

Our Business For the Future

Innovation

We want to be the driver of change – not its passenger. We have put together a strategy to accelerate the evolution of Dominion Energy on multiple fronts that will provide better service for customers, a strong future for investors, and a sustainable future for the environment.

Creating Change

We are determined to create changes that improve our customers' experience, exceed our stakeholders' expectations and position our company for sustainable, agile and long-term success. We need not only to foresee technological advancements, but to develop them in order to find new and better ways of serving our customers and bringing them value.

Our Strategy:

We are aggressively seeking ways to foster an even more innovative culture, grow and transform the business and enhance the performance of existing assets while highlighting and rewarding the successes we've already had.

How We Performed:

In 2017, we created the position of Chief Innovation Officer. In 2018, we created the position of Vice President — Innovation. We also enhanced our innovation capability by forming a beachhead team consisting of strategists, designers and coaches to foster innovation mindsets and skills. We also created opportunities for innovation through a series of immersive field experiences, employee summits and our first innovation expo. We expanded our innovation tools by launching a company-wide crowdsourcing platform for ideas and began to create environments for rapid testing, prototyping and experimentation.

2018 TARGETS

We will continue to reward innovation to create a culture in which employees are encouraged to experiment. Retaining the attributes that have made us successful, we will place even more emphasis on innovation and customer focus. We are committed to looking out for disruptions to our industry and partnering with start-ups to infuse energy into our employees and processes.

STATUS

In 2018 we enhanced our innovation capability by forming a beachhead team consisting of strategists, designers and coaches to foster innovation mindsets and skills. We also created opportunities for innovation through a series of immersive field experiences, employee summits and our first innovation expo. We expanded our innovation tools by launching a company-wide crowdsourcing platform for ideas and began to create environments for rapid testing, prototyping and experimentation.

Our Business For the Future

Innovation

Continued

Our Strategy

Where We're Headed:

We will place even more emphasis on innovation and customer focus, and are committed to looking out for disruptions to our industry and partnering with startups to infuse energy into our organization. We will continue to reward innovation and build out our innovation capability by involving customers and employees in experimentation, learning by doing, and fostering high-velocity collaboration and knowledge sharing.

Our Commitment:

Dominion Energy is accelerating its innovation strategy even further in 2019, and the employees continue to embrace change. This effort includes doubling the number of crowdsourced business and technical solutions in 2019 (compared to prior year), expanding its innovation accelerator program from the pilot program in one organization to all business units, collaborating with university faculty and students in the states where we operate, and deploying technologies such as data analytics, edge devices, and mixed reality. We are also planning to substantially increase the number of pitch sessions across the company, where employees can present their ideas to broader audiences, and gain exposure to others in the company to bring ideas through the implementation stage. Dominion Energy is committed to seeking out disruptions to our industry and partnering with start-ups to infuse energy into our employees and business processes.



We promote innovation at our company and in our communities by supporting startup accelerators, working with innovation councils, hosting corporate roundtables and partnering with colleges and universities to embrace cutting-edge technologies and ideas developed from their research.

Our Business For the Future

Innovation

Continued

Our Strategy

Driving Change

In 1955, *Fortune* magazine [debuted](#) its list of the 500 largest companies in America. By 2017, [only 60 members](#) of the original list remained. The rest had been replaced by competitors, swallowed up by rivals or rendered obsolete by emerging technology.

A company cannot stand still and hope to remain successful; it must evolve to stay abreast with the changing times. At Dominion Energy, we do more than stay abreast — we drive change forward.

Our [corporate ancestry \(PDF\)](#) includes companies involved in everything from canal navigation and horse-shoe manufacture to streetcar and railway operation. Today we are a leader in the delivery of electricity and natural gas. But changing customer behavior, lower barriers to entry and new technologies and marketplaces are disrupting or upending traditional business models.

While Dominion Energy currently enjoys success, we know a proud history will not guarantee a prosperous future. Progress in the years ahead will not be shaped by the strength of our legacy, but by how well we embrace innovation.

Changes in technology, customer expectations, and competition instill a sense of urgency. Now is the time to embrace new ideas, to improve asset performance, and to create new business opportunities. Our company is moving aggressively to foster innovation: We are developing new platforms to share and implement new ideas, and giving our employees the tools they need to quickly develop solutions to problems or develop new market opportunities. We aim to become nothing less than the energy company of the future.



Drone technology now is used in some areas to help inspect infrastructure.

Our Business For the Future

Innovation

Continued

Our Strategy

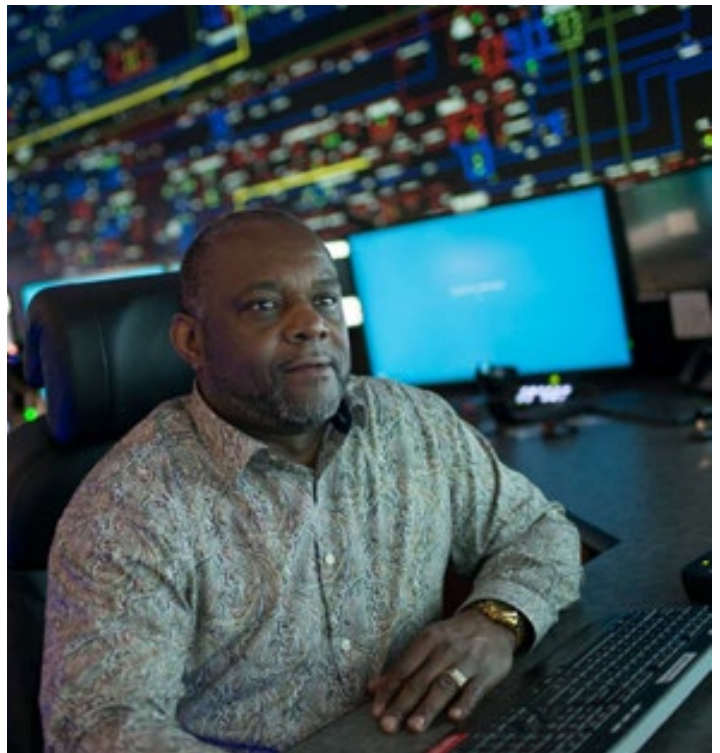
Performance, Growth & Culture

Our approach to innovation has three components: performance, growth and culture.

We want to use innovation to drive excellence. We call this *incremental innovation* — making improvements to existing operations. For example, we can use emerging technologies to drive down costs, improve efficiency and enhance safety. The performance strategy also seeks to simplify and streamline operations, reduce cognitive load and minimize waste. And as new technological threats emerge, performance innovation allows us to respond nimbly and effectively.

The growth aspect of our innovation strategy focuses on creating new and greater value in the face of changing markets. We do this through adjacent innovation (expanding existing products, services and expertise into new spaces) and transformational innovation (developing entirely new products, services and business models). We constantly monitor social, technological, policy and market trends to see threats and opportunities and invest strategically. This growth strategy seeks to create new customer offerings, develop new value chains and potentially foster new revenue models.

The performance and growth innovation strategies require innovative mindsets and behaviors across the entire company. An innovation culture is key. We aim to build permanent innovation capabilities into the organization that allow the company to act with agility and speed to capitalize on new opportunities. We support innovation with collaborative and inspiring work environments, and provide the tools and skills to harness ingenuity.



At Dominion Energy, innovation is key to our culture.

Our Business For the Future

Innovation

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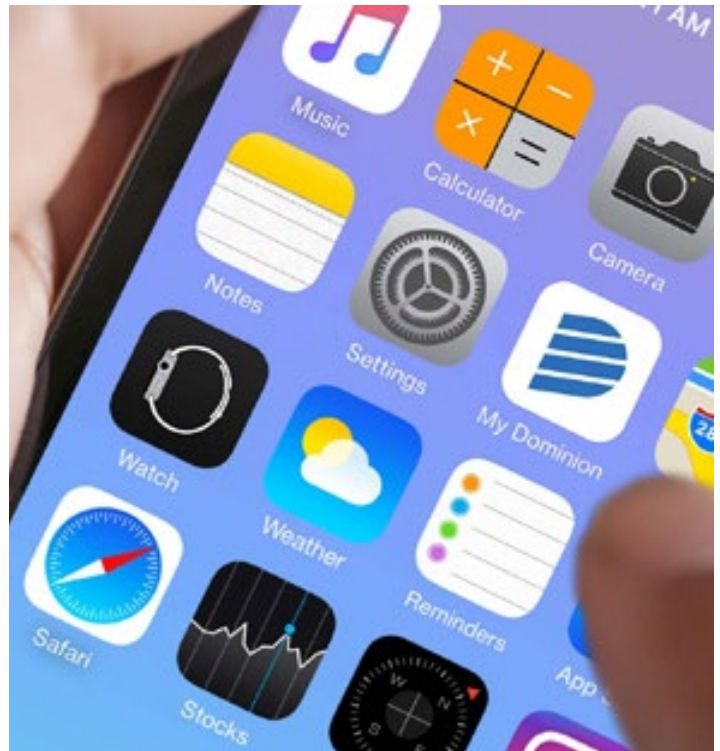
Our Strategy

Getting Down to Work

In 2016 we launched the Chairman’s Excellence Award, which encourages employees to advance innovative ideas. In 2017 we welcomed the company’s first Chief Innovation Officer to lead the cultural change needed to drive innovation. We also evaluated our innovation ecosystem and benchmarked our performance against our peers.

In 2018 Dominion Energy expanded its innovation program by forming a small beachhead team consisting of strategists, designers and four Innovation Guides — one representing each of our four business groups. The team reports to the Vice President — Innovation, a new position. Together, the group fosters a culture of innovation and creative thinking. It does so through workshops where employees are exposed to new mindsets, tools and techniques enabling them to explore and execute upon ideas and concepts, along with events such as Innovation Expos and the 2nd annual Innovation Summit held in June, 2018. The summit provided employees the opportunity to learn about exponential technologies and the effects they might have on our business.

In partnership with the Gas Infrastructure group, the Innovation Guides are piloting an ambassador program through which employees will receive training and exposure to innovative ecosystems so that they can advocate for our program and support their peers’ innovations. The innovation ambassador program is expected to roll out companywide.



Technology helps drive change and innovation at Dominion Energy.

Our Business For the Future

Innovation

Continued

Our Strategy

The Power of the Crowd

Crowdsourcing

In 2017 we launched a new crowdsourcing tool to help collect ideas from our 16,000 employees and build them into workable solutions to business challenges. In 2018 we've expanded this tool across our business groups and continue to find solutions from the crowd.

We are also deploying sprint teams — small groups with focused assignments and dedicated time and resources to develop solutions to specific problems. And we are working with external partners to develop our innovation and knowledge-management platforms.

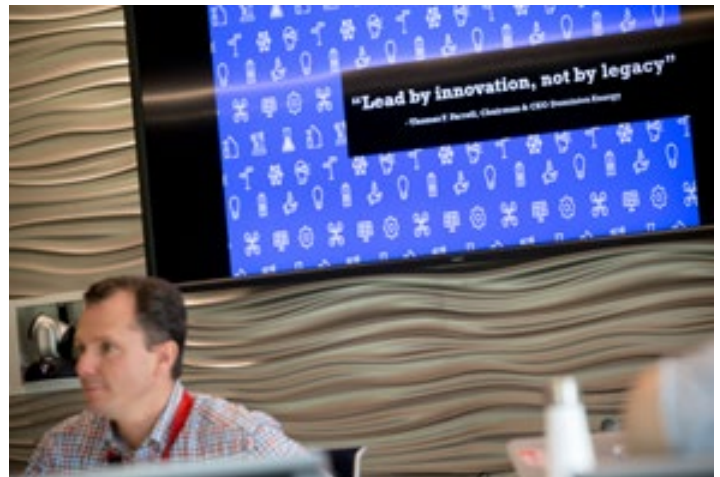
The Power Generation Group has launched Generation Forward, a continuous-improvement initiative that identifies significant efficiency and process improvements to increase flexibility and competitiveness. In its first year alone, Generation Forward identified and implemented more than 225 work processes, leading to sustained savings of more than \$100 million per year.

The Ecosystem

Dominion Energy recognizes that innovation happens not only within our organization, but all around us as well.

The company has teamed up with two other utilities in a venture-capital fund that targets innovation and late-stage startups in the energy sector. Participation in the fund keeps us abreast of technological advances that could benefit our customers or improve our operational efficiency. The fund has successfully supported the development and commercialization of clean-energy technologies, including equipment that boosts the productivity of renewable resources, energy management systems, smart-grid data analytics and cyber and physical security.

We maintain a presence in local innovation communities by supporting startup accelerators, working with innovation councils, and hosting corporate roundtables where we interact with business partners and peers to share insights on



We are shaping our future now by embracing innovation.

Our Business For the Future

Innovation

Continued

Our Strategy

innovative culture and growth. We also partner with colleges and universities to embrace cutting-edge technologies and ideas developed from their research.

We continue to benchmark our customers, partners and peers and their innovation efforts. This allows us to gather insights and intelligence about the changing environment and better prepare ourselves to meet the needs of all the stakeholders in our business. The innovation team regularly meets with outside organizations to learn from their experiences — including peer utilities, technology development organizations both large and small, universities, startup accelerators and utility-excellence organizations. We also collaborate with the U.S. Department of Energy, NASA and government-backed national labs to stay current with the latest research and development initiatives in the energy industry.

Incubating Businesses

Entrepreneurship and business incubation often provide the key to the next big idea. We are continually looking for new ways to shape the future and delight customers. Dominion Energy is a founder of an advanced-technology business incubator that provides startup companies with collaborative workspaces, mentoring, guidance on business strategy and other support services.

The Innovation Center — located north of Richmond in Ashland, Virginia — offers entrepreneurs access to teams of people and resources to develop early-stage concepts into financially viable, freestanding ventures. It also hosts special events and classes to foster creativity and entrepreneurship in the community.

The incubator has helped launch nearly 15 new companies. These include a developer of cutting-edge electric motors and generators; a solar-energy development company; and a biotechnology startup creating new products based on a novel recycling technology.

Our Business For the Future

Investing in Infrastructure

We work around the clock to deliver safe, dependable, affordable and clean energy. The new infrastructure we are building to do so is more advanced, more reliable and more environmentally friendly – to reduce our carbon footprint and that of our customers.

New Projects

Since 2007, Dominion Energy has spent nearly \$30 billion to improve our production, storage and delivery systems, increasing the dependability of the energy flowing to our customers. We will continue investing up to \$4.2 billion annually through the middle of the next decade to provide cleaner energy to our customers over a more robust, secure system of natural gas and electric wires.

Our Strategy:

To construct infrastructure to produce and deliver energy, with a special emphasis on renewable energy projects such as solar generation and offshore wind, smart-grid technology and to continue providing low-carbon natural gas and carbon-free nuclear energy.

How We Performed:

In April, 2018, we brought online the Cove Point liquefaction project in Maryland, which will export natural gas to Japan and India, where it will replace the use of other high-carbon fuels. In August, we sought permission to construct a pilot offshore wind project in the Atlantic. We are investing up to \$4.2 billion annually through the middle of the next decade to provide cleaner energy to our customers over a more robust, secure system of natural gas pipelines and electric wires. And we have begun construction of the 600-mile Atlantic Coast Pipeline in parts of West Virginia and North Carolina to bring American natural gas to people and businesses in new markets that need more of it to support growing populations and economies, to replace higher-carbon fuels and to support intermittent renewable energy from solar and wind.



Cove Point LNG Facility.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

2018 TARGETS	STATUS
<p>We plan to begin construction of the 600-mile Atlantic Coast Pipeline, fully operationalize the Cove Point liquefaction project in Maryland, pursue re-licensing of our carbon-free nuclear fleet and continue investing in renewable energy. We plan to rebuild 120 miles of electric transmission lines.</p>	<p>In April, 2018, we brought online the Cove Point liquefaction project in Maryland. In August, we sought permission to construct a pilot offshore wind project in the Atlantic. We are investing up to \$4.2 billion annually through the middle of the next decade to provide cleaner energy to our customers over a more robust, secure system of natural gas pipelines and electric wires.</p> <p>And we have begun construction of the 600-mile Atlantic Coast Pipeline in parts of West Virginia and North Carolina to bring American natural gas to people and businesses in new markets that need more of it to support growing populations and economies, to replace higher-carbon fuels and to support intermittent renewable energy from solar and wind. In October 2018 we submitted an application to renew the license for Surry Power Station and are working to submit a similar application for North Anna Power Station in 2020. As of mid-year 101 miles of transmission lines have been rebuilt.</p>

Where We're Headed:

We will begin construction of the 600-mile Atlantic Coast Pipeline, re-license our carbon-free nuclear fleet, rebuild 120 miles of electric transmission lines, and continue investing in renewable energy. Through the Virginia Grid Transformation & Security Act, we will harden our electric grid and modernize it with smart-energy technology.

Our Commitments:

Dominion Energy is seeking concurrence from the State Corporation Commission of Virginia with the infrastructure programs including the deployment of 2.1 million smart meters to streamline integration of renewables while ensuring safe, secure and reliable service to customers.

We intend to continue to enhance reliability and resiliency in 2019 by placing approximately 260-290 miles of the most outage-prone overhead distribution tap lines underground.

We anticipate continuing construction of the Atlantic Coast Pipeline to provide reliable natural gas to the region and pursue license extensions for our carbon-free nuclear fleet.

To ensure reliability, we plan to rebuild 90 miles of electric transmission line in 2019.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

State-of-the-Art Systems

Our approach is exemplified by projects like the \$1.2 billion, 1,376-megawatt Brunswick Power Station that entered service in 2016. It quickly became one of the workhorses of the Dominion Energy stable, and will help limit greenhouse-gas emissions.

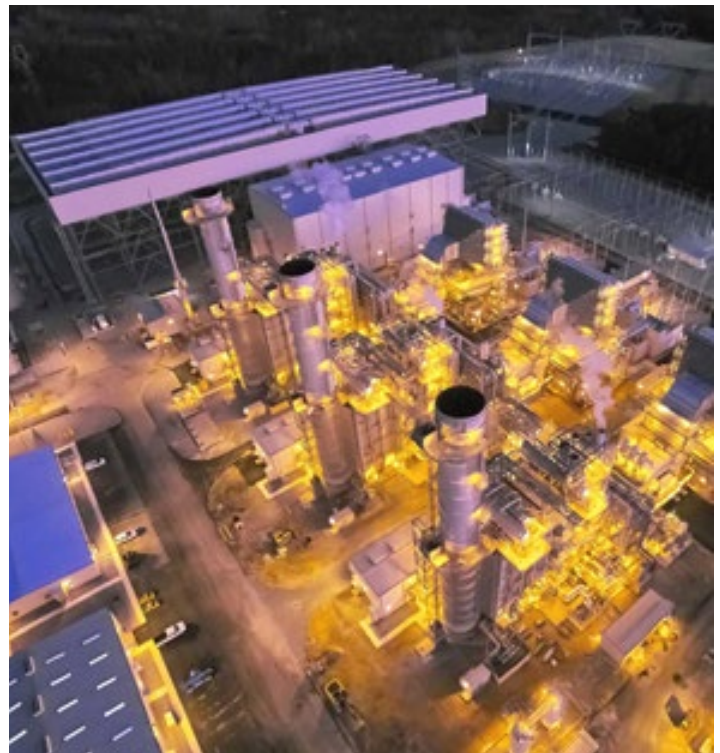
We are also building state-of-the-art natural-gas pipelines and compressor stations that help pressurize and move gas to customers with fewer emissions that contribute to climate change. Much of Dominion Energy's new and planned gas infrastructure provides our customers, gas utilities and power producers a clean, reliable source of energy that both serves their needs and meets environmental goals.

In April, 2018, we brought online the Cove Point liquefaction project in Lusby, Maryland, which has long-term contracts to ship liquefied American natural gas to Japan and India – helping the latter, in particular, reduce its emissions of greenhouse gases.

We are continuing work to complete the 600-mile Atlantic Coast Pipeline, re-license our carbon-free nuclear fleet, rebuild 120 miles of electric transmission lines, and continue investing in renewable energy.

In 2017, we opened a new Systems Operation Center to enable safe, reliable and continuous operation of the electric transmission grid across Virginia and North Carolina.

We have invested \$3.5 billion in renewable generation over the past five years, creating more than 10,000 construction jobs, and we expect to invest \$4 billion over the next decade.



Brunswick Power Station

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

Natural Gas: A Cleaner Source of Energy

Atlantic Coast Pipeline

In late 2019, the 600-mile Atlantic Coast Pipeline is expected to begin transporting natural gas to electric and gas utilities for key segments. For a region facing pipeline constraints, economic challenges, and the ongoing transition to cleaner energy, the project is essential to the energy security, economic vitality and environmental health of the region.

The new infrastructure of the ACP would draw from low-cost supply basins, including the Appalachians, thereby enhancing the reliability of electric and gas utility service and significantly lowering costs for consumers. It also would help alleviate constraints and expand access to gas in underserved communities, and attract manufacturing and other new industries — building a foundation for long-term job creation and economic growth. In fact, the ACP is expected to create 17,240 jobs during construction and support thousands more with new industries.

Electric utilities in the region also are replacing conventional power plants with efficient, cleaner-burning units. The pipeline would support this ongoing transition to cleaner energy, lowering emissions and promoting cleaner air across the region. Natural gas is an ideal partner for renewable energy, providing around-the-clock backup power.

A project of this scope must be sustainable over the long term – for Dominion Energy, for consumers and for communities and the environment. So the ACP will employ an industry-leading, best-in-class program for construction, emissions controls and methane-reduction measures. Other precautions include:

- a program to avoid landslides on steep slopes;
- X-ray inspection of every single weld;
- hydrostatic pressure tests prior to operation;
- 24/7/365 monitoring from Dominion Energy’s gas control center; and
- remote-controlled shutoff valves.



The Atlantic Coast Pipeline will provide the natural gas necessary for backup power to support renewable energy sources.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

Cove Point

In 2014, construction began on a \$4 billion facility to liquefy natural gas at Dominion Energy's Cove Point on the western shore of the Chesapeake Bay. The liquefaction process involves super-cooling gas to shrink it to 1/600th of its original volume so that it can be piped to a pier a mile offshore and loaded onto supertankers for distribution to American allies around the world.

Cove Point's footprint has not expanded to accommodate the project, and the project maintains a surrounding nature preserve. It also uses only pre-existing storage tanks, pipelines and the offshore pier.

In addition to the nearly 3,000 construction jobs created when Cove Point was built, the project also has produced nearly 100 permanent jobs at the site and is expected to contribute \$40 million in new annual revenue to Calvert County, Maryland – nearly 13 percent of the county's total expected revenue in 2020.

Besides shoring up the economic sustainability of the immediate region, Cove Point also contributes to the environmental sustainability of energy production worldwide. Cove Point is providing American allies in Japan and India with a new source of natural gas for the next two decades or more. This can help these countries reduce their carbon footprint while improving the reliability of their gas and electric utilities. In recent years India has pursued an ambitious program of rural electrification. Despite those efforts, rural areas still face considerable challenges with regard to both quality and reliability – a problem that disproportionately affects impoverished populations. LNG from Cove Point can help alleviate that disparity.



Cove Point LNG Facility.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

Greensville Power Station

Finished in December, 2018, the \$1.3 billion, 1,588-megawatt combined-cycle natural gas station in Greensville, Va., operates as one of the largest and most environmentally friendly generating facilities of its kind in the world. The station's air permit is the most stringent in the nation in terms of carbon dioxide emissions, according to the Virginia Department of Environmental Quality. Construction at the station created more than 1,000 jobs and it supports about 166 jobs, including 49 full-time employees.

In its first year of operation, the station is expected to provide as much as \$8 million in property taxes for Greensville County, near the North Carolina border in Virginia's rural Southside region. The station will have low carbon intensity because it uses clean-burning natural gas, combined-cycle technology and the best available control technology to reduce emissions. It also will use less water, minimizing the impact to rivers and streams.



Greensville Power Station.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

Nuclear Relicensing

Dominion Energy Virginia has notified the federal Nuclear Regulatory Commission of its intent to relicense the Surry and North Anna power stations for additional 20-year terms, ensuring that Virginia customers will continue to benefit from the safe, reliable and carbon-free electricity the stations produce for decades to come. We filed the Surry application in October of 2018 and expect to file the North Anna application in 2020.

Our nuclear power stations have proven to be among the most efficient and most reliable sources of electricity in our fleet. The operation of North Anna and Surry directly supports more than 2,000 high-paying jobs in Virginia and produces additional economic and tax benefits. Their continued operation will go a long way toward maintaining low carbon-emission rates in the commonwealth.

The company expects to invest up to \$3.5 billion in upgrades as part of the re-licensing process. Like all U.S. nuclear units, the North Anna and Surry units were originally licensed to operate for 40 years. In 2003, licenses for all four units were renewed for 20 additional years of operation, following a stringent review process required by federal law. An additional extension would extend carbon-free energy until the 2050s. Extending the life of our nuclear stations rather than mothballing them and building new ones conserves natural space and natural resources and enables these units to continue to provide carbon free generation.



Surry Nuclear Power Station.

Our Business For the Future

Investing in Infrastructure

Continued

New Projects

Looking to the Future

The power grid is a critical component of public infrastructure vital to the safety, comfort, and prosperity of the public.

We are taking steps to make it even stronger. We expect that the reliability and resiliency improvements of the smart energy grid will result in fewer power outages and a faster response to those that do occur. It also means a grid that can be even more environmentally friendly: Our customers will have the flexibility to choose clean, renewable energy like solar and wind, thereby exercising greater control over their own carbon footprint.

This translates to an overall improvement in the customer experience. A smart energy grid will provide customers with new tools to access timely, accurate information about their energy use, and create additional pricing options and service enhancements.

In 2018, Virginia passed the Grid Transformation & Security Act; the law went into effect in July. Dominion Energy supported this landmark legislation alongside a broad spectrum of environmental, consumer and business groups during the 2018 General Assembly.

In addition to declaring 5,000 megawatts of additional solar generation to be in the public interest, the law also directs utilities to submit proposals for revamping our electric system to meet modern standards. Dominion Energy's plan includes self-healing grid technology that can predict and prevent outages before they occur, isolate them when they do, and restore power more quickly.

Our plan includes placing more outage-prone power lines underground to improve system reliability. And it entails a vast expansion of energy conservation, equivalent to \$870 million in such programs over the next decade. Energy conservation promotes sustainability in two ways: by reducing the amount of natural resources consumers use, and by reducing the strain on the power grid, especially during peak-usage hours, thereby lowering the risk of outages.



The power grid is a critical component of public infrastructure that is vital to the safety, comfort and prosperity of the public.

We are also seeking concurrence from the Virginia State Corporation Commission on:

- Increasing comprehensive customer insights and consumer availability of energy usage data;
- Establishing remote capabilities and reducing the number of truck rolls and the amount of overall time to complete service orders;
- Improving outage and restoration-management capabilities, including proactive customer communications; and
- Focusing on opportunities to increase access to electric-vehicle charging infrastructure.

Our Business For the Future

Energy Diversity & Security

Diversifying our energy mix lies at the center of our approach to sustainability. Our approach places particular emphasis on the clean, reliable and renewable energy our customers want. Strengthening our delivery networks will ensure that customers continue to receive superior service around the clock.

Low- and No-Carbon

At the most basic level, diversifying our energy mix reflects simple prudence: The adage about not putting all your eggs in one basket applies here. Supply disruptions can create uncertainty for traditional fuel sources; clouds can render solar generation intermittent. To remain sustainable for the long term, Dominion Energy is making sure it can supply clean energy without interruption, and with minimal exposure to sudden energy price swings, no matter what.

But our commitment to sustainability extends beyond protecting the continuity of our own operations. We are committed to lowering our greenhouse-gas emissions as a matter of principle. We already have achieved much, cutting the amount of carbon dioxide we emit per unit of energy in half. Now we're focused on cutting even further.

Our Strategy:

To invest more in renewable solar and wind generation, along with cleaner natural gas, to serve the need for around-the-clock reliable generation of electricity, to extend the life of our carbon-free nuclear facilities, and to use innovation to drive excellence.

How We Performed:

In the past five years we have invested \$3.5 billion in renewable generation and grown our solar fleet in Virginia and North Carolina from zero to approximately 1,700 megawatts in service, in construction, or under development. In November 2018, we received approval of an offshore wind pilot project – the second such project in the United States and the first to be owned by an electric utility.



Amazon Solar Farm, Buckingham County, Va.

zz For the Future

Energy Diversity & Security

Continued

Low- and No-Carbon

2018 TARGETS

STATUS

The company announced plans to continue to increase our reliance on cleaner generation technologies.

In the past five years we have invested \$3.5 billion in renewable generation and grown our solar fleet from zero to approximately 1,700 megawatts in service, in construction, or under development. In 2018 we filed for approval of an offshore wind pilot project – the second such project in the United States and the first to be owned by an electric utility.

Where We're Headed:

Dominion Energy is committing to having 3,000 megawatts of new solar and wind under development or in operation by the beginning of 2022. We will bring online our Greensville power station – one of the largest and most environmentally friendly stations of its kind in the world in 2018 – and proceed with our Coastal Virginia Offshore Wind pilot project. We will continue to invest in natural gas and in making the electric grid smarter and harder.

Our Commitments:

The self-healing and grid hardening activities in the company's proposed Grid Transformation Plan should reduce outages by 25 percent over the next 10 years.

Dominion Energy is committing to having 3,000 megawatts of new solar and wind under development or in operation by the beginning of 2022.

As part of the 2018 Grid Transformation Plan, the company is seeking Virginia State Corporation Commission concurrence with infrastructure programs including the initial three years of a five-year plan to complete the Smart Meter deployment of 2.1 million smart meters to streamline integration of renewables while ensuring safe and reliable service to customers.

Our Business For the Future

Energy Diversity & Security

Continued

Low- and No-Carbon

Rapid Evolution

The way we provide energy to our customers is rapidly changing. Evolving economics and better technology are coming together to advance renewable and low-carbon energy, enabling us to reduce a legacy of reliance on fossil fuels. Our strategy for the future depends on using a diverse and balanced mix of resources to deliver reliable and affordable energy to customers. We focus especially on balancing our portfolio to meet our customers' future energy needs in the most reliable, affordable and environmentally sustainable manner possible.

Solar

Backed by an ongoing \$1 billion investment, Dominion Energy has grown its solar fleet in Virginia and North Carolina over the past several years from near zero to approximately 1,700 megawatts in service, in construction or under development. That is enough clean energy to power nearly 425,000 homes during peak sunshine.

Nationally, Dominion Energy is ranked 4th in the nation among utility holding companies for ownership of solar facilities, either operational or under development. The company has nearly 2,600 megawatts of solar generating capacity in operation or under development in nine states, including offtake agreements for the company's utility customers.

Dominion Energy has committed to having another 3,000 megawatts of new solar and wind generation – enough to power 750,000 homes – under development or in operation in Virginia by the beginning of 2022.

The company also is seeking regulatory approval in Virginia for a 100 percent renewable-energy option for residential and small commercial and industrial customers, as well as an option for business customers to purchase renewable generation equal to a specific portion of their energy usage.

Offshore Wind

As part of our ongoing commitment to bring cleaner energy to customers, we are moving forward on the Mid-Atlantic's



Bath County Pumped Storage Facility

Our Business For the Future

Energy Diversity & Security

Continued

Low- and No-Carbon

first offshore wind project in a federal lease area. We have signed an agreement and strategic partnership with Ørsted Energy of Denmark, a global leader in offshore wind development, to build two 6-megawatt turbines off the coast of Virginia Beach. This project — the first of its kind owned by an electric utility company — has received approval from Virginia's State Corporation Commission. It will be located about 27 miles off the coast of Virginia Beach, beyond the coastal viewshed.

Pumped Storage

Dominion Energy operates a 3,003-megawatt [pumped-storage power station](#) in Bath County, Virginia. Pumped storage operates much like a giant battery: When electricity demand is low, the company pumps water from the lower of two reservoirs to the upper one. When demand spikes, valves open to let water run back to the lower reservoir at a rate of 13.5 million gallons per minute. The station powers 750,000 homes and provides a reliable backup source of energy if other sources go offline. We are also exploring the potential for another pumped-storage facility in the coalfields of Southwest Virginia to provide additional energy storage capacity to help balance future renewable resources.

A Lower Carbon Footprint

Dominion Energy has invested in reliable natural gas generation as well. This includes the \$1.2 billion Brunswick Power Station that entered service in April 2016. This highly efficient workhorse plant is expected to provide energy savings of more than \$1 billion to our customers over its life — and help limit greenhouse gas emissions. From 2007, the portion of our generation supplied by natural gas has grown from 8 percent in 2007 to 32 percent in 2017. Natural gas and nuclear generation will play an important role in our transition to cleaner energy.

Because of this hard work, Dominion Energy has reduced its carbon emission rate by 50 percent over the past 15 years.

Natural Gas

Dominion Energy has 11 power stations fueled by natural gas.

Our Business For the Future

Energy Diversity & Security

Continued

Zero-Carbon Nuclear

Every day, Dominion Energy's three nuclear power stations — Millstone in Connecticut, and Surry and North Anna in Virginia — generate enough low-carbon energy to power roughly 3 million homes. They provide base-load generation that backs up renewable sources when the sun doesn't shine and the wind doesn't blow. Nuclear power is by far the largest source of energy that emits no air pollution, and the only one that can provide energy around the clock.

Millstone

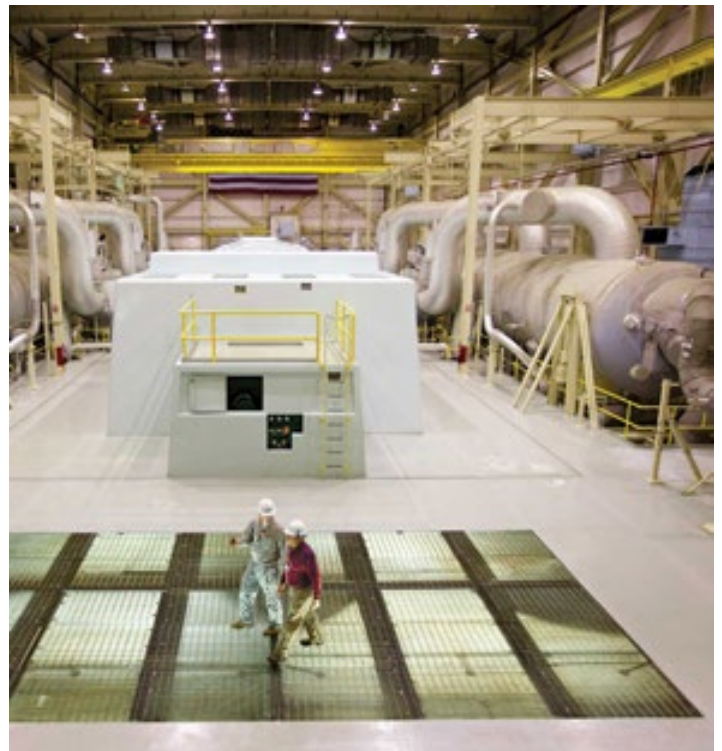
Each day Millstone Power Station — New England's largest source of carbon-free energy — provides abundant, low-cost power to New England. [The station](#) produces enough electricity to power 2 million homes. The operation of the Millstone Power Station produces over \$1.5 billion in annual economic benefits to Connecticut, supports more than 3,900 jobs, and generates the equivalent of over half the electricity consumed in Connecticut, and 98 percent of the state's low-carbon electricity.

North Anna

With an economic impact of more than \$700 million and a workforce of 900, [North Anna](#) supplies 17 percent of Virginia's electricity — powering 450,000 homes in the process. The 17-mile-long, 1.5-mile-wide [Lake Anna](#), created by Dominion Energy to provide cooling water to the power station, has become a hugely popular source of outdoor recreation for fishermen, campers, hikers, picnickers and nature-lovers.

Surry

Employing 900 people in southeastern Virginia, [Surry Nuclear Power Station](#) generates 14 percent of the state's electricity, supplies energy to 420,000 homes, and sits adjacent to the 3,900-acre [Hog Island](#) Wildlife Management Area, which includes pine forests, tidal marshes, and ponds supporting a vast array of wildlife.



Millstone Nuclear Power Station

Our Business For the Future

Energy Diversity & Security

Continued

Clean Natural Gas

We are re-orienting our business model around sustainability. We will remain a best-in-class operator and developer of safe, reliable, and clean assets while creating profitable growth through sustainable new businesses that will reshape our social contract. We will do so by using new technologies to create innovative customer solutions that minimize energy use, reduce harmful emissions, and increase public safety.

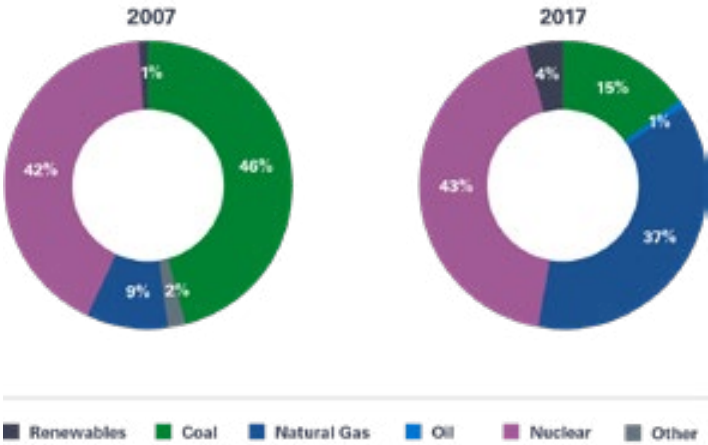
Low-Carbon Reliability

Converting coal-fired power plants to natural gas already has helped Dominion Energy cut its carbon intensity by half. Natural gas-fired generation also provides rapidly dispatchable baseload generation to ensure reliability when zero-carbon but intermittent renewable energy sources such as solar and wind power are not available.

Dominion Energy has 11 power stations fueled by natural gas.

Output by Fuel 2007 - 2017

Electric Output by Fuel (Total Fleet, by Percent)



Our Business For the Future

Energy Diversity & Security

Continued

Grid Hardening

As new threats emerge in a complex world, simply improving reliability is no longer enough. That's why we aim to harden and modernize the energy grid even further.

A New Approach

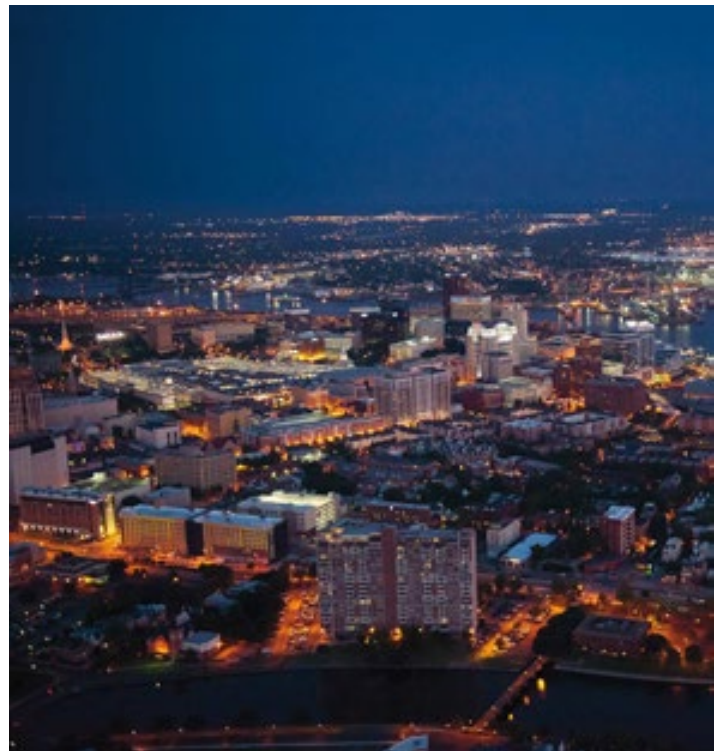
Historically, Dominion Energy's infrastructure investment strategy has centered around improving reliability — ensuring that customers maintain access to energy in bad weather, and that we restore it quickly after an outage, including storms. But as new threats emerge in a complex and dangerous world, we know we have to do more.

That's why we aim to harden and modernize the energy grid much further. Like bridges and roads, the grid is a critical component of public infrastructure vital to the safety, comfort, and prosperity of the public. The grid and its many components must be equipped to meet modern reliability demands, and become more resilient and adaptable to changing physical and cybersecurity challenges.

Our energy grid must become even more reliable and resilient, even more capable of harnessing clean, renewable energy.

A smart energy grid uses digital technologies to be more efficient, reliable and secure, and better able to accommodate renewable energy by adapting to expanding solar and wind power. It means progress toward our goal of always-on power.

As part of the 2018 Grid Transformation Plan the company is seeking concurrence from the Virginia State Corporation Commission on the initial three years of a five-year plan to complete the Smart Meter deployment of 2.1 million smart meters, as well as streamlining integration of renewables while ensuring safe and reliable service to all customers.



Modernizing our electric grid is a top priority.

Our Business For the Future

Cybersecurity

We take our responsibility to protect the energy grid and the privacy of our customers' personal information very seriously. Our customers deserve that – and America's national security depends on it.

Defense-in-Depth

Dominion Energy is resolved to make sure this never happens to us – or to you:

Two days before Christmas, 2015, hackers wormed their way into the Ukrainian power grid. That afternoon an operator in the control center of a western Ukrainian power company [watched the pointer](#) on his computer monitor begin moving, seemingly of its own volition. It clicked on a box to take a substation offline, and clicked again on a dialogue box to confirm the decision. Then it turned off another substation, and another.

Soon more than 230,000 residents found themselves without power in the dead of a cold Ukrainian winter. It was the first successful cyberattack on an electric grid.

Our Strategy:

To stretch beyond simply complying with security regulations. We have one goal: to protect the critical infrastructure that our customers rely on for their health and safety, that our country relies on for national security and that our economy relies on to drive business operations and growth. If the energy grid goes down, people can lose their livelihoods. That's why we have an exhaustive system of rigorous security protocols, overseen by experts who work directly in protecting against cyberattacks.

How We Performed:

We deploy technical controls using a defense-in-depth approach, continuously strengthening our defenses to identify and prevent external attacks as well as insider threats. We revise the cybersecurity strategic plan at least annually, with status updates and performance metrics



Our Business For the Future

Cybersecurity

Continued

Defense-in-Depth

provided to the board of directors and senior management team. Employees have completed Information Protection and Phishing training. The company has participated in cyber exercises with the National Guard, conducted vulnerability scans and conducted penetration tests with more planned before the end of the year. NERC CIP Cyber Vulnerability Assessments are underway.

2018 TARGETS	STATUS
<p>Employees will complete annual training to educate them in their role as the first defense in cybersecurity. In addition, internal and third party-led exercises to evaluate cybersecurity defenses will be performed. We will conduct four cybersecurity drills in 2018. These are conducted with both internal resources and external parties, including other utilities, regulatory agencies and law enforcement. We will conduct four Independent Vulnerability Scans in 2018. These scans are conducted by third parties to identify any public facing cyber vulnerabilities. We will conduct six Penetration Tests in 2018. These tests are targeted testing of vulnerabilities of our external and internal systems. We target enterprise and industrial control systems, with remediation of any issues found as a high priority. We will conduct North American Electric Reliability Critical Infrastructure Protection (NERC CIP) program Cyber Vulnerability</p>	<p>We revised the cyber security strategic plan and prioritize cyber security investments based on these external assessments, threat intelligence and our assessment of risk. Employees have completed Information Protection and Phishing training. The company has participated in National Guard cyber exercises, completed vulnerability scans, penetration tests and NERC CIP Cyber Vulnerability assessments.</p>

Assessments at 65 locations in 2018. We aim to remain in the top quartile of BitSight assessments, a third-party organization that conducts external cyber assessment and scoring of major companies. We revise the cybersecurity strategic plan and prioritize cybersecurity investments based on these external assessments, threat intelligence and our assessment of risk.

Where We're Headed:

We will continue to enhance cybersecurity for systems that generate and move energy. We will heighten user awareness training with a focus on current and emerging threats. We will augment programs to monitor and detect malicious activities in the organization.

Our Commitment:

In 2019 we plan to conduct four cybersecurity drills, four independent vulnerability scans and eight penetration tests, and plan to perform NERC CIP Cyber Vulnerability Assessments at multiple locations.

Our Business For the Future

Cybersecurity

Continued

Defense-in-Depth

Managing Threats

We prioritize cybersecurity investments based on three primary components:

Threat Management

We partner with information-sharing organizations in the energy sector — as well as local, state and federal agencies — to gain insight into and actionable intelligence about cyber threats.

Security Controls

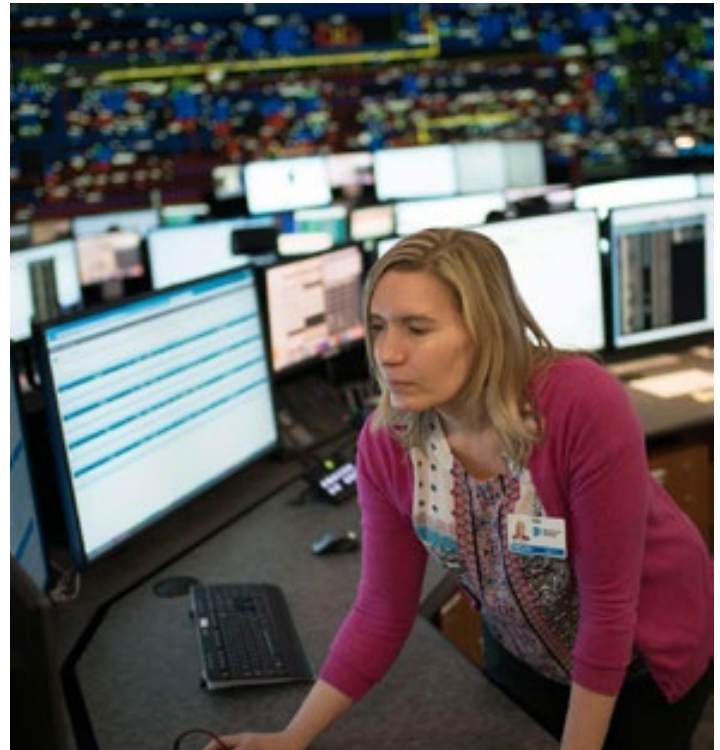
We deploy technical controls using a defense-in-depth approach, continuously strengthening our defenses to identify and prevent external attacks as well as insider threats. We realize that our people provide the first and last line of defense. That's why we continue to educate and train our users to help identify threats and malicious activities.

Assessments

We use internal and external vulnerability assessments, penetration tests, drills and simulations to search continuously for gaps and opportunities for improvement. Both Dominion Energy and third parties that specialize in security services perform the assessments. We conduct drills with other utilities, regulatory agencies and law enforcement, and perform vulnerability scans to identify public-facing cyber vulnerabilities. Whether through annual tabletop exercises or actual restoration operations, we validate recovery procedures and system resiliency to ensure we can return critical systems to normal operating levels in a timely manner.

The threat landscape is constantly changing. As we deploy more intelligent devices to modernize the grid and improve reliability and efficiency, our risk profile changes.

We have implemented additional monitoring and protections to help make sure that sensitive data, such as customer personal information, remains secure. We have deployed solutions to further strengthen perimeter defenses, secure critical system-to-system communications against



Our people provide our first and last line of defense.

unauthorized access and increase the resiliency of business operations. We continue to improve awareness training to help our users better identify malicious emails. We performed multiple assessments and penetration tests, remediating critical findings and closing any gaps we identify.

For example: In 2019 we will conduct four cybersecurity drills, four independent vulnerability scans and eight penetration tests, and will perform North American Electric Reliability Corporation critical-infrastructure protection Cyber Vulnerability Assessments at multiple locations.

Our nation's way of life depends upon energy. Protecting critical infrastructure and maintaining industry-leading security posture will remain a top priority.