizations for tip-sharing and supplies.
- Educating elected officials so that they're not caught off-guard if people bring up the issue.
- Focusing on needs, not wants.

Contacting other utilities directly. For instance, Alabama Power, an investor-owned utility, sold a truckload of transformers to Huntsville after a local official helped connect people at both utilities.

Expanding ties to other utilities and utility types is happening on a national level, too. "Typically, the three trade organizations work to support their own members in times of emergency," said APPA's Mitchell. Now, APPA is working with the National Rural Electric Cooperative Association and the Edison Electric Institute on how to share equipment in a constrained environment.

Mitchell said co-ops, public power utilities, and IOUs often help each other out in a pinch but, given today's long lead times for equipment and low stock of emergency supplies, the trade associations want to be more proactive and have started discussions about putting agreements and processes in place.

He also advises that purchasing professionals revisit contracting details. "We're hearing that distributors are breaking contracts, so we've pulled together legal counsel to help utilities know what should be in contracts and how to negotiate effectively."

Courtesy: APPA/ Reliability

Needing Assistance?
Please Contact Us!

Indiana Municipal Electric Association
176 W. Logan St. #225

Duane Richardson, IMEA Executive Director
duane@imea.com / (765)366-5506

Follow Us!



IMEA Workshop Calendar

2022

January

- 12 Supervisory Development Series: Session One (Mishawaka)
- 26 Excavation Competent Person (Lebanon)

February

- 8 & 9 Supervisor Safety (Lebanon)
- 16 Supervisory Development Series: Session two (Mishawaka)

March

- 9 – 11 Apprentice Top-Out Exam #031918 (Scottsburg)
- 16 Supervisory Development Series: Session Three (Mishawaka)
- 21 – 25 IMEA 612 Intermediate Workshop #032320 (Scottsburg)

April

- 4 - 8 IMEA 613 Advanced Workshop #031819 (Scottsburg)
- 12 - 13 Line Clearance Arborist Certification (Frankfort)
- 25 -29 IMEA 611 Basic Workshop #041921 (Scottsburg)

May

- 2 - 13 IMEA 610 Wood Pole Climbing Workshop #050222 (Scottsburg)
- 24 - 26 IMEA 212 Transformer Theory & Connections (Scottsburg)

June

- 7 - 8 Working it Hot - Insulate / Isolate (Scottsburg)

August

- 22 - 9/2 IMEA 610 Wood Pole Climbing Workshop #082222 (Scottsburg)

September

- 12 - 16 IMEA 613 Advanced Workshop #093019 (Scottsburg)
- 21 - 23 Apprentice Top-Out Exam #100118 (Scottsburg)
- 26 - 30 611 Basic Workshop #092721 (Scottsburg)

October

- 11 - 13 IMEA Annual Meeting & Vendor Expo (Blue Chip Casino, Michigan City, IN.)
- 25 - 27 IMEA 212 Transformer Theory & Connections (Scottsburg)

Register Today! www.imea.com / workshops



Jobs in Public Power



Public power is more to communities than just an essential utility. It is a source of unique and fulfilling career opportunities in your local community. Employees make a difference by serving their own neighborhoods and families. Talented high school, college and technical college graduates—and even technology, environmental and public service professionals—will find that competitive salaries aren't the only this attractive about careers in public power.

To post a classified ad to our jobs in Public Power page. Please email text to janel@imea.com.

2022 IMEA Annual Meeting & Vendor Expo

~ October 11 - 13, 2022 ~



Blue Chip Casino
Hotel & Event Center
Michigan City, IN.

Registration Coming in May 2022!

LEADERSHIP • INNOVATION • COLLABORATION

Do you have important news or photos that you would like to share in our bi-weekly newsletters? Please email all news and photos to janel@imea.com

INDIANA MUNICIPAL ELECTRIC
ASSOCIATION

176 W. LOGAN ST. #225

NOBLESVILLE, IN. 46060

765.366.5506 | imeainfo@imea.com