
Henderson Municipal Power & Light Case Study



About

Henderson, Kentucky is the county seat of Henderson County, Kentucky, with 28,000 residents and a rich history. Settled along the banks of the Ohio River in Western Kentucky, Henderson has both a beautiful and thriving downtown waterfront district along with quiet parks with miles of hiking trails, cabins, and a nature center. Henderson was an early home of John James Audubon, whose fame led to the formation of Audubon state park to celebrate the birds and wildlife around which he worked.

Henderson Municipal Power & Light (HMP&L) is a municipal-owned utility serving the residents of Henderson for more than a century. HMP&L was formed to build their first power plant to light up the streets of Henderson in 1896. Since then, they have evolved from power generation and distribution to a distribution network that covers every residential and business address. In addition to this, since 1999 they have been providing broadband services to businesses within the city.



hendersonky.org
hmpl.com/history

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infrastructure for a connected world



Company

Henderson (Kentucky)
Municipal Power &
Light (HMP&L)

Country

North America

Industry

Utility

Business Challenges

Developing a Network Operations Center to support community-wide rollout of improved internet service, with a focus on reliability and uptime

Panduit Solution

HD Fusion Splice Cabinet

FiberRunner® Cable
Routing System

19- and 23-inch
2-Post Racks

PatchRunner™ 2
Vertical and NetManager™
Horizontal Cable Managers

HD Flex™ Fiber Cabling
System with Splitter
Cassettes

Fiber Jumpers with
RapidID™ Network
Mapping System

Building for Reliability

Network Operations Center Relies on Panduit Infrastructure to Support Reliable Broadband Internet

The residents of the City of Henderson, Kentucky will soon be receiving a significant upgrade in internet service, thanks to the vision, careful planning, and rapid execution of the HMP&L Fiber team at Henderson Municipal Power & Light. HMP&L Fiber is getting ready to light up the town with symmetrical gigabit internet offered to all 12,000 of their customers. The new service uses XGS-PON, expanding rapidly from their existing business internet service that they have been delivering via Active Ethernet fiber.

Before they could start providing internet service to customers, however, they needed to plan their network operations. Their Network Operations Center, sometimes referred to as a central office or head-end, needed to support high reliability. HMP&L receives accolades for reliability in their electric utility business and it was critical to them that their internet service meets the same standard. Just like residents expect electricity to always be on, broadband internet is now itself considered a utility, and when it goes down, critical business and home functions stop.

HMP&L Fiber reached out to Graybar and the Panduit broadband team to help turn their vision for best-in-class Network Operations Centers into reality. According to Holly Ruser, Manager of Comm/Data Business for Graybar, working with Panduit was a logical choice. "Panduit is one of a few select manufacturers that can provide an all-encompassing solution," Holly says. "Starting with the initial design to the completed project, Panduit's breadth of product including the racking, connectivity, and cable management products made Panduit a perfect solution for this project." The local Panduit broadband team worked with HMP&L Fiber to understand their short-term needs and long-term goals for expansion and helped to configure a solution that fit the vision for their new NOC. "Our team enjoys working with clients like HMP&L because they have a vision for what they need their NOC to accomplish, and we can dive in to tailor our large central office portfolio and deliver an optimum solution for them," said Bill Morris, Sr. Account Executive for Panduit supporting the Henderson rollout.

Panduit Solutions

The solutions Panduit and Graybar offered HMP&L Fiber encompassed the full range of infrastructure needed for fiber and network management. Fiber entering the facility is spliced into Panduit's HD Fusion cabinet. It is then routed to a line-up of 19" and 23" 2-post equipment racks. A FiberRunner® Cable Routing System runs above the equipment racks to provide safe routing for fiber jumpers between fiber breakout enclosures and the Active Ethernet and XGS-PON equipment. Vertical and horizontal cable managers and slack spools provide routing down and within the rack space. HD Flex™ enclosures and splitter cassettes provide management of 1:2 and 1:4 passive fiber splits within the NOC in a reliable, high-density environment.



HD Fusion Splice Cabinet



FiberRunner™ Cable Management System



19- and 23-inch 2-post racks



PatchRunner™ 2 and NetManager™ Cable Management System



HD Flex™ Fiber Cabling System with splitter cassettes



Fiber jumpers with RapidID™ Network Mapping System

The result was a best-in-class Network Operations Center that will support the existing customers today and will scale to eliminate the digital divide, supporting all the residents of the City of Henderson.

"I'm extremely proud of our team and thankful for the support of Panduit and Graybar in making a best-in-class network operations center a reality. Together we have built an architecture that will allow us to provide world class network reliability to our subscribers and scale for the future of HMP&L."

– Chad Kietzman, Fiber Manager, HMP&L



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