Dominion Energy's Presence in Chesterfield County

At Dominion Energy, we are committed to providing reliable, affordable, and increasingly clean energy that **powers our customers every day**.



Map of Assets in Chesterfield County

(Includes the Midlothian local office and multiple training centers)







Dry Bridge Battery Storage

Chesterfield Power Station

Winterpock Solar (Under Construction)

We are committed to serving our customers and communities where we all live and work.



\$17.23 million

Property taxes paid in 2023

\$377,602 Philanthropic and corporate giving in 2023

160,000+

Customers served in 2023

341

Homes weatherized in 2023

481

Customers received bill pay assistance in 2023

830+

Hours volunteered in 2023



Dominion Energy's Presence in Henrico County

At Dominion Energy, we are committed to providing reliable, affordable, and increasingly clean energy that **powers our customers every day**.



Map of Assets in Henrico County

Includes Magnolia Systems Operations Center and multiple local offices







Darbytown Battery Storage (Pre-construction) Magnolia Systems Operations Center Bridleton Solar (Pre-Construction)

We are committed to serving our customers and communities where we all live and work.



\$13.35 million

Property taxes paid in 2023

\$1.67 million

Philanthropic and corporate giving in 2023

155,000+

Customers served in 2023

294

Homes weatherized in 2023

827

Customers received bill pay assistance in 2023

7,200+

Hours volunteered in 2023



What is CERC?



Chesterfield Energy Reliability Center will be a 1,000 MW "always-ready" power generation facility.

Four ~250 MW combustion turbines (CTs)

 Able to serve up to 250,000 homes with variable and reliable dispatchable energy in as little as 10 minutes

Flexible fuel capability

 Ability to run on natural gas, fuel oil, and possibly a hydrogen-blend in the future

Designed to start-stop over short periods

 Ability to serve current customers, increasing growth and demand, and support a clean energy transition by running only when needed – such as when other power stations are unable to meet the need



Where will CERC be located?



Chesterfield Energy Reliability Center will be located on the existing Dominion Energy-owned **Chesterfield Power Station property, near the still** operating Chesterfield Power Station Units 7 & 8.

On existing Chesterfield Power Station property

- Limits construction and operation to the already existing footprint
- Minimizes impacts to wetlands and cultural resources
- Much of necessary infrastructure needed to deliver power to the grid is already in place

Approximately one mile away from the nearest home

Minimizes impacts to the neighboring community



How It Works

The Dual Fuel Combustion Turbine (natural gas and fuel oil) will meet grid demand with its fast start to full load.

The compressor takes the input air and compresses it, which will increase the temperature and decrease the volume.

This gas is then expanded through the turbine where the power is extracted through the decrease in pressure and temperature and the increase in volume.

The fuel is then added, and the combustion takes place in the combustor, which increases both the temperature and volume of the gaseous mixture but leaves the pressure as a constant. State-of-the-art, efficient, CTs will be utilized to minimize air emissions. The CTs will have advanced dry low NOx combustion systems and water injection capability to reduce emissions. Additional control technologies will be installed; a selective catalytic reduction system to further reduce NOx emissions, and oxidation catalysts to further reduce emissions of CO, VOCs, and HAPs.



The facility plans to utilize county water and sewer utilities, so facility operations will not require water withdrawal from or discharge to the James River.



Clean Energy Transition

What We're Doing Today to Prepare for Tomorrow

- Constructing 2.6GW of Offshore Wind
- Constructing, developing, and under contract for approximately 10,000MW of solar generation
- Relicensing our nuclear units to continue providing over 3.7GW carbonfree around-the-clock generation



 Working with farmers to produce cleaner energy from renewable natural gas

CERC Will Help Reach Clean Energy Goals

- Ensure reliability while allowing for renewable and clean energy technologies to be piloted and deployed
- Providing always-ready power when we need it the most with as little as 10 minutes notice

DEV 2023 Integrated Resource Plan (Plans B thru E)

New Power Generation Capacity Deployed thru 2048 (by Technology) Total Megawatts (MW)







Why is CERC needed?

2024 load forecast report projects an average 10-year summer load growth of 5.6% per year



Top 20 Dom Zone* Peaks



Load Growth

- 5x larger expected growth than that experienced over the last 10 years
- More energy and capacity needed to support customers

* Dom Zone includes DEV service area in Virginia and Northeast North Carolina, along with cooperative and municipal electric utilities in the same area.

Peak Demand Growth

- 85% of our all-time top 20 peaks have occurred within the last two years
- These peaks are generally occuring at 7am and 5pm
- The common theme is that these peaking events tend to be multi-day events showing us that our base loads are increasing, pushing us to new peaks



Dominion Energy Commitments to Surrounding Communities



Minimize Impacts

Construction and operations will take place in a manner that will be protective of the environment and surrounding community

Station will meet or exceed all federal and state emissions requirements.

Reliable and Affordable Energy

The most underserved and vulnerable communities are hit hardest when the power goes out or costs go up. Dominion recognizes it is critical to maintain reliability and affordability, while pursuing clean energy goals. We are committed to powering your every day.

- The station will be designed to meet all requirements of the existing Chesterfield Power Station Conditional Use Permit.
- Traffic will be limited through coordination with Chesterfield Public Schools and other heavy-traffic businesses.
- Pre-construction studies and coordination with regulatory agencies minimize impacts to the environment, threatened and endangered species, and cultural resources.

Provide Support

Continue to support efforts to make the surrounding community a better place to live

- Clean energy efforts such as school bus electrification and home weatherization
- Park construction and local organization support to make the outdoors more readily available to all



Chesterfield Energy Reliability Center Air Permitting

Project design and purpose support minimization of emissions.

- The Project is designed as a limited utilization source to ensure reliable power during times of peak need and support the transition to renewable power sources.
- The combustion turbines selected are designed for quick and efficient starts and will be permitted for low utilization.
- The combustion turbines can use hydrogen blended fuel which is lower carbon emitting.

Air permitting requires and ensures protection of human health and the environment specifically including sensitive populations.

- Dispersion modeling underway using US EPA approved models and methodology to ensure the Project will not exceed air quality standards established by the US EPA.
- US EPA standards are set to protect public health, including "sensitive" populations such as asthmatics, children and the elderly, and the environment.
- Permitting will also ensure additional state standards are met to protect public health.

The Project requires an air permit that further ensures the best available control technologies are selected.

- NOx emissions controlled by state-of the art low-NOx combustors and post combustion controls (selective catalytic reduction (SCR)).
- CO, VOC, HAP emissions controlled by good combustion practices and post combustion controls (oxidation catalyst).
- SO2, PM, PM10, and PM2.5 emissions controlled by use of low-sulfur fuels and good combustion practices.
- Selection of best available control technologies overseen by state agency responsible for environmental protection.
- As detailed above, CERC potential to emit significantly lower than retired Units 5 & 6 for almost all pollutants.

Consideration of Environmental Justice is integral to the air permitting process.

- Air permitting will be in accordance with Virginia law and DEQ guidance designed to protect environmental justice communities.
- The permitting process also includes:
 - Communication and outreach to the surrounding community led by the Company and DEQ
 - Opportunities for the public to provide comments to the Company and state regulators

Existing Dominion Energy Simple Cycle Combustion Turbines

Darbytown Power Station, Richmond, VA	Remington Power Station, Remington, VA	Ladysmith Power Station, Caroline, VA	Elizabeth River Power Station, Chesapeake, VA	Gravel Neck Power Station, Surry, VA
Powers 85,000 homes	Powers 151,000 homes	Powers 196,000 homes	Powers 81,000 homes	Powers 92,000 homes
Fully operational since 1990	Fully operational since 2000	Fully operational since 2001 (Units 1-2) 2008 (Units 3-4) 2009 (Unit 5)	Fully operational since 1992	Fully operational since 1972 (Units 1-2) 1989 (Units 3-6)



Air & Noise

Air

PTE Emissions (Tons per vear)						
Pollutant	CERC Project	Retired CPS Units 5 & 6				
Nitrogen Oxides (NOx)	345	4,491				
Carbon Monoxide (CO)	819	940				
Volatile Organic Compounds (VOC)	159	108				

Particulate Matter (PM)	82	1,347
PM <10 microns in diam. (PM ₁₀)	154	1,347
PM <2.5 microns in diam. (PM _{2.5})	154	776
Sulfur Dioxide (SO ₂)	28	5,928
Sulfuric Acid Mist (H ₂ SO ₄)	18	3,435
Green House Gases (CO ₂ e)	2,213,100	9,310,562

Note:

1. CERC Project PTE is based on the proposed maximum operating profile specified in the CERC air permit application.

- 2. PTE for retired CPS coal fired Units 5 & 6 were based on emission limitations where available in the air permit, otherwise readily available EPA emission factors (i.e. AP-42 and Part 98) were used.
- 3. PM, PM₁₀, and PM_{2.5} PTE for the retired CPS Units 5 & 6 is based on filterable particulate only consistent with the permit and provides conservative comparison.

Noise

Dominion Energy prides itself on being a good neighbor. With that in mind, we would not exceed 75dBA at the existing Chesterfield Power Station site property line. Dominion Energy will complete near and far field sound measurements at the end of the project to ensure compliance with any permit, or contractual guarantee of the CT vendor or the construction contractor.





Expected Local Economic Impact

Chesterfield Energy Reliability Center not only helps ensure continued reliable service but will help replace the lost tax revenues and local economic activity resulting from the retirement of Chesterfield Units 5 & 6 while supporting the transition to clean energy and providing additional positive impacts for the local community.

Construction (Total)





\$53+ Million

in local economic activity.



\$2.2 Million

in state and local tax revenue.



540+

direct, indirect and induced jobs.

Opportunity for local businesses–Construction suppliers, civil construction, equipment rentals, hospitality, restaurants, gas stations, hotels

Operations and Maintenance









\$25 Million

in local economic activity annually.

\$142.6 Million

in new tax revenue. (approx. 36-year cumulative)

35

direct, indirect and induced jobs created.

Source: Estimated economic impacts determined by Mangum Economics



Opportunities for Local & SWaM Businesses

Dominion Energy values our partnerships with the local and Small, Women- and Minority-owned (SWaM) business community in Chesterfield County and the surrounding area. We are committed to providing opportunities for the community as part of the Chesterfield Energy Reliability Center project.



Dominion Energy has a process to ensure that our contractors also provide opportunities to local and SWaM businesses when awarding subcontracts.

The Engineering, Procurement, and Construction (EPC) contractor will be responsible for soliciting bids for project work, including from local employment interest. Please sign up to receive additional information upon EPC selection (estimated early-2025).





Español

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careers.dominionenergy.com

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dominionenergy.com/suppliers

PROJECT UPDATES

dominionenergy.com/CERC



Tentative Project Timeline







Permitting Process

ANNOUNCEMENT OF PROJECT

DEQ **Air Permit**



Submittal of Air Permit Application to VDEQ, August 1, 2023

DEQ Air Permit Informational Briefing, November 16, 2023

State Corporation Commission (SCC)



Convenience and Necessity Hearing



DEQ Air Permit Public Participation Process



The permitting process includes ensuring the project will meet Environmental Protection Agency (EPA) established National Ambient Air Quality Standards and applicable Virginia Department of Environmental Quality (VDEQ) standards.

The process also requires State Corporation Commission (SCC) determination that the project is needed and will benefit Dominion Energy customers and the community.



During and between each step of the process community engagement will take place including public meetings, organization meetings, and one-on-one and small group meetings to ensure the project team is available to listen to the community and answer any questions.



Project Contact



Scan the QR code or to learn more visit **DominionEnergy.com/CERC**

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