

Welcome to the overview of Dominion Energy's construction processes for the Idylwood to Tyson's 230 kilovolt underground electric transmission line project. This project will address load growth in Fairfax County Virginia. At Dominion Energy, we are committed to providing safe, reliable energy to our customers while working collaboratively with the communities we serve.

Pre-construction activities are expected to begin in Fall 2019 and construction activities will last through 2022, with right-of-way restoration continuing into 2023. This 4.3 mile route begins with an open trench transmission line traveling north from Idylwood substation on Shrieve Road toward I-66. Utilizing horizontal directional drilling (HDD) the line will cross under I-66 and I-495 and run parallel to the W and OD trail. The HDD will end near the crossing of W and OD trail and Gallows Road. Here the line will turn north and open trench construction will be utilized. The line will run within Gallows Road, International Drive, and Spring Hill Road until it reaches Tyson substation on Taiko Road.

Load on the existing lines that service the greater Fairfax County area may exceed reliability standards in the year 2022. Once the need for an additional resource was identified, Dominion Energy began consulting with residents, business owners, and other key stakeholders to solicit feedback on our project plans. Informational mailers, open houses, focus groups, and community meetings took place before and during the application process with the Virginia State Corporation Commission, SEC.

The SEC issued its final order approving the project on September 5th 2018. After permitting and real estate activities are complete and before construction begins, crews install new access entrances and roads. During this time surveyors mark the edges of the corridor, the erosion and sediment controls are installed. Surveyors then stake manhole locations and stage their equipment to begin work. Impacted neighbors will receive notice in advance of any work taking place and construction updates will be posted to a dedicated project page.

Dominion Energy will use two common methods to install underground transmission cables. The open trench method and horizontal directional drilling method, HDD. The open trench method begins with installation of manholes at predetermined intervals along the route. Crews then dig trenches along the predetermined route using excavators, trenchers, asphalt saws, and hand tools where necessary. Trenches are short to prevent walls from collapsing and to ensure a safe work environment during construction. Conduits are laid in the trench, surrounded by concrete, at least 42 inches below the surface. The remainder of the trench is filled with thermal backfill and topped with pavement. After the conduit installation is complete, cable is brought in on reels and pulled from one manhole to another. Crews then splice the cable sections together in each manhole.

The horizontal directional drilling method begins with equipment setup at drilling entry and exit points. The initial borehole is made using a hollow drill guided by a skilled operator and advanced navigational technology at a minimum depth of 12 feet below the ground surface. As the drill moves through the earth, drilling mud is released from the head, which transfers the soil cuttings back to the surface. At the surface, a recycling station separates the soil cuttings from the drilling mud so the mud can be reused as drilling continues. After the initial cable path is drilled, a rotating tool used to enlarge the borehole is attached to the drill. This tool passes through the hole multiple times in both directions to enlarge it in small increments until it reaches the correct diameter. A casing pipe is installed into the hole to prevent soil from collapsing on the conduit. The conduit is then pulled through the steel casing pipe. The empty space around the conduit is filled with thermal insulating material. A large reel of cable is brought in and pulled through the conduit. Crews then access the manholes where they splice the conduit together.

After construction is complete the wooden matting used for equipment staging areas and gravel used for access roads are removed and work areas are restored. Thank you for your patience while

we work to complete this important project. We are committed to working safely and courteously in your neighborhood. For more information please visit [dominionenergy.com/tysons](https://www.dominionenergy.com/tysons), contact us by phone at 888-291-0190, or by email at powerline@dominionenergy.com