

LOCAL NEWS

National Grid sensors preventing outages

Finds issues before they become a problem in Leominster



National Grid is investing in new technology that helps find problems with the electric system before they lead to outages through use of its Early Fault Detection sensors, including an off-kilter insulator. (COURTESY OF NATIONAL GRID)

By **SUBMITTED ARTICLE**

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LEOMINSTER — National Grid is investing in new technology that helps find problems with the electric system before they lead to outages. Early Fault Detection sensors continuously monitor the electric grid for signs that equipment is beginning to fail. By identifying issues early, crews can make planned repairs before customers lose power, with many of the sensors recently being installed in Leominster.

Early Fault Detection sensors continuously monitor the electric system for issues such as deteriorating equipment, emerging circuit phase degradation,

vegetation encroachment and other conditions that could impact reliability and lead to customer outages, according to National Grid.

National Grid has conducted a comprehensive review of underperforming circuits across the Worcester Central Region. Based on historical reliability data and system performance, two circuits in the city of Leominster were identified as strong candidates for deployment of the Early Fault Detection system to help reduce the frequency and duration of customer outages, and the sensors have now been installed in those areas.

“As part of our ongoing work to further improve electric service reliability, we identified opportunities in communities like Leominster where new technologies could help us reduce outages and improve service,” said John Franklin, vice president for network management for National Grid. “Early Fault Detection sensors give us another way to identify potential equipment problems before they become outages. That means crews can make repairs before customers lose power, improving our customers’ experience in the communities we serve.”

More Leominster sensors to improve reliability of customers

National Grid officials said the technology is another example of how the company is modernizing the electric grid while improving reliability and making smarter investments that benefit customers over the long term.

“Customers expect the lights to come on when they flip the switch. Behind the scenes, that takes constant investment and maintenance. Early Fault Detection gives crews another tool to identify equipment problems before they become outages,” said a recent National Grid press release.

“It also helps shift work from emergency response to planned maintenance. That means crews can address issues before they become larger, more expensive problems, improving reliability while helping manage costs.”

National Grid said the technology is especially valuable ahead of severe weather by identifying vulnerable equipment before storms arrive.

Planned maintenance costs less than emergency repairs, they said.

“Finding problems early helps extend the life of existing equipment and reduces costly emergency restoration work. Investing in preventative technologies helps make the electric system more efficient over time.”

Early Fault Detection sensors have a 98 foot accuracy range, said National Grid representatives, so a sensor giving an alert to a problem “tells you there’s a problem within this 2-3 pole range.”

Sensors are positioned every 2 to 2.5 miles.

Other circuits across National Grid’s service territory, including in the Merrimack Valley and North Shore regions, are currently undergoing the circuit selection review process to determine future opportunities for sensor deployment.

Current sensor deployments include Leominster, Athol, Attleboro, Spencer, Harvard and National Grid’s Millbury training lab.