Turfway Reliability Project



Duke Energy is committed to providing customers with dependable energy. We're expanding our transmission infrastructure – the backbone of the energy system – to power our communities and to help build the smarter, more reliable energy future that customers expect.

About the Project

We're improving our electric system to deliver energy safely and reliably to the customers we serve. Boone County is among the fastest-growing counties in Kentucky and is also considered the commonwealth's fourth most populous county, according to the 2020 U.S. Census. Energy infrastructure upgrades such as the Turfway Reliability Project help to ensure that we meet the capacity needs of our growing communities and their flourishing developments.

Project Need

To accommodate the growth and prosperity of this community now and in the years ahead, Duke Energy's careful and continuous assessment of the electric system has identified a need to install a new substation on Duke Energy property at 7650 Turfway Road in Florence, Ky. The substation will be served by two 138-kilovolt (kV) transmission lines to be built in and out of the new substation. The transmission line portion of the project will undergo a regulatory filing.

Project Description

- Build a new substation at 7650 Turfway Road in Florence, Ky.
- Build two 138-kV transmission lines in and out of the substation.
- Lengths of transmission lines may range from 1 to 3.5 miles.
- The new transmission lines will be supported by steel poles to improve reliability. The steel poles last longer than wood utility poles, plus they require less maintenance and fewer inspections since they're not prone to rot or damage from insects or animals.
- The new poles have an improved design for lightning protection and can withstand higher wind speeds than traditional wood poles. Both attributes benefit the energy grid during inclement weather.
- Build six lower-voltage distribution lines from the substation.

KEY PROJECT DATES:

Aug. 28, 2024: Drop-in open house

Aug. 28-Sept. 28, 2024: Community Input Window

Feb.-March 2025: Preferred route announcement

Summer 2025: Regulatory filing

2025-2026: Surveying & right of way acquisition

2026-2027: Preconstruction activities (such as design and vegetation maintenance)

2028: Construction start

2029: Restoration

*Timeline may change with weather impacts on construction, schedule changes, etc

Benefits to the Community

These investments will help support our customers' growing energy needs now and in the future. They will help:

- Enhance our ability to continue providing safe and reliable energy to homes, schools, hospitals and businesses
- Improve our ability to reroute power during planned and unplanned outages, which also supports restoration following extreme weather events
- Strengthen the resilience of the electric system and allow more flexibility for providing critical energy to the community
- Provide a robust system for supplying and delivering electric service helps to promote continued economic growth

Public Input

Duke Energy invites feedback from the community regarding the transmission line routing studies. We are committed to evaluating all input received during the public comment period as part of our route options selection process. Public feedback is among many factors considered, including overall impacts to property owners, the environment and the community.



Turfway Reliability Project Frequently Asked Questions

View our website and interactive map at duke-energy.com/Turfway



What is a transmission line?

Transmission lines are a system of electrical wires that carry large amounts of energy over long distances. These wires can run from generation stations to substations where energy is converted to lower distribution levels to serve communities. If you've ever heard a reference to the energy grid, that's the network of the transmission and distribution systems. The Turfway Reliability Project will help strengthen the energy grid by allowing more flexibility in providing energy to communities in the region, while also improving the company's ability to reroute power during planned and unplanned outages. This can help support faster restoration following weather events such as extreme summer and winter conditions.

How are locations selected for transmission lines?

The company first identifies potential corridors and seeks feedback from the community. A corridor is a study area that represents the potential path of a transmission line. The specific transmission line equipment will be much narrower and located in easements negotiated with property owners. These specific locations will later be determined following public input and further study. This additional study examines land use, connectivity to other power lines, engineering construction and complexity, and ecological and cultural resources, such as wetlands and historic sites.

When will the transmission lines be built?

We are in the preliminary stages of selecting the preferred routes for the transmission line extensions where we're seeking public input. We hope to finish construction by December 2028.

What will the transmission lines look like?

Duke Energy, like other national utilities, uses steel poles as its standard for transmission projects. Compared to wood poles, steel poles are more reliable during severe weather events. In addition, they require less maintenance and inspection, which means less cost for customers through electric rates. Pole heights will be determined following engineering design.

Does Duke Energy have the necessary land rights to build these new transmission lines?

Once we select the preferred route for the new transmission lines, we will negotiate with landowners to obtain the required easements – or land rights – for the new transmission lines.

What is an easement?

An easement is a legal agreement that gives Duke Energy the right to use, not own, specific portions of land for certain purposes. Easements get recorded on the property deed and remain in effect after properties are sold to a new owner.

How wide is this easement area?

Easement area widths are expected to be 70 feet when the transmission line is adjacent to the road right of way and 100 feet cross country. Property owners will be contacted directly and will take an active role in negotiations if they are affected by an easement acquisition.

What is a substation?

Substations are fenced banks of electrical equipment that convert the high-powered transmission line voltage to the lower levels that serve your homes, schools, businesses and hospitals, or convert electricity from low-to-high transmission levels. The new Turfway Substation will connect to two transmission lines and six lower-powered distribution lines.

Will trees or other vegetation be removed as part of this project?

Trees and other woody vegetation growing near overhead electric lines create safety hazards for workers as well as the public when they are at risk of causing an electrical outage. Duke Energy will be directly approaching property owners if tree removal is needed on their property to safely install the transmission line. Additional obstructions – such as fencing, sheds or playground equipment that interfere with the power lines – may also need to be removed, but not before direct conversations with affected property owners.

What happens during the preconstruction phase of the project?

Many factors are considered when building a new transmission line. Part of this phase involves gathering information about the project area to properly design the project. Survey crews will stake the easement area. Environmental specialists will research the transmission corridor to determine how to minimize environmental impacts during construction. Crews will identify the best access for construction. Soil borings – which involve a collection of soil samples – will be conducted to examine the environmental conditions and strengths of the soil in the easement area. This helps engineers determine the appropriate structures to build a strong and reliable transmission line.

What about electric and magnetic fields?

Many studies have examined electric and magnetic fields (EMF) from power lines, household appliances and other devices with an electric current. After decades of research, scientists have not established a conclusive link between EMF exposure and effects on human health. You can find more information on our website at duke-energy.com/pdfs/emf brochure.pdf.



Please call us at 888.827.5116, email MWOhioTransmission@duke-energy.com or visit: duke-energy.com/Turfway