

A SAFE AND RELIABLE POWER GRID

Upgrades to the power grid are pivotal to provide safe and reliable electric service for communities. A robust grid helps to meet customers' digital needs, allows businesses to operate and supports economic growth. One way to strengthen the grid involves installing communication wire (a fiber optic system) that allows utilities to monitor electrical facilities and address power outages more quickly.

This technology benefits customers by:

- Reducing the likelihood of power outages
- Enabling a faster response when outages occur
- Ensuring a smarter, stronger and more secure power grid

INSTALLATION PROCESS

Communication wire and associated equipment help utility operation centers, power-generating facilities and electrical substations share information with each other. The wire has a durable outer casing and includes non-metallic material to keep electricity from flowing through it.

Communication wire installation happens either above the ground or underground depending on factors such as the nature of the project and the terms of existing easements where construction needs to take place.

ABOVE-GROUND (AERIAL) INSTALLATION

Crews install communication wire along high-voltage transmission lines and lower-voltage distribution lines in the utility's right-of-way.

UNDERGROUND INSTALLATION

Crews may use any of the following methods to bury plastic conduits that house communication wire. They determine which method to use based on municipal requirements, soil conditions, proximity to other buried utilities and other factors.

- **BORING:** Involves drilling a hole horizontally below the ground's surface to install the conduits.
- **PLOWING:** Involves pulling a single vertical blade behind a piece of heavy machinery to create a slot in the earth for the conduits.
- **TRENCHING:** Involves using heavy machinery such as an excavator to dig a trench, and then placing the conduits in the trench before refilling the trench with dirt.

WORKING WITH PROPERTY OWNERS/COMMUNITIES

Before Installation: The company communicates upcoming field work in the area and addresses questions and concerns.

During Installation: The company works to limit traffic delays, although occasional road closures could occur.

After Installation: The company works with landowners to address installation-related property damages. This includes reimbursing landowners or restoring property to its previous condition.



AERIAL INSTALLATION



UNDERGROUND INSTALLATION