

GTP Overview Video

Fundamental changes in the energy industry have prompted the need for utilities across the country to modernize their distribution grids.

In Virginia, Grid Transformation has two primary objectives: enhancing grid reliability and security, and integrating distributed energy resources, like solar, wind, battery storage and electric vehicles.

In response, Dominion Energy Virginia is implementing a comprehensive 10-year plan to transform the distribution grid. This plan embraces the changing energy landscape while continuing to provide the reliable service customers expect and deserve.

We are moving forward with a number of approved modernization projects, including Physical and Cyber Security, Mainfeeder Hardening, Targeted Corridor improvement, customer education, and deploying a new Customer Information Platform to improve the customer experience.

The Grid Transformation plan has recently focused on the integration of distributed energy resources, or D-E-Rs, while continuing to address security and keeping the lights on.

Energy flow on the traditional grid was very predictable. It started at a central generating plant, moved through our transmission lines, and into the electric substations in neighborhoods where overhead or underground lines connected residents and businesses alike.

But that's all changing, and very rapidly. The Virginia Clean Economy Act, and Dominion Energy's commitment to net zero are accelerating the growth of solar, so Virginia's distribution grid must be ready.

Energy flow on the grid of the future will look different, requiring additional intelligence and technology to effectively integrate DERs into the distribution system.

- We are modernizing certain distribution substations to enhance our remote monitoring and control capabilities.
- We are installing intelligent devices along our power lines to provide real-time data at strategic locations and send it back to our system operators.
- We will continue to install smart meters for all customers, which will provide essential real-time data so we can optimize the use of distributed energy resources around the clock.
- We are installing systems to process, manage, and use this new data to optimize grid operations, and work to maximize the benefits of renewable energy for our customers.

The result: a grid that is more efficient, modern, and reliable; with new options to improve comfort and savings, like time-of-use rates and energy efficiency programs, so that we can all strive for net-zero emissions.

Modernizing the grid has no quick fix and time is of the essence. We must act now and remain agile; Dominion Energy Virginia is implementing this bold plan on behalf of our 2.6 million customers to meet their needs and expectations and build the grid of the future.