

Virginia

A more reliable grid. New jobs. Cleaner power. Transmission makes it possible.

Every day, millions of people in Virginia rely on the energy grid to power our modern way of life. Thanks to a network of transmission lines that carry energy from where it's generated to where it's used, we're able to heat and cool our homes, keep the lights on at our businesses, get online for work and school, and even charge our vehicles. We rarely think twice about it — until the power goes out. Unfortunately, many of our state's transmission lines were built in the 1950s and 1960s, and were only intended to have a 50-year lifespan. We're way overdue for an upgrade – especially since we'll need a robust transmission system if we're going to hit our clean energy and climate goals.

Upgrading Virginia's existing grid infrastructure will ensure we can all enjoy reliable energy while also bringing thousands of new living-wage jobs to the state, lowering energy costs, and accelerating the clean energy transition.

Transmission Means a Competitive Economy. More Power to Keep Pace With Virginia's Changing Economy

As Virginia's energy demand grows, we need serious improvements to Virginia's transmission infrastructure to avoid energy shortages. Plus, the Virginia Clean Economy Act (VCEA), passed in 2020, mandates top utilities to move to 100% clean energy by 2050. To fuel our economy and meet this goal, we must pursue a regional approach to transmission planning and upgrade the existing grid with grid-enhancing technologies (GETs).

Transmission Means Lower Costs. Electricity Savings for Homes and Businesses

Expanding transmission infrastructure across the eastern US will allow Virginia to tap into lowcost wind and solar energy and cut the average household electricity bill in the East by onethird. That means the **typical household would save \$300** every year on utility costs.



Grid-enhancing technologies, or GETs, are sophisticated hardware and software applications that increase the capacity, efficiency, and reliability of our existing transmission systems. For example, GETs can provide grid operators a real-time view of how their systems are performing, which in turn allows them to react quickly when the grid is under stress. These technologies will allow grid operators to bring more clean energy online with our existing transmission infrastructure, while keeping up with demand and reducing the likelihood of energy shortages to homes and businesses.

Transmission Means Jobs. Thousands of Living-Wage Jobs for Virginians

By some estimates, the U.S. needs to build as many as <u>91,000 miles</u> of new transmission lines in the next 13 years to meet our clean energy goals — which means new high-paying jobs across the country. Here in Virginia, with the right clean energy policies in place, as many as <u>115,000 good-paying transmission jobs</u> could be created in the next 30 years.

By using grid enhancing technologies, <u>we can as much as double</u> the low-cost renewable power we can add to Virginia's grid. Nationwide, grid enhancing technology adoption can save consumers \$5 billion, <u>create 20,000 long-term, high-paying jobs</u>, and displace 90 million tons of carbon emissions - enough to offset all new automobiles sold in a year.

Transmission Means the Lights Stay On. Keeping the Power On When Extreme Temperatures Strike

Each year, more extreme weather causes <u>more power outages in Virginia</u>. With extreme heat on the rise, more people will take shelter indoors and crank up the air conditioning — and that means we'll need a grid that can keep up with demand to keep homes and businesses cool. A strong transmission grid will make it easier for utilities to coordinate resources over a wide geographic footprint to help maintain <u>energy reliability</u> and keep the lights on.

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