



Installation of Underground Transmission Lines Disston Line Upgrade Project

Project Overview

Duke Energy plans to upgrade an existing 3.5-mile underground transmission corridor in Pinellas County between the Disston Street Substation in Pinellas Park and the 40th Street Substation in the Disston Heights community. We can avoid the need to place a new line above ground by using an existing underground utility corridor (path), resulting in less overall impact on the community. Once constructed, the new line and associated equipment will be entirely underground and maintained through manholes that lead to underground maintenance vaults that we will install.

This new transmission line will bring a new power source and more capacity to Pinellas County. Upgrading the transmission grid in the county, the backbone of the electric system, will also help make the system more reliable to help shorten and prevent outages during storms that often affect us here in Florida.

Preparing for Construction

The installation of underground facilities is challenging and complex. Approximately 2.5 miles of the path for the new line is located within the road right of way along 40th Street North through several St. Petersburg neighborhoods. The remaining approximate 1 mile of the line is along a CSX rail line. A map of the line's route is on our website at duke-energy.com/Disston.

In advance of the construction and installation of underground lines, field data is being collected and used to prepare for the work. These activities include land surveying and staking, soil sampling, and environmental surveying. Trees, vegetation and other obstructions may need to be removed in some areas to allow for safe access to conduct these activities.

Questions?

Phone: 877.480.2446

Email: disston@duke-energy.com

To learn more about this important project, please visit our website:
duke-energy.com/Disston



BUILDING A SMARTER ENERGY FUTURE®

Construction and Installation

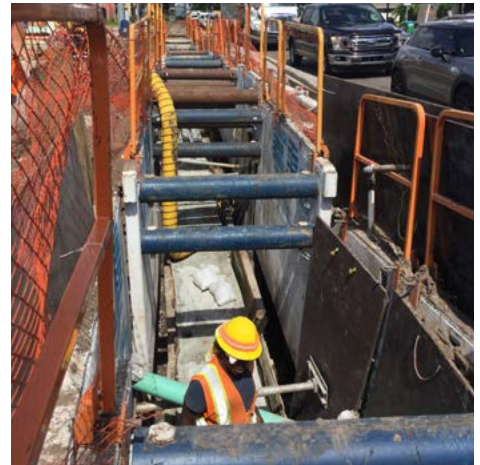
Trenching will be used in most areas to install the new underground line components. In busy intersections and other areas where trenching isn't feasible, the line will be installed using a trenchless method (underground boring).

Trenching will require temporary lane and road closures, and traffic controls will be necessary in some locations, potentially for extended periods. We will provide residents with advance notice and coordinate with them in these areas. Crews may install plating and, in such cases, will work with landowners to provide access to driveways and side streets.



Duke Energy uses PVC conduits to house the electric cables. These conduits are placed in the trench and secured in specialized spacers to maintain their alignment. Concrete gets poured into the trench to the desired depth and, after curing, is backfilled with soil. The roadway is repaved following the installation of the facilities.

The construction will occur across several intersections. In these cases, crews will develop traffic control plans to allow traffic to navigate through the intersection or detour around the work area.



Maintenance vaults measuring 24 feet by 8 feet installed roughly every half-mile will allow access to the underground equipment for inspections and repairs. A crane is used to lower the vault into place. Vaults will be sealed with manhole covers and will not be visible after the completion of construction.

During the construction activities, traffic cones, signage and crews will help ensure safety for the public and workers.



The electric cables get pulled through the conduit in sections between the maintenance vaults. Cable installation uses a system with special equipment, including a cable reel truck at one end and a winch truck at the other.

The final activities include testing before energizing the transmission line and area restoration. Construction equipment gets removed from the work areas, and the roadways are repaved and restored as closely as possible to their original condition.

