Impacts of Data Center Growth on Virginia and the Choice Ahead for Albemarle

Piedmont Environmental Council

Julie Bolthouse, Director of Land Use and

Rob McGinnis, Senior Land Use Field Representative Albemarle & Greene counties

PEC's Mission

Protect and restore the lands and waters of the Virginia Piedmont, while building stronger, more sustainable communities.

Today's Presentation

- Current Trends and Cumulative Impacts
- The Broken System
- PEC's Data Center Reform Campaign
- Albemarle County's Data Center Ordinance
- PEC's Recommendations
- Engage with staff after

Key Takeaways

- **Data center growth is unprecedented** with massive impacts to land, water, air and climate

- We need **state AND local action**

  - Write the Board of Supervisors

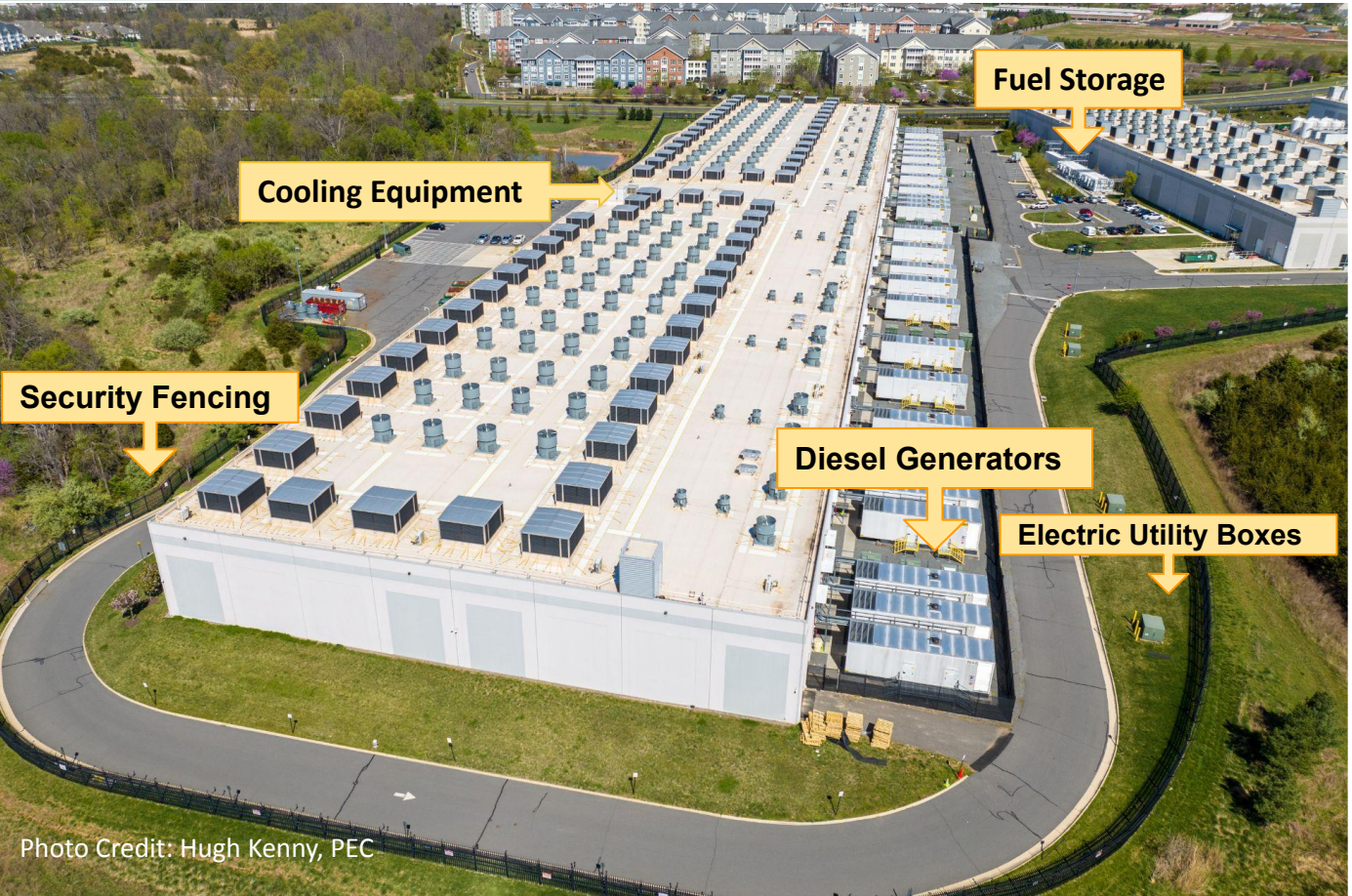
  - Speak at a Public Hearing
    - Oct. 14: Planning Commission
    - Nov. 19: Board of Supervisors

- **Get involved with PEC** during State Corporation Commission Hearings & the upcoming Virginia General Assembly

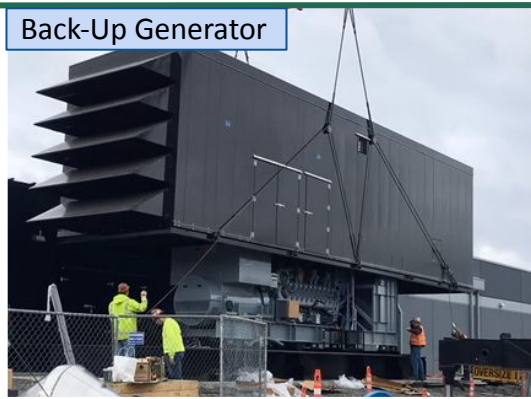
Photo Credit: Lynne Kaye

What is a Data Center?

Top Photo Source: www.globalpwr.com
Bottom Photo: Christopher Bowns, Wikimedia Commons



Back-Up Generator



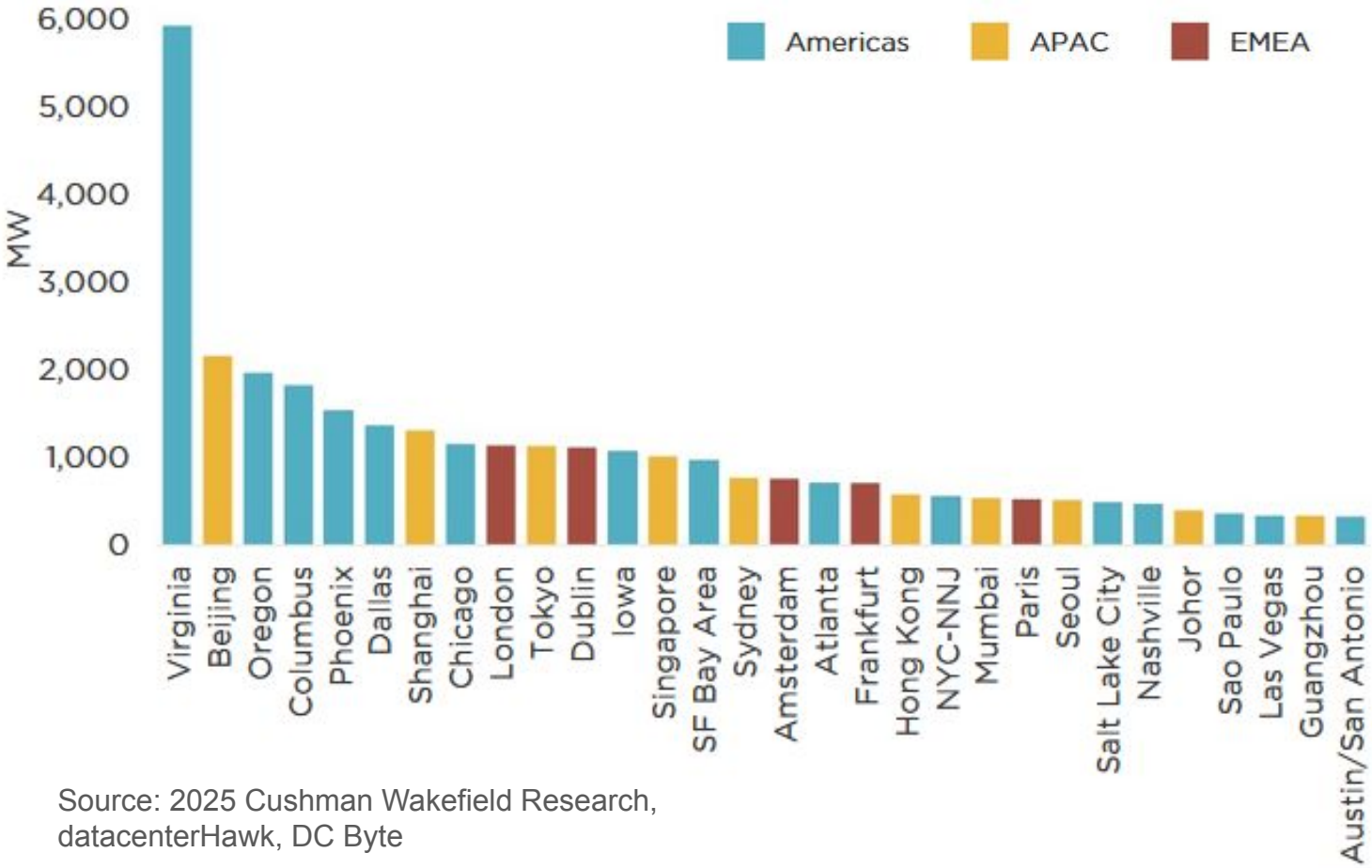
Inside Data Hall

Demand Driving Data Centers

- Outsourcing of information technology functions
- Advancing smartphone technology and apps (5G)
- Expansion of rural broadband
- Digitization and data storage
- Cloud computing
- GenAI such as large language models, and machine learning

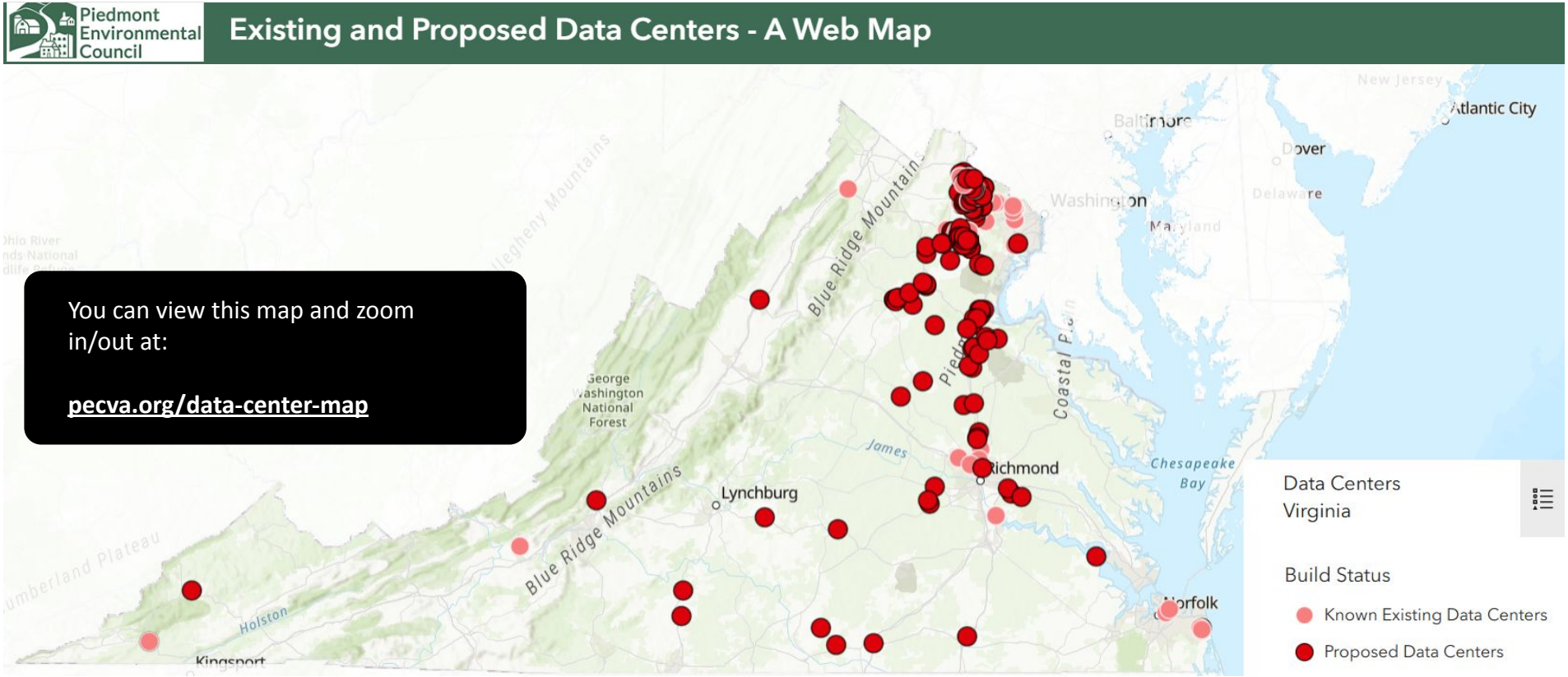
Top Markets by Operational IT Load

CUSHMAN & WAKEFIELD



Source: 2025 Cushman Wakefield Research, datacenterHawk, DC Byte

Data Center Projects In Virginia

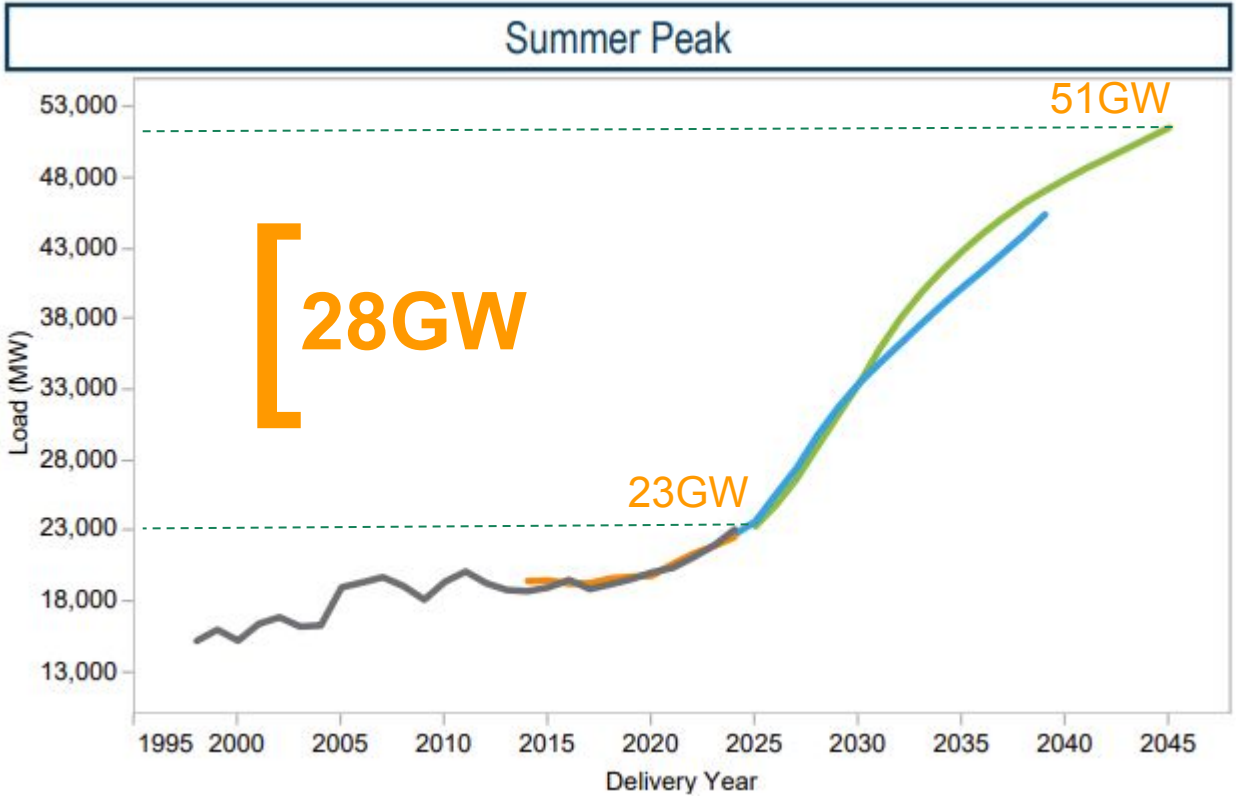


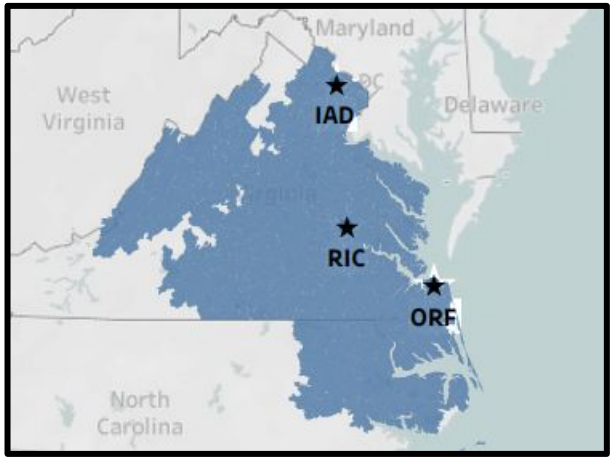
Currently about 60 million square feet existing or being constructed in the state

There's another 350 million square feet approved or in the pipeline

Skyrocketing Load Demand

Dominion Energy's 20 Year Forecast



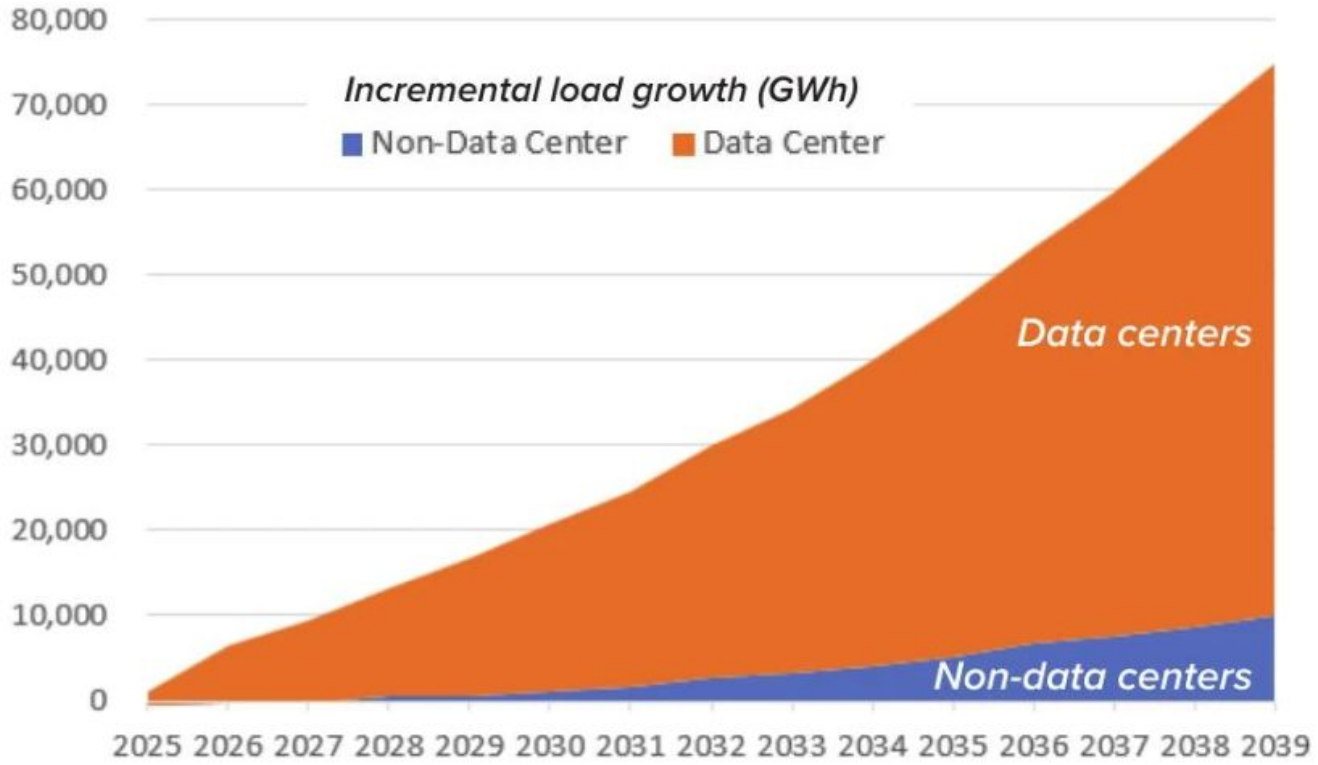


Green = 2025 projection
Blue = 2024 projection

That’s a doubling of Virginia’s peak load!

Feeding the beast

PEC analysis of regulatory filings shows how data centers are expected to drive steep growth in Virginia's power demands.



SOURCE: PEC from Dominion Energy data

Crisis by Contract

Dominion Energy Virginia

Data center request process

Typical data center request process from contact to connection

1 High level assessment

- Identify infrastructure requirements

2 Substation Engineering Letter of Authorization

- Detailed engineering plan
- Costs reimbursed to Dominion Energy

3 Construction Letter of Authorization

- Authorizes construction
- Customer must reimburse Dominion Energy for all spent costs should they walk away

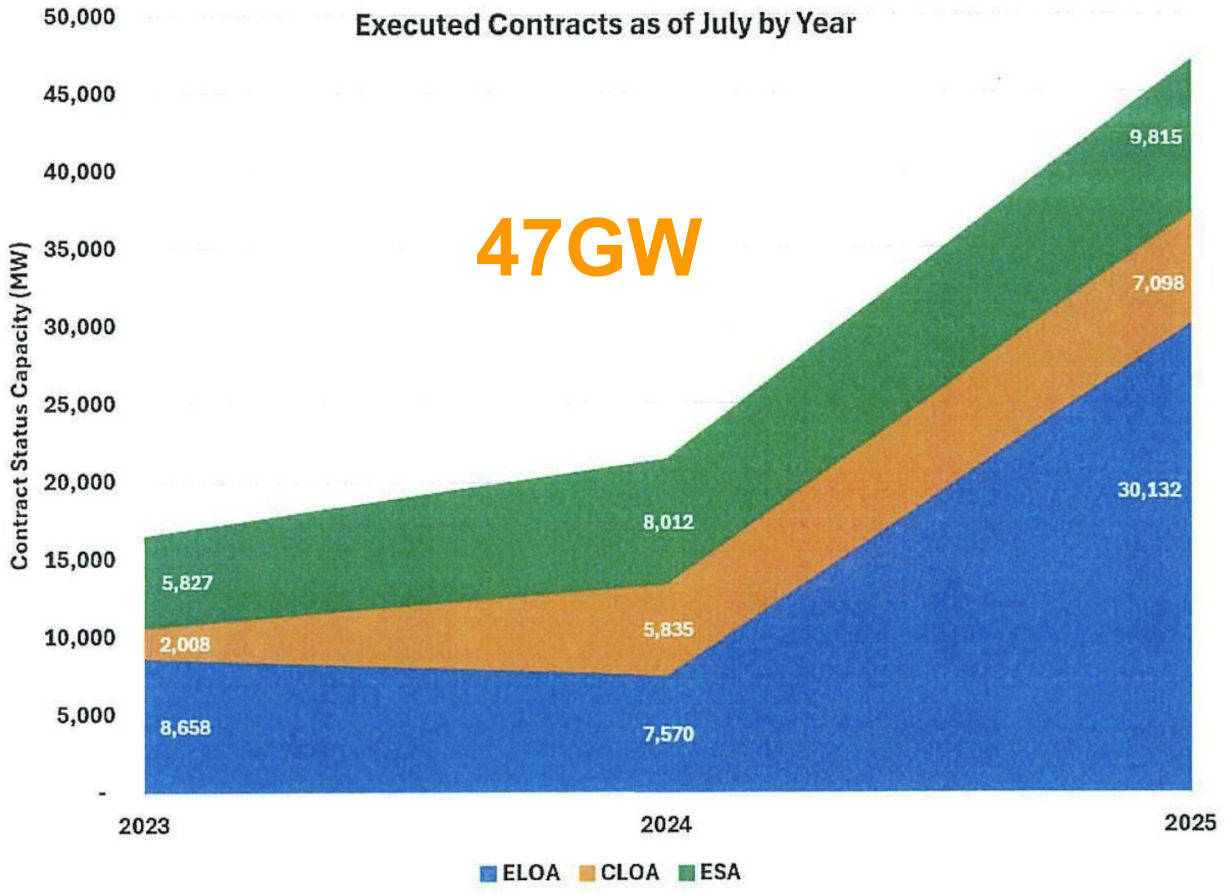
4 Install infrastructure

- Substation(s)
- High voltage transmission lines
- Distribution lines

5 Electric Service Agreement

- Defines how the customer will take service and structure to recover costs
- Includes revenue requirement whether customer takes service or not

Dominion's Contracts with Data Center Customers



What is the “Crisis by Contract”?

An energy “*crisis*” that’s been artificially created through Dominion’s unquestioning acceptance of these contracts and their rushed in-service dates.

PJM fast-tracks 11.8 GW, mainly gas, to bolster power supplies

Natural gas-fired generation accounts for 69% of selected Reliability Resource Initiative capacity, followed by batteries at 19% and nuclear at 12%.

Published May 5, 2025

Ethan Howland
Senior Reporter

PJM selects 11.8 GW in Resource Reliability Initiative

Gas-fired generation accounts for two-thirds of selected capacity.

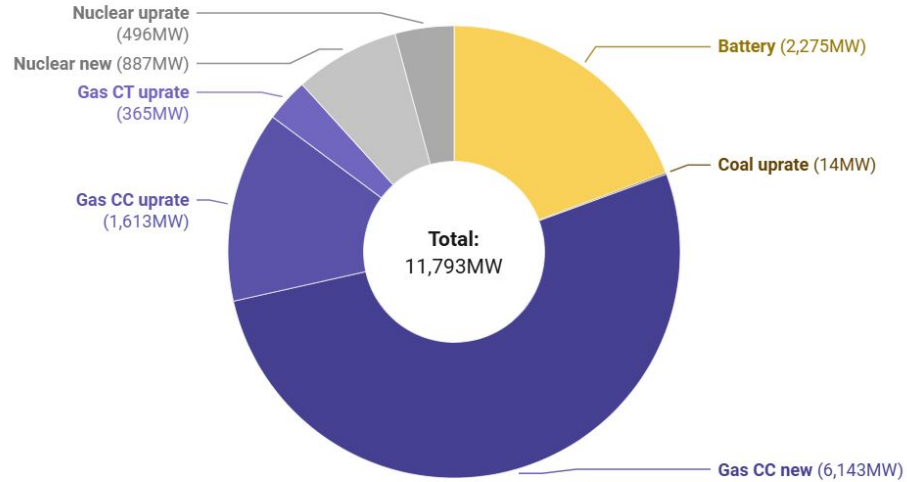
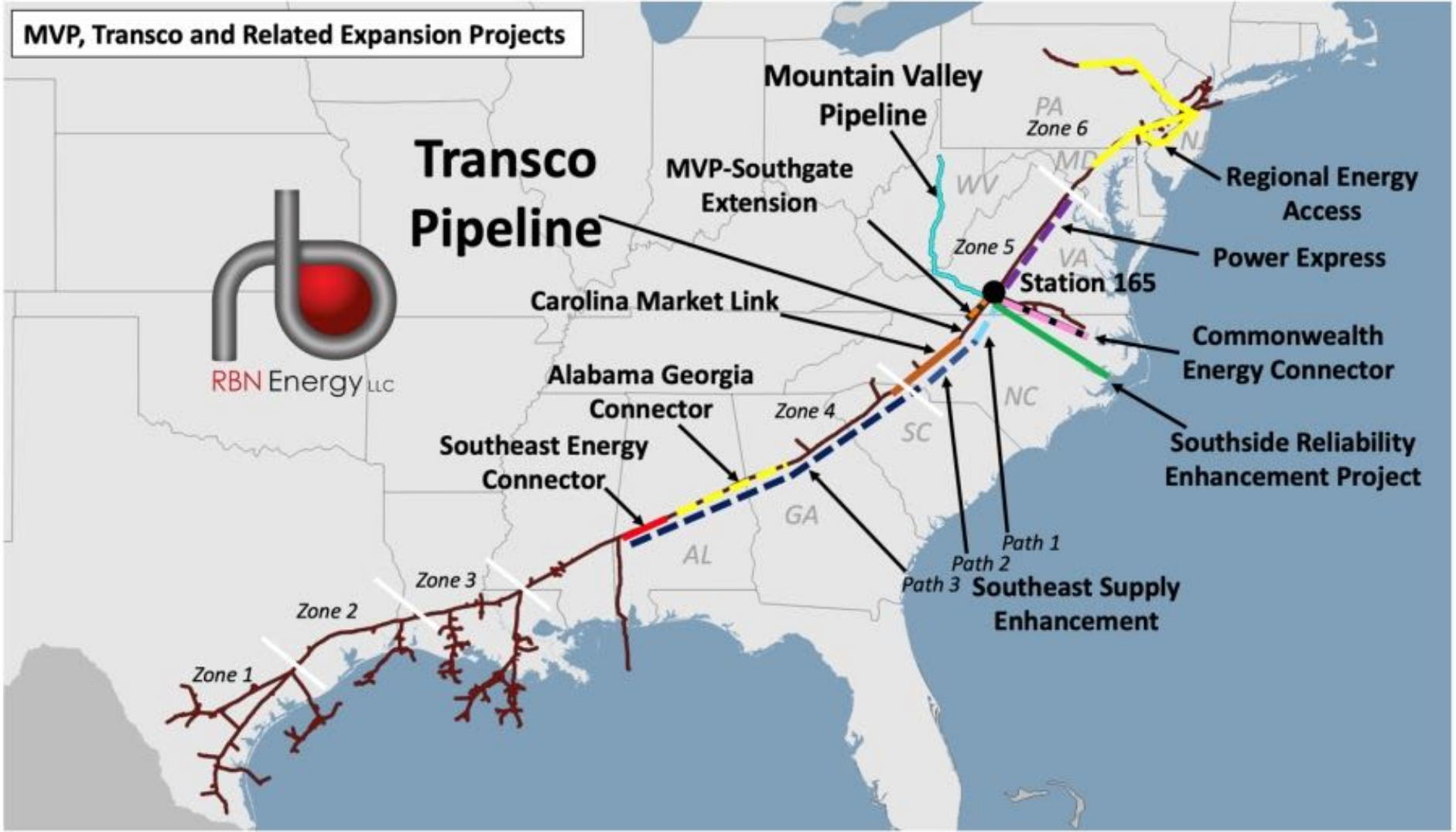
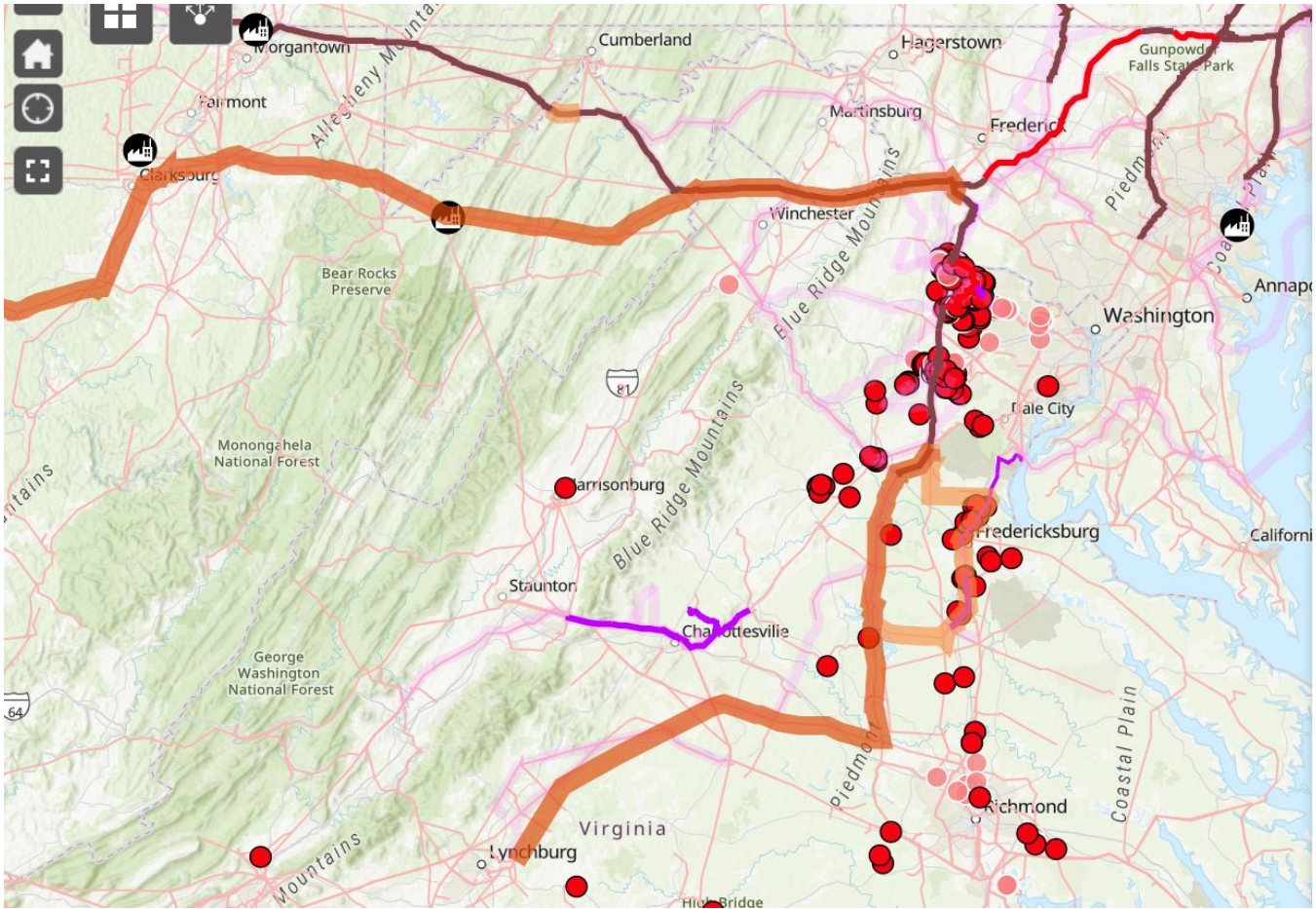


Chart: Ethan Howland/Utility Dive • Source: PJM Interconnection • Get the data • Created with Datawrapper


MVP, Transco and Related Expansion Projects
Mountain Valley Pipeline
Transco Pipeline
MVP-Southgate Extension
Carolina Market Link
Alabama Georgia Connector
Southeast Energy Connector
RBN Energy LLC
PA
Zone 6
WV
MD
NJ
Regional Energy Access
Zone 5
VA
Power Express
Station 165
Commonwealth Energy Connector
NC
Zone 4
SC
Southside Reliability Enhancement Project
GA
AL
Path 1
Path 2
Path 3
Southeast Supply Enhancement
Zone 3
Zone 2
Zone 1

$12 Billion in Regional Transmission Lines Being Planned



PJM 2024 Window 1: Selected Transmission Proposals (from 12/2024)

- 500 kV
- 765 kV

Coal Power Plants with Maximum Output over 1,000 MW

PJM 2022 Window 3: Selected Transmission Proposals (from 10/31/23)

- New Transmission Line (Route to be determined by utility)
- Expand Existing Right of Way
- Rebuild in Existing Right of Way

PJM 2022 Window 3: Original Transmission Proposals from 9/5/23

Data Centers in Virginia

- Existing
- Proposed

Who pays and who bears the risk?

Utility Ratepayers (You and Me) Subsidizing Data Center Power Demand

- **Discounted rates**, private negotiations, and stronger leverage and influence as largest customer class
- **Flawed rate structure** that does not match the new paradigm of 24/7 large load consumers driving increase
- **High demand causing higher capacity costs** and fuel prices that are born by all users
- **Transmission lines** to solely serve a data center are unfairly subsidized by all users
- **Huge risk** borne by the rest of the customers if data centers don't consume as much energy as expected

Community Impacts Experienced in Northern Virginia

Parks and Trails

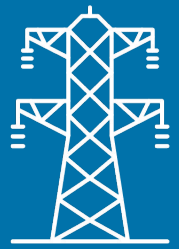
Noise

Water

Air Quality

Wildlife Habitat

Design



Energy Infrastructure

Data center development is unprecedented

- **Explosive growth** and lots of speculation due to the boom in AI
- **Much more energy**; a campus can use as much as a city
- **More generators** are used for onsite backup power requirements than any other use including hospitals and factories
- **Consumptive water use**; much of the water is lost to evaporative cooling
- Facilities **tend to cluster**, leading to cumulative impacts on air and water quality, water consumption, and energy infrastructure.


Loudoun County, Virginia


Fairfax, Virginia


Loudoun County, Virginia

Hidden Danger of Generators

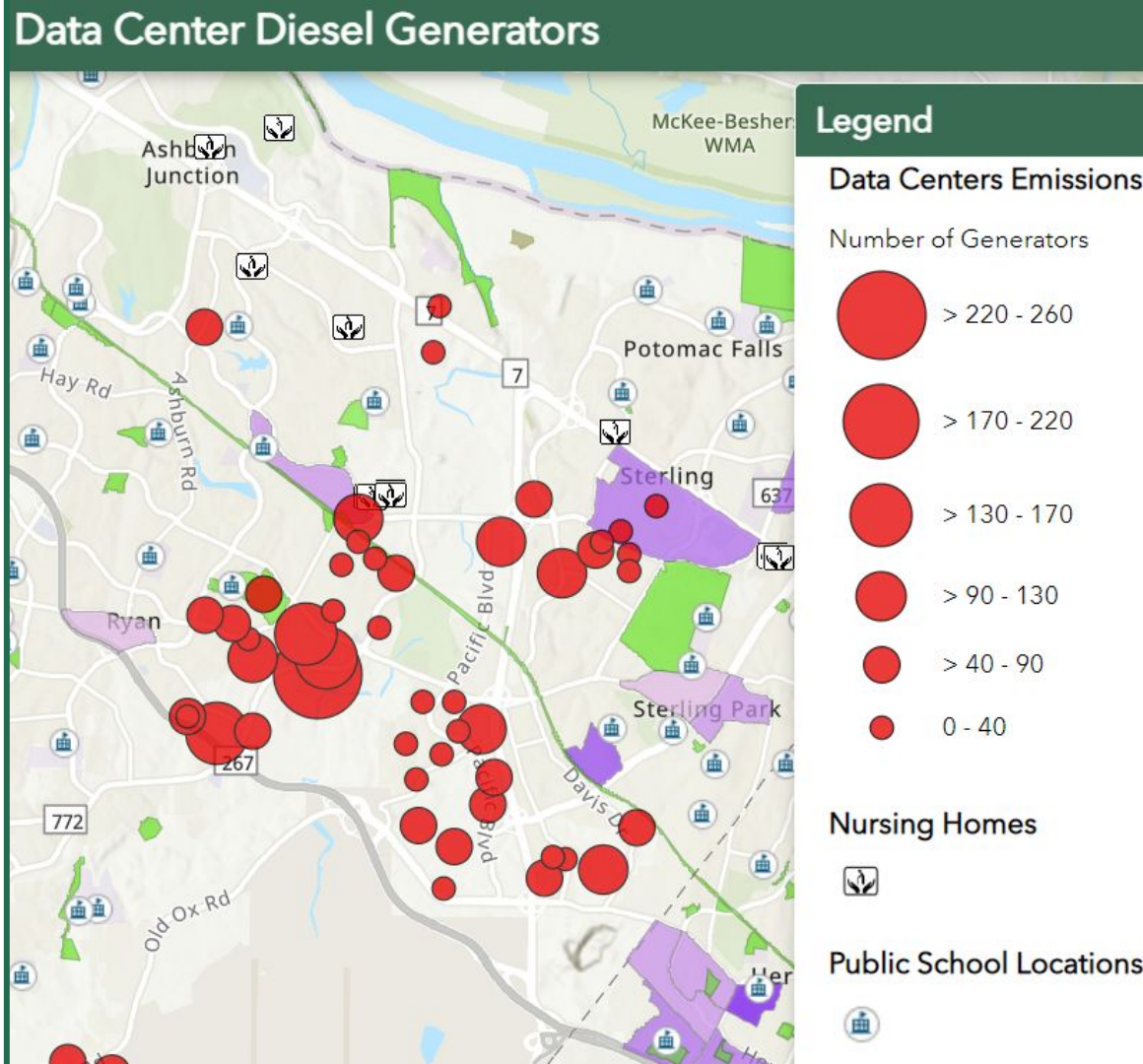
W&OD Trail, Loudoun County


NO PARKING
WITHIN 33'
OF BUILDING

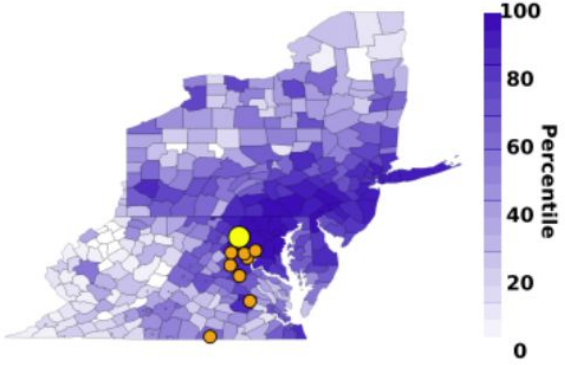
There are nearly 9,000 diesel generators permitted at data centers in Virginia

About 2,000 are in this area around the W&OD Trail!

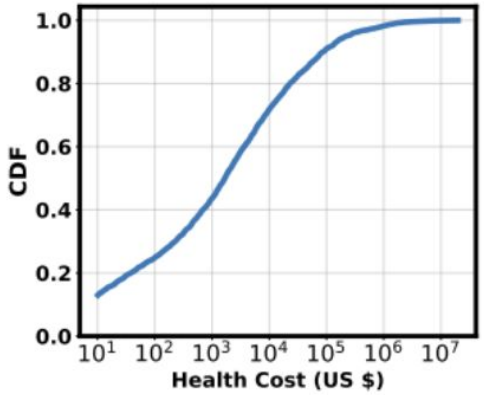
www.pecva.org/work/energy-work/data-centers-diesel-generators-and-air-quality-pec-web-map/



Air Pollution Modeling Using EPA modeling tool - COBRA



(a) Health cost map



(b) CDF of county-wide health cost

State	County	Health Cost (million $)
MD	Montgomery	**19.9** (17.3, 22.4)
VA	Fairfax	**18.9** (16.6, 21.2)
MD	Prince Georges	**8.9** (7.5, 10.4)
MD	Baltimore	**8.3** (7.0, 9.6)
DC	District of Columbia	**7.6** (6.2, 9.0)
MD	Anne Arundel	**6.3** (5.5, 7.2)
MD	Baltimore City	**6.0** (4.8, 7.1)
VA	Loudoun	**5.4** (4.7, 6.1)
VA	Prince William	**5.0** (4.4, 5.7)
MD	Frederick	**4.6** (3.9, 5.2)

(c) Top-10 counties by health cost

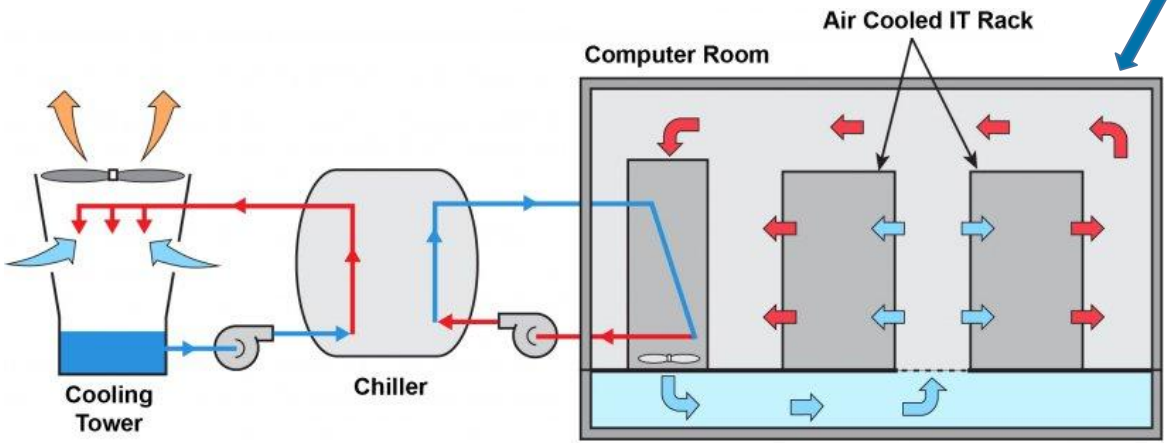
Figure 1: *The county-level total scope-1 health cost of data center backup generators operated in Virginia (mostly in Loudoun County, Fairfax County, and Prince William County) [57]. The backup generators are assumed to emit air pollutants at 10% of the permitted levels per year.*

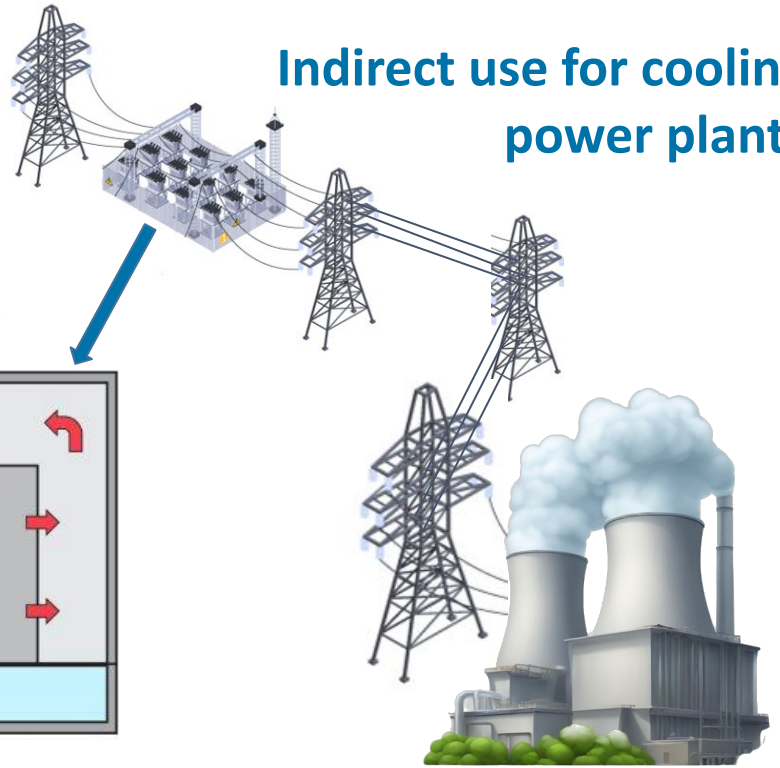
Source: The Unpaid Toll: Quantifying the Public Health Impact of AI - https://arxiv.org/abs/2412.06288

Water Consumption – Cooling and Power

Indirect use for cooling power plants

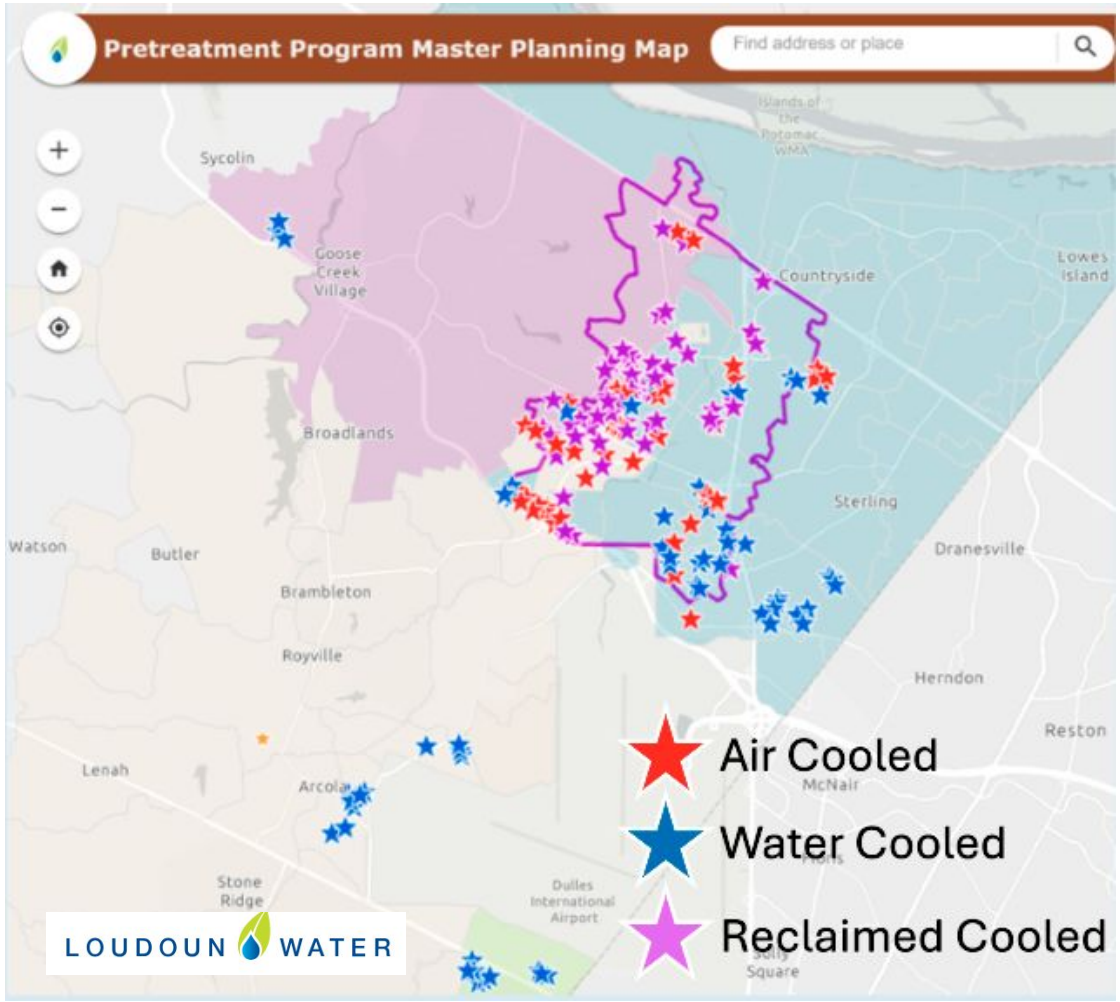
Direct use for cooling IT





2024 Total Data Center Water Consumption in Loudoun County

- **Reclaimed** – 704 million gallons
- **Potable** – 937 million gallons
- **9% of total system capacity**
- **242 million gallons in August**



Overall the impacts have been…

- **Higher electric bills** to pay for infrastructure and increasing capacity and fuel costs
- **Public and private right of way taken** for transmission lines
- **Renewable energy transition forfeited** and climate action put on hold
- **Industrialization of community** and pushing out of other land uses
- **Air quality degradation** from onsite power and power plants
- **Water supply and water quality impacts** from cooling and effluent (blowdown)
- **Land conversion and habitat loss** for data centers and energy infrastructure

How is this happening?

The tail is being allowed to wag the dog.

Dominion Energy Virginia

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- Defines how the customer will take service and structure to recover costs
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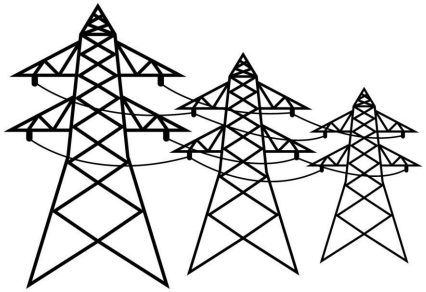
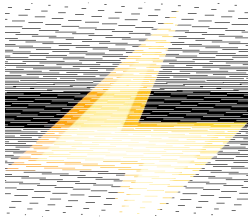
Review and approval is at the local level and its review like any other land use.

It's not like other land uses though.

The impacts demand state oversight that doesn't currently exist.

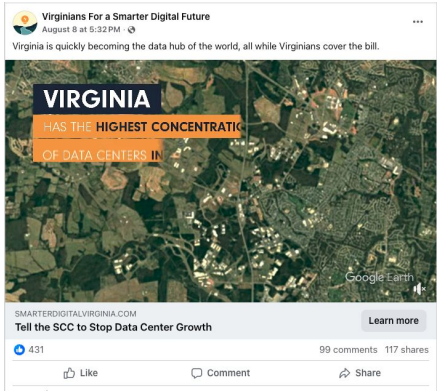




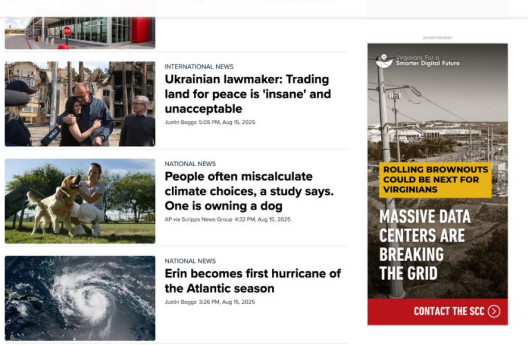
PEC’s Data Center Reform Campaign

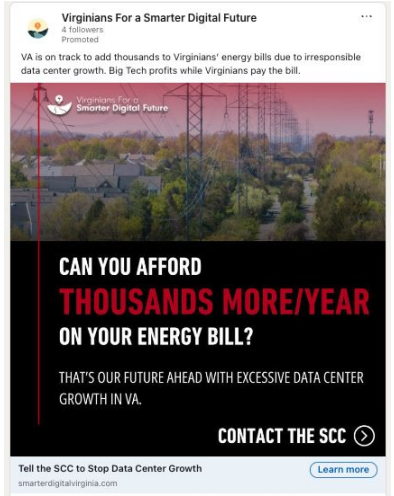
Virginia Data Center Reform Coalition

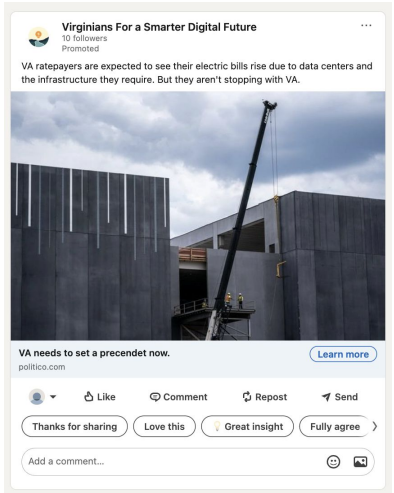
Awareness Campaign: Virginians for a Smarter Digital Future



Virginians For a
Smarter Digital Future







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August 20, 2025

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State Policy Strategy

- **State review** of data center proposals and oversight of regional and statewide impacts
- **Increased transparency** around energy, water, and emissions
- **Industry pays** for infrastructure through utility tariffs on large load users and fair allocation of costs
- **Incentivize sustainability** through the sales tax exemption or other means and **mitigate impacts**.

If the Virginia General Assembly fails to take action, **unchecked data center expansion will have a disastrous impact on ratepayers, our communities and the environment.**

Four Pillars of Data Center Reform

ENHANCED TRANSPARENCY	PROTECTIONS FOR FAMILIES AND BUSINESSES
STATE OVERSIGHT	INCENTIVES FOR EFFICIENCY

Virginia is already home to the world's largest concentration of data centers, with an IT power load believed to be nearly three times greater than the next largest market in Beijing. Many of these data centers individually draw as much power as small cities.

The rapid growth of data centers is creating an unprecedented demand for energy, land and water, and our communities are paying the costs. Without any public review or oversight by the state, Dominion Energy has already contracted with data centers for a startling 21 gigawatts (GW) of electricity, which nearly doubles its current peak energy capacity and is the equivalent of more than 11 North Anna nuclear power plants.

Without strong regulatory and legislative intervention, the risks and costs of the immense infrastructure supporting data centers is destined to be passed on to all ratepayers, including other businesses and residents.

Our electric companies are using these contracts to justify expensive and polluting energy infrastructure projects, including nuclear and gas power plants, and are delaying the retirement of coal plants. The Virginia Department of Environmental Quality has permitted thousands of diesel generators as back-up power for data centers, and it is now approving onsite gas turbines as primary power. **The continued use of fossil fuels by data centers exacerbates the environmental and climate risks already present throughout the state.**

Water consumption by data centers, particularly in the Potomac and Rappahannock river watersheds, is increasing at an alarming rate — at the same time that much of the state is experiencing increased drought conditions. The cumulative impact of data centers on neighborhood air quality and individual watersheds is yet to be assessed.

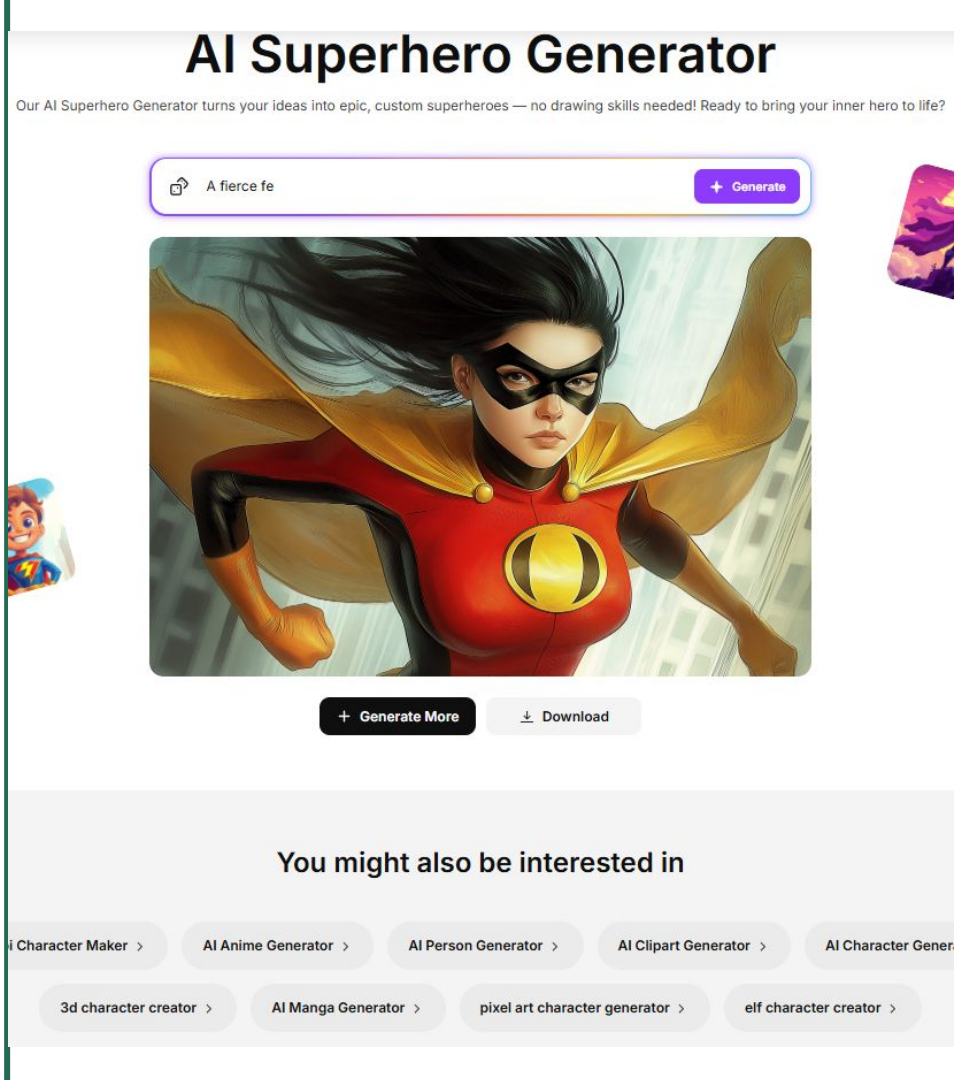
From the **THE PIEDMONT ENVIRONMENTAL COUNCIL**

Learn more and get connected at **PECVA.ORG/DATACENTERS**

Demand and Supply Side Strategies

Demand Side Strategies: Policy that Forces Reduction

- **Full transparency of projected** energy, water, and emissions so the costs/benefits are weighed
- **Transparency during operation** so investors and consumers can make informed decisions
- **Prevent externalization of cost** (ratepayer protection, sales tax exemptions, mitigation of pollution)
- **Prioritize critical AI uses vs. others** through transparency about usage



Demand Side Strategies: Sustainability Practices

- More efficient and smaller software design and AI models
- Maximize IT and cooling efficiency
- Water conservation practices
- Waste heat utilization
- Geothermal heating and cooling
- Onsite solar, wind, and advanced geothermal power generation
- Onsite battery storage utilized for backup and demand response
- Utilize flexible load shifting

Supply Side Strategies: Clean Energy and Smart Grid

- Well sited and designed utility scale solar
- Innovative grid solutions
  - Advanced conductors/Smart grid technology
  - More battery storage; longer-term storage pilot projects
  - Virtual Power Plants
- Retain Net Metering Rates
- More state incentives: parking lot, brownfield, agrivoltaics, rooftop

PEC's Advocacy is Focused On:

- Local ordinances and applications
- Legislative changes for state reform
- Clean Energy & Smart Grid Solutions over Fossil Fuels
- Engagement in SCC Cases
- Outreach and education efforts
- Studies - data collection, studies, and research by community volunteers, nonprofits, government agencies, and academic institutions

Albemarle has a few small data centers but PEC is concerned about the County opening the door to many large data centers without community input and review by the Planning Commission and Board of Supervisors.

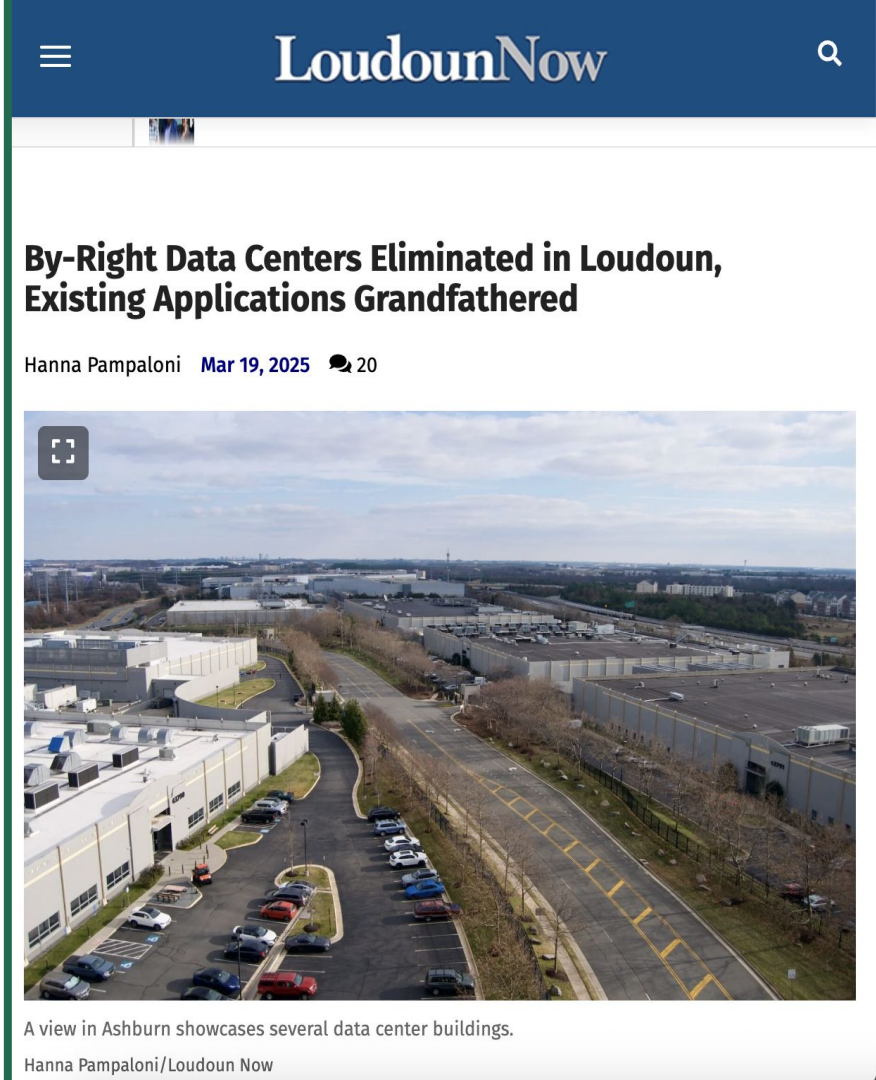
This unprecedented level of development could have significant consequences - but we can act to ensure we have a more sustainable future.

Albemarle County's
Proposed Updated Data Center Ordinance

PEC is advocating that Albemarle County:

- **Heed the warnings** from Loudoun, Louisa and Culpeper Counties
  - **continue requiring special use permits for all data centers larger than 40,000 square feet.**

- **Allow the public and elected officials to have a voice** in data center proposals that would compromise the county's ability to make informed, community-centered decisions



LoudounNow

By-Right Data Centers Eliminated in Loudoun, Existing Applications Grandfathered

Hanna Pampaloni Mar 19, 2025 20

A view in Ashburn showcases several data center buildings.

Hanna Pampaloni/Loudoun Now

How Did We Get Here?

Current Data Center Ordinance

- With some performance requirements, the county allows data centers:
  - up to 40,000 sq. ft in industrial zoned areas

- On property with commercial zoning (regardless of size), with a special use permit

- On industrially-zoned property for data centers exceeding 40,000 square feet, with a special use permit

Proposed change: By-right with performance requirements in overlay districts up to 500,000 sq. ft

Fifth Street Station

Ashburn, Va

Energy of approx. 10-20,000 homes!

What's Driving Albemarle's Data Center Demand?

US Route 29 N/Proposed Defense & Intelligence Innovation Corridor

Greene County Line

Rivanna Station Futures

1) Economic Development Goals

2) Desire to increase tax revenue from nonresidential sources…

3 STRATEGIC DIRECTION

The goals and initiatives are summarized below, and specific actions related to each initiative are detailed in the following pages.

GOAL 1 Expand economic opportunities in the Food and Beverage industry

A. Provide specialized training, peers, and mentors to reach young people, recruit talent for specialized positions, and assist businesses with start-up, expansion, and access to new consumer markets.

B. Leverage and overcome resistance to new technologies for agricultural biotechnology advances in animal and crop sciences and environmental resilience; promote greenhouses and controlled environment agriculture ("CEA") and continue to expand rural infrastructure.

C. Monitor land competition and conditions and support climate change research and investments in resilient infrastructure.

GOAL 2 Leverage Virginia's clean technology assets to establish an expanded hub for innovation and Advanced Manufacturing

A. Develop a clean energy technology sector plan in Region 9 that focuses on R&D, innovation, and product manufacturing.

B. Focus on building support for Clean Energy R&D and small-scale manufacturing initiatives.

C. Support university-based collaboratives to advance R&D in next-generation commercial applications.

D. Evaluate and build out the Clean Energy supply chain.

GOAL 3 Designate a Defense and Intelligence industry corridor

A. Market corridor (Rtes. 15 and 29) expanding from Fauquier to Orange, Greene, Culpeper, Albemarle counties and Charlottesville.

B. Promote incentives such as a defense production zoning overlay.

C. Focus on infrastructure investments to ready sites with necessary security precautions.

D. Partner with existing employers to meet needs and provide job training and recruitment for specialized roles.


RIVANNA
FUTURES
INTELLIGENCE & NATIONAL SECURITY
INNOVATION ACCELERATION
CAMPUS
Accelerating innovation technology through partnerships today, for tomorrow's challenges.

Rivanna Station Futures

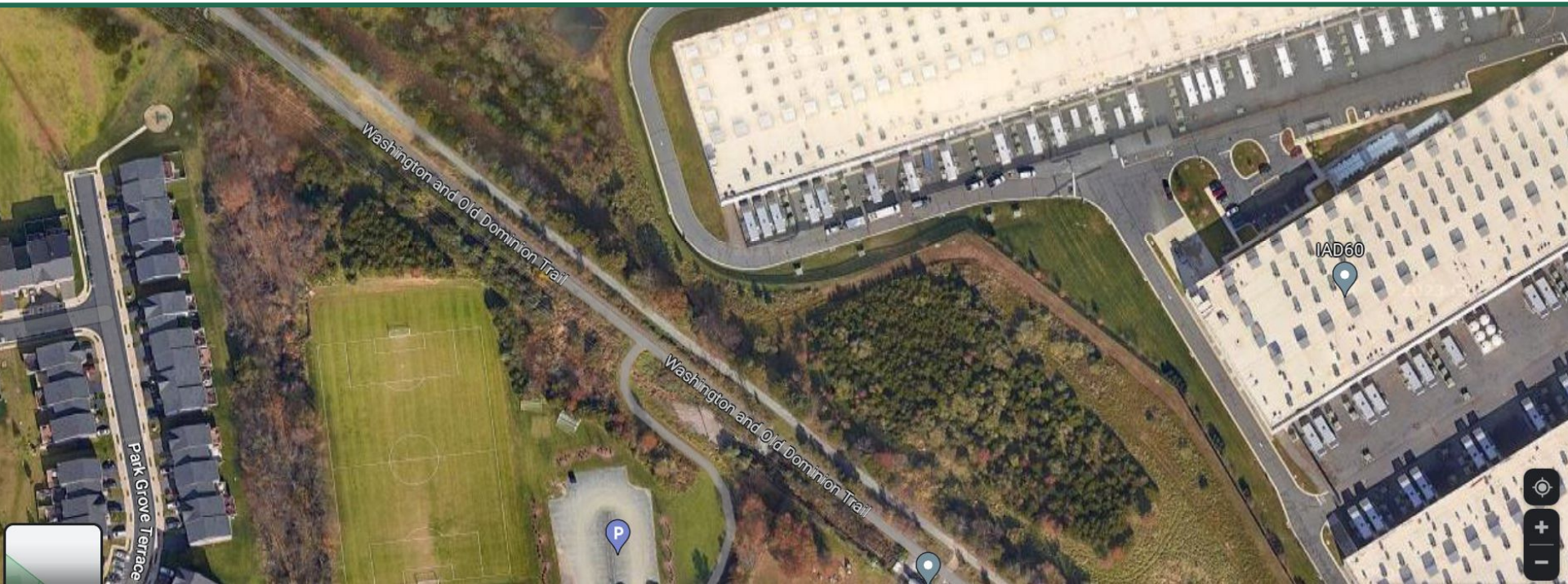
"...potential for development from North Fork [of the Rivanna River] all the way up to Greene County, approximately eight miles, with the possibility of realizing a **level of potential similar to Silicon Valley at its onset.**

He said that they believed the **Rivanna Station Futures projects would help anchor that work**. He said there was an ecosystem in their community that supported it."

- Deputy County Executive, Albemarle County

Albemarle County Planning Commission Work Session Meeting Record, October 24, 2023

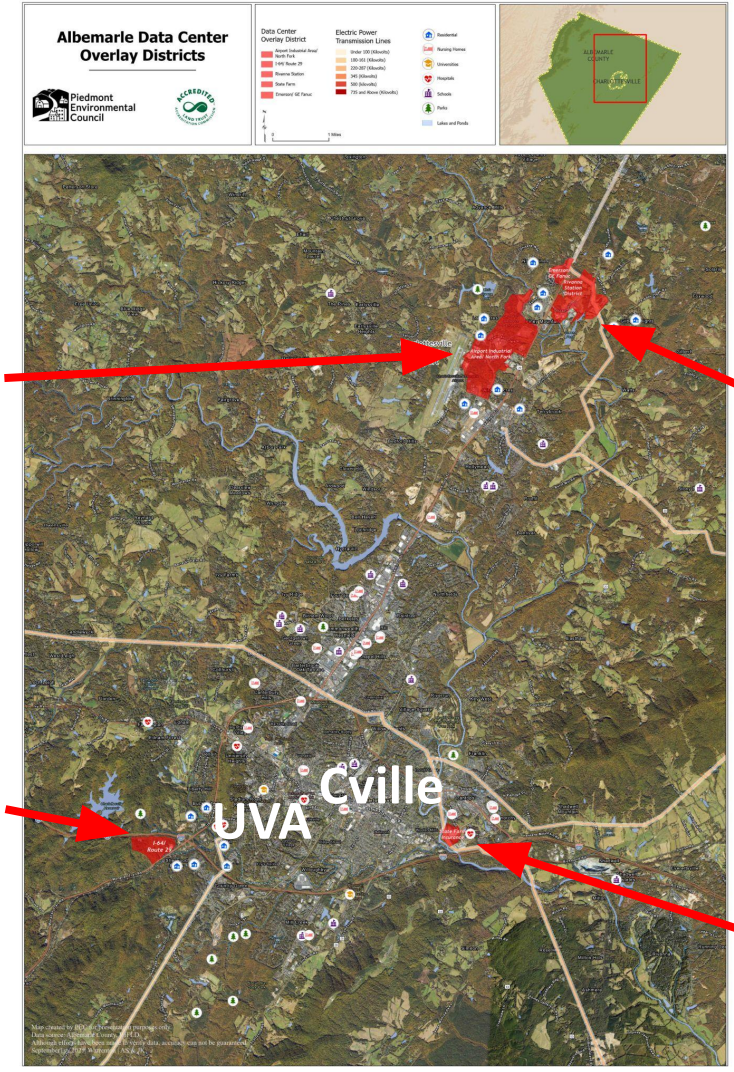
Proximity to sensitive receptors such as parks, trails, schools, hospitals, assisted living facilities, or low-income neighborhoods…




W&OD Trail, Ashburn, Virginia


Haymarket, Virginia

Haymarket, Virginia

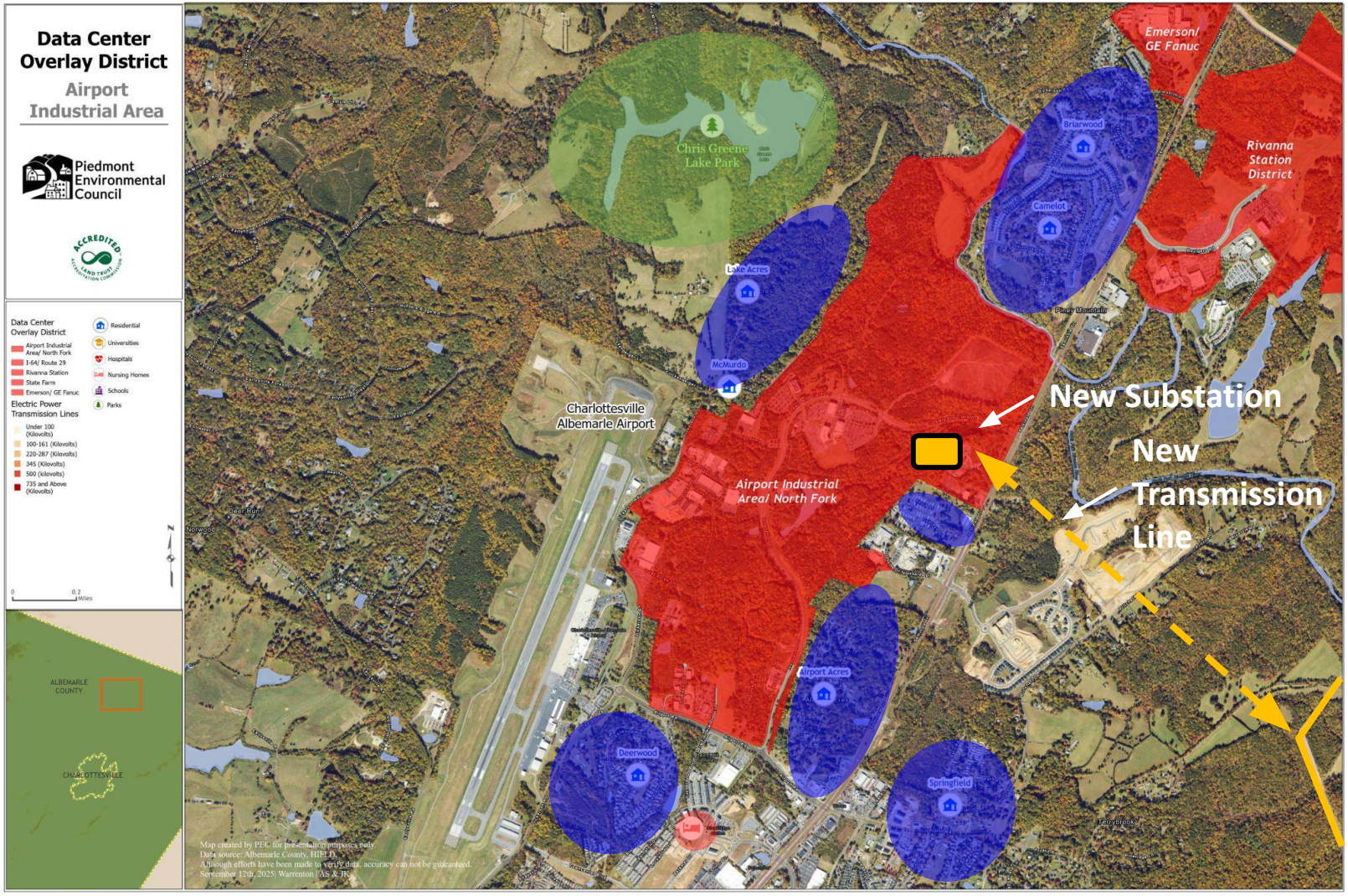


Airport Industrial Area

Emerson & Rivanna Futures Campus

I-64/I-29 Interchange

Former State Farm - Pantops

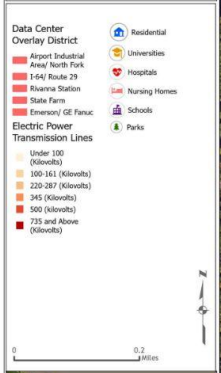

Data Center Overlay District
Airport Industrial Area
Piedmont Environmental Council
ACCREDITED
Data Center Overlay District
Airport Industrial Area/ North Fork
I-64/ Route 29
Rivanna Station
State Farm
Emerson/ GE Fanuc
Electric Power Transmission Lines
Under 100 (Kilovolts)
100-161 (Kilovolts)
220-287 (Kilovolts)
345 (Kilovolts)
500 (kilovolts)
735 and Above (Kilovolts)
Residential
Universities
Hospitals
Nursing Homes
Schools
Parks
0
0.2
Miles
ALBEMARLE COUNTY
CHARLOTTESVILLE
Chris Greene Lake Park
Emerson/ GE Fanuc
Briarwood
Rivanna Station District
Camelot
Lake Acres
Piney Mountain
McMurdo
Charlottesville Albemarle Airport
Airport Industrial Area/ North Fork
New Substation
New Transmission Line
Beer Run
Norwood
Airport Acres
Deerwood
Springfield
Map created by PEC for presentation purposes only
Data source: Albemarle County, HIFLD
Although efforts have been made to verify data, accuracy can not be guaranteed.
September 12th, 2025| Warrenton |AS & JK

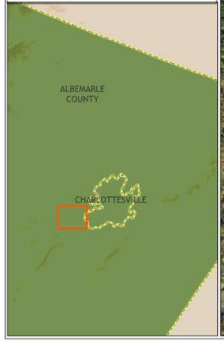
Data Center Overlay District

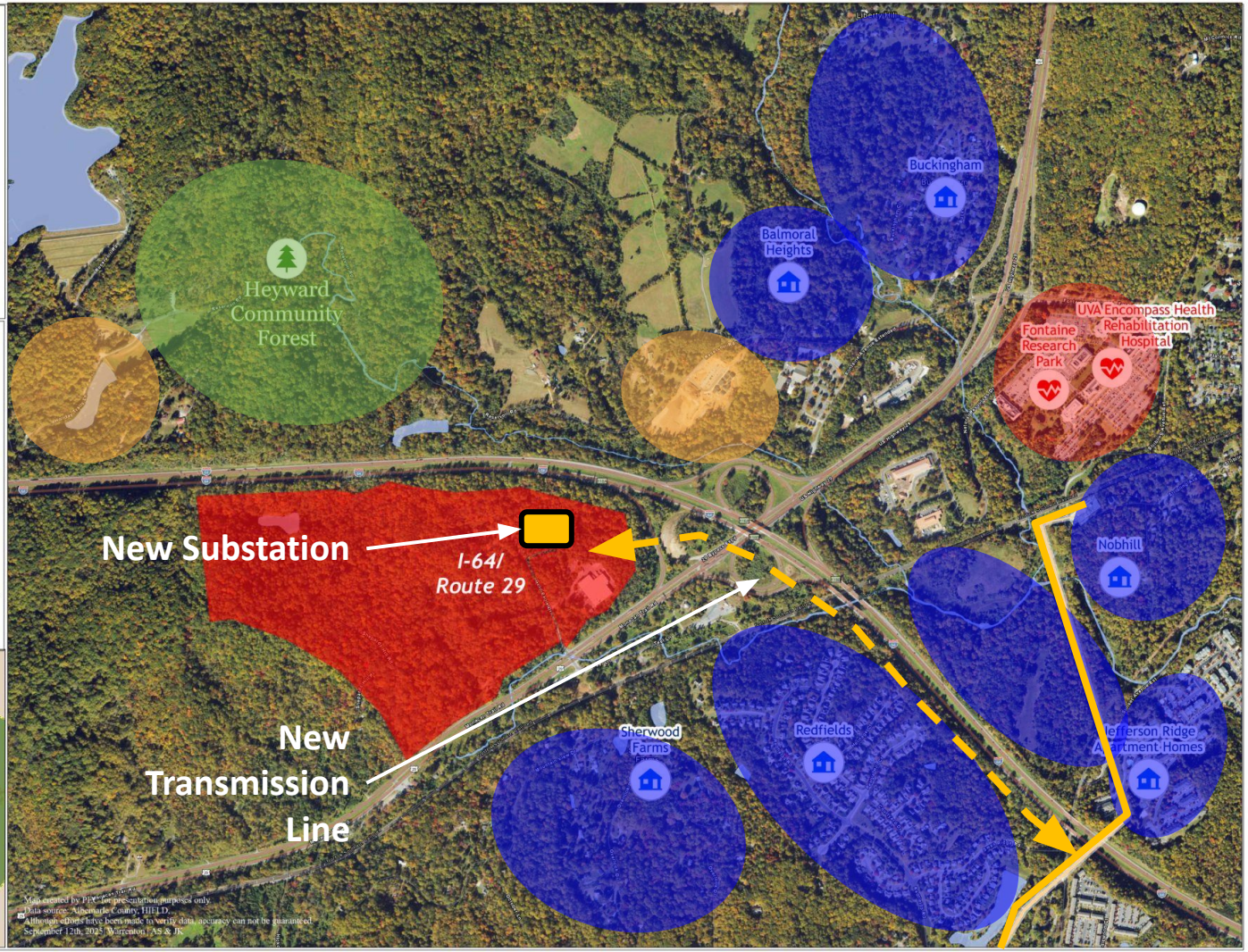
I-64/ Route 29

Piedmont Environmental Council

ACCREDITED LAND TRUST ACCREDITATION COMMISSION








Data Center
Overlay District
State Farm
Piedmont Environmental Council
Data Center Overlay District
Airport Industrial Area/ North Fork
I-64/ Route 29
Rivanna Station
State Farm
Emerson/ GE Fanuc
Electric Power Transmission Lines
Under 100 (Kilovolts)
100-161 (Kilovolts)
220-287 (Kilovolts)
345 (Kilovolts)
500 (kilovolts)
735 and Above (Kilovolts)
Residential
Universities
Hospitals
Nursing Homes
Schools
Parks
0
0.2
Miles
ALBEMARLE COUNTY
CHARLOTTESVILLE
State Farm Insurance
SENTARA MARTHA JEFFERSON HOSPITAL
Pantops
Glenorchy
New Substation
Data source: Albemarle County, HIFLD.
Although efforts have been made to verify data, accuracy can not be guaranteed.
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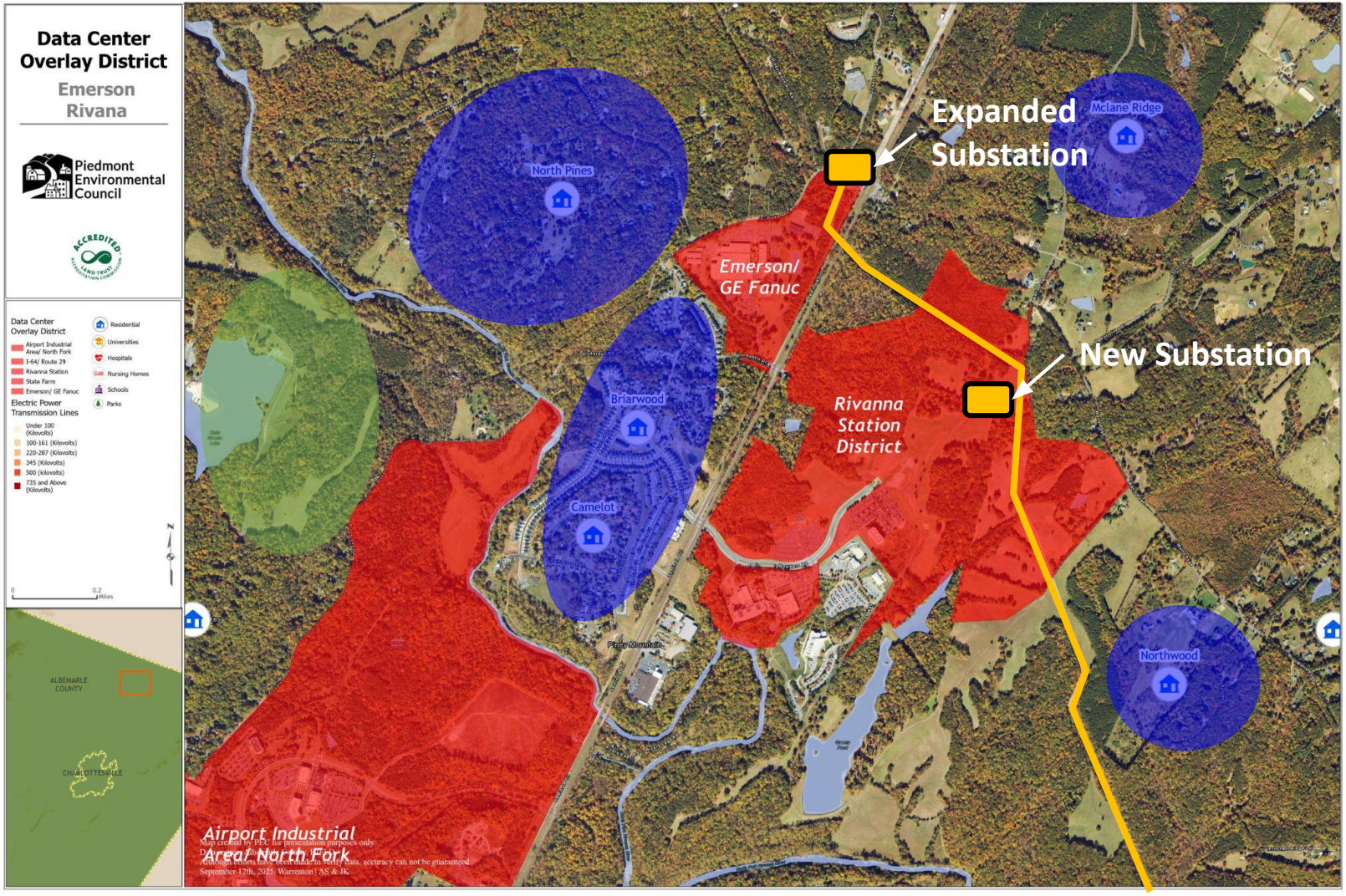
Data Center Overlay District
Emerson
Rivana
Piedmont Environmental Council
ACCREDITED
Data Center Overlay District
Airport Industrial Area/ North Fork
I-64/ Route 29
Rivanna Station
State Farm
Emerson/ GE Fanuc
Electric Power Transmission Lines
Under 100 (Kilovolts)
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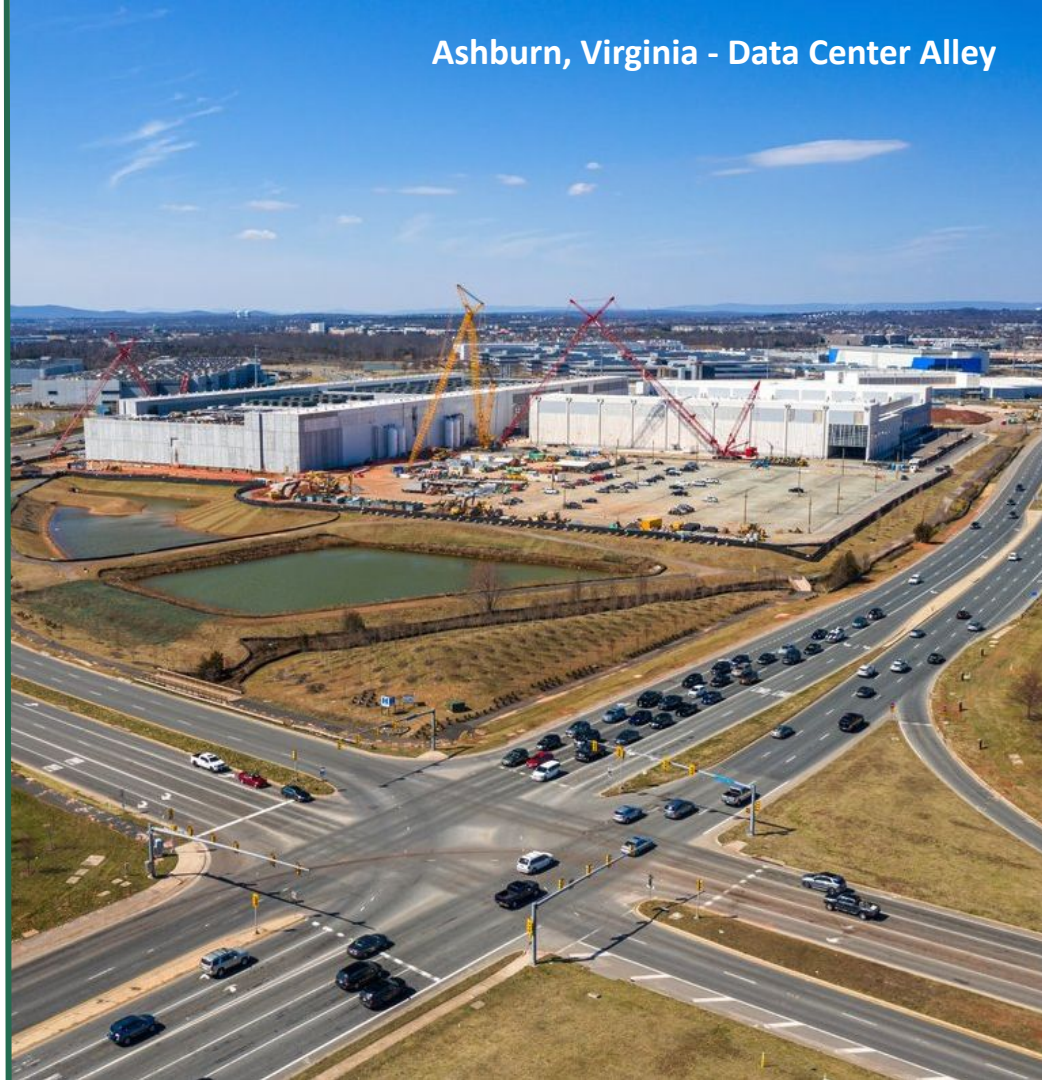
Residential
Universities
Hospitals
Nursing Homes
Schools
Parks
0
0.2
Miles
ALBEMARLE COUNTY
CHARLOTTESVILLE
Expanded Substation
New Substation
North Pines
Mclane Ridge
Emerson/ GE Fanuc
Briarwood
Camelot
Rivanna Station District
Pinoy Mountain
Northwood
Airport Industrial Area/ North Fork
Map created by PEC for presentation purposes only
September 12th, 2025| Warrenton | AS & JK

Local Land Use Impacts

- Energy Usage
- Water Usage and Wastewater
- Water Vapor Plumes
- Air Quality
- Noise
- Fire Protection and Fuel Storage
- Compatibility w/Adjacent Uses
- Lighting
- Building Design
- Parks and Trails
- Wildlife Habitat

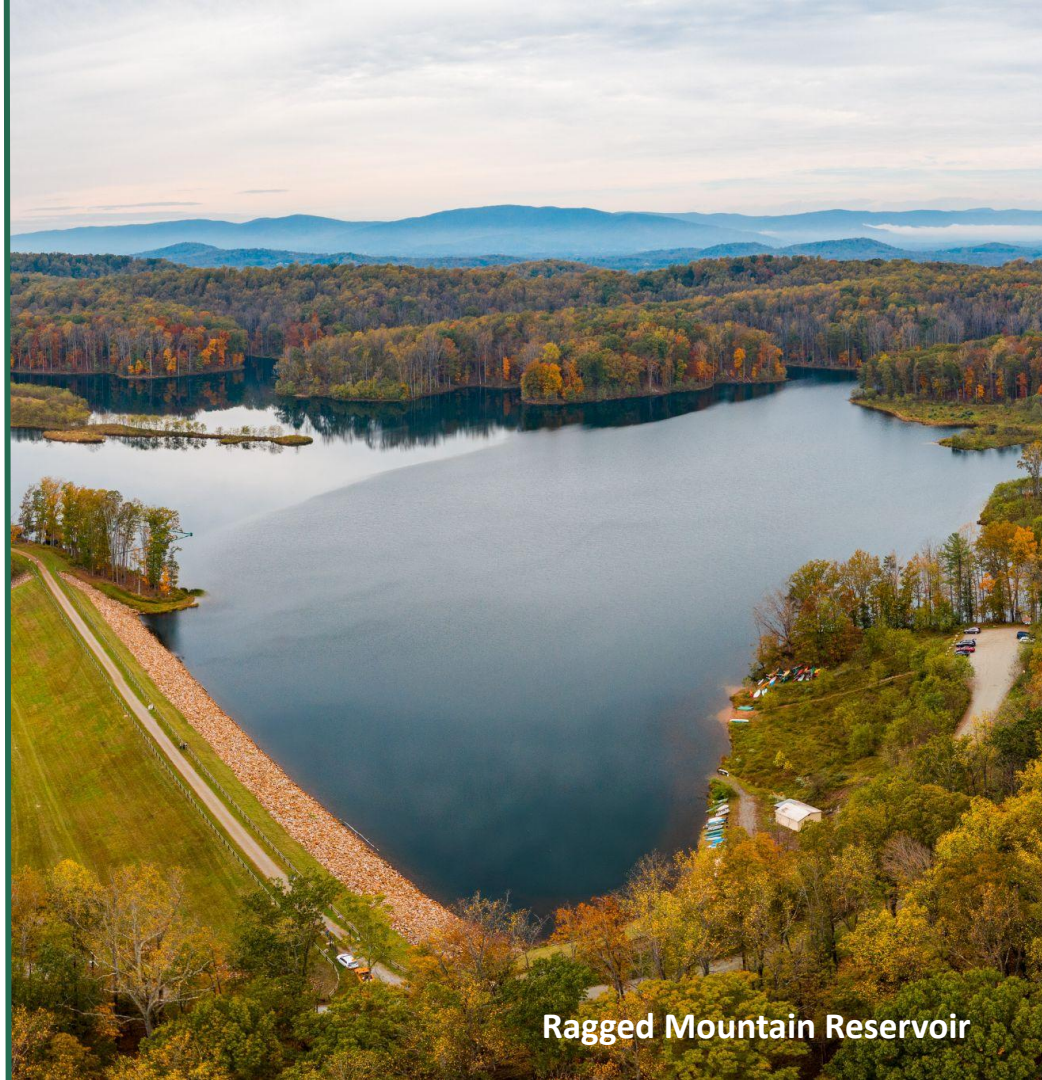


Water Impacts

The county is proposing requiring the use of “closed loop cooling” and/or “recycled” water systems.

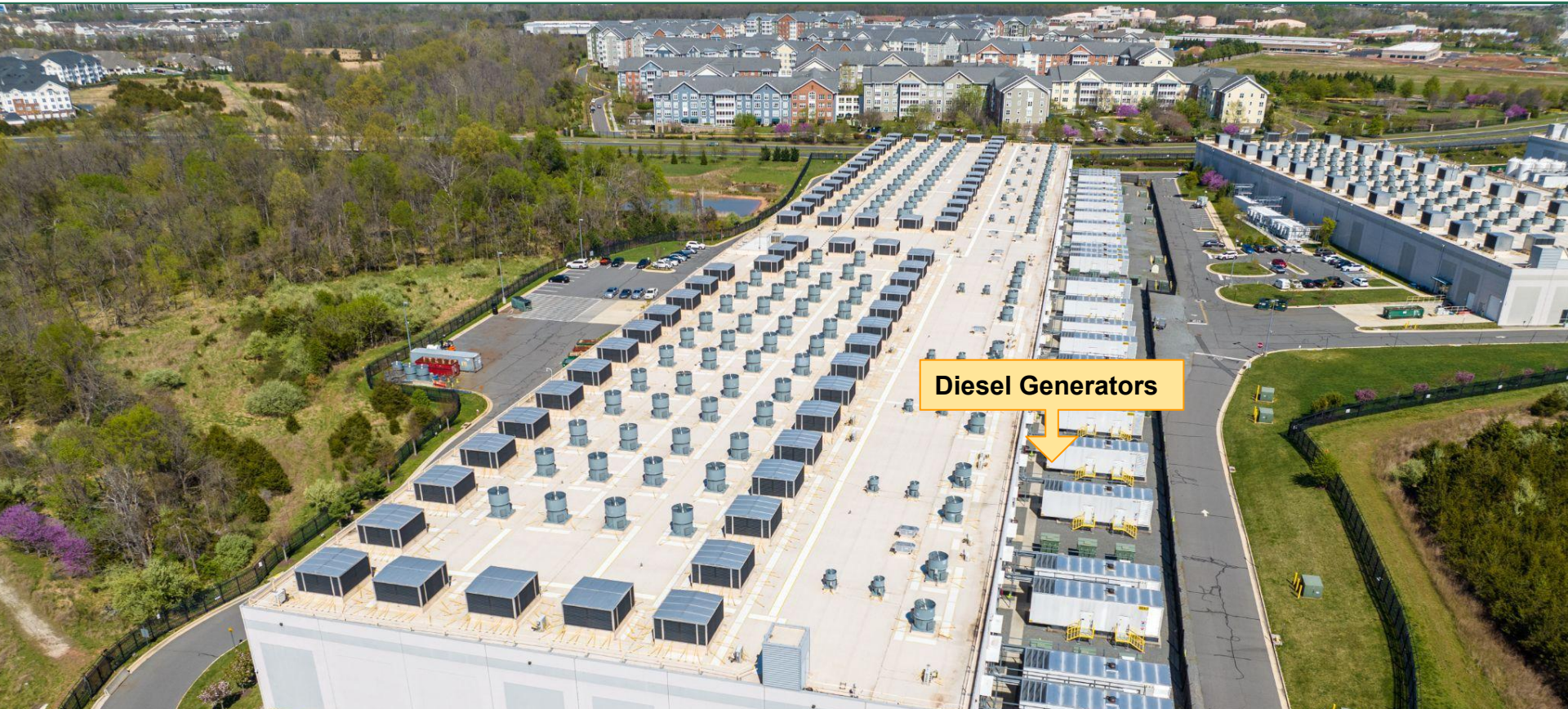
While a good step, this doesn’t eliminate water concerns:

- **Water loss**
- **Replenishment**
- **Infrastructure costs**
- **Increased contaminant discharge**



Ragged Mountain Reservoir

Air Impacts - Data Centers & their Power Plants

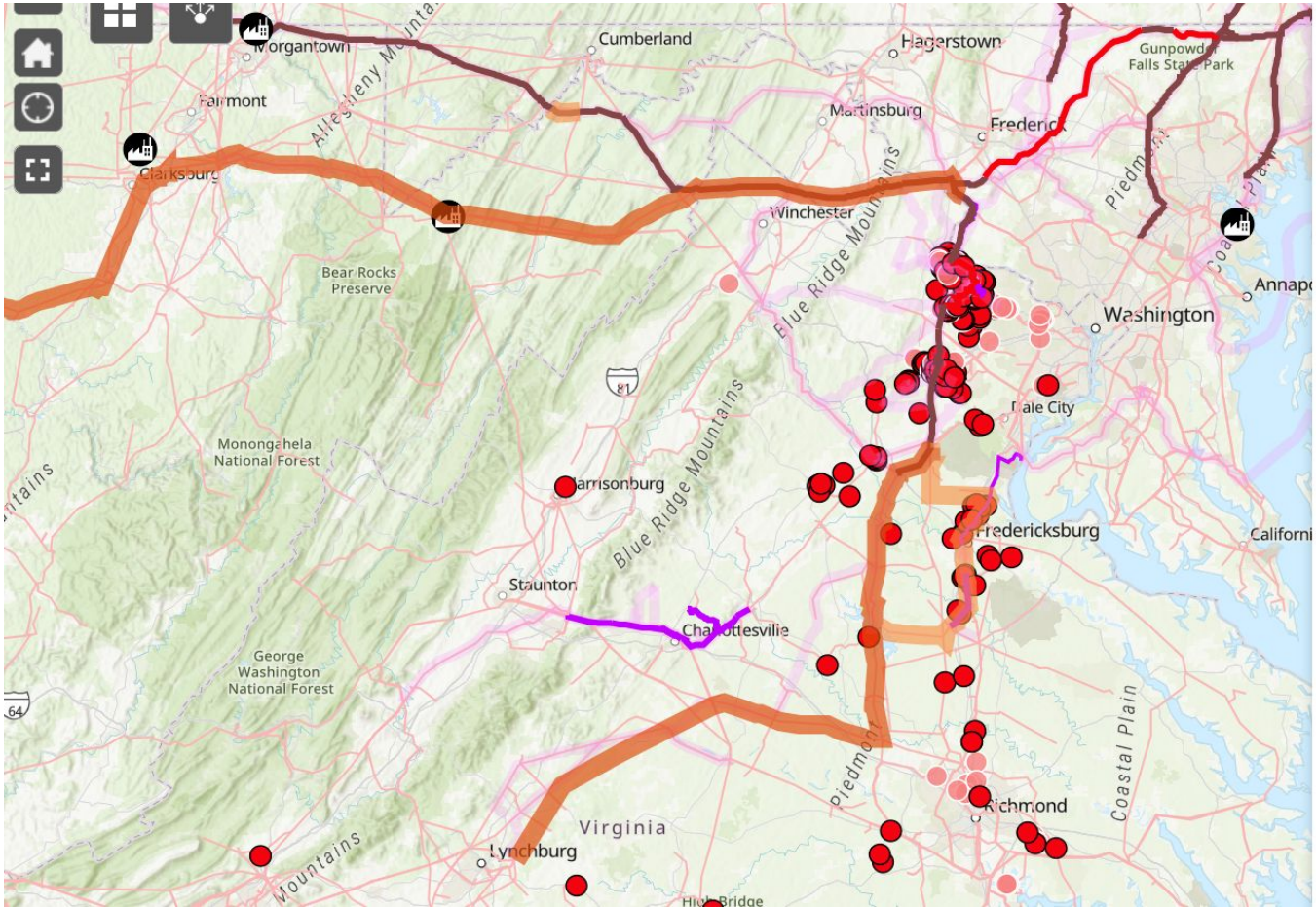


Noise Impacts - Constant low-level hum

Monopolization of Industrial & Commercial Land

Land Use Impacts: Electrical Grid

$12 Billion in Regional Transmission Lines Being Planned



PJM 2024 Window 1: Selected Transmission Proposals (from 12/2024)

- 500 kV
- 765 kV

Coal Power Plants with Maximum Output over 1,000 MW

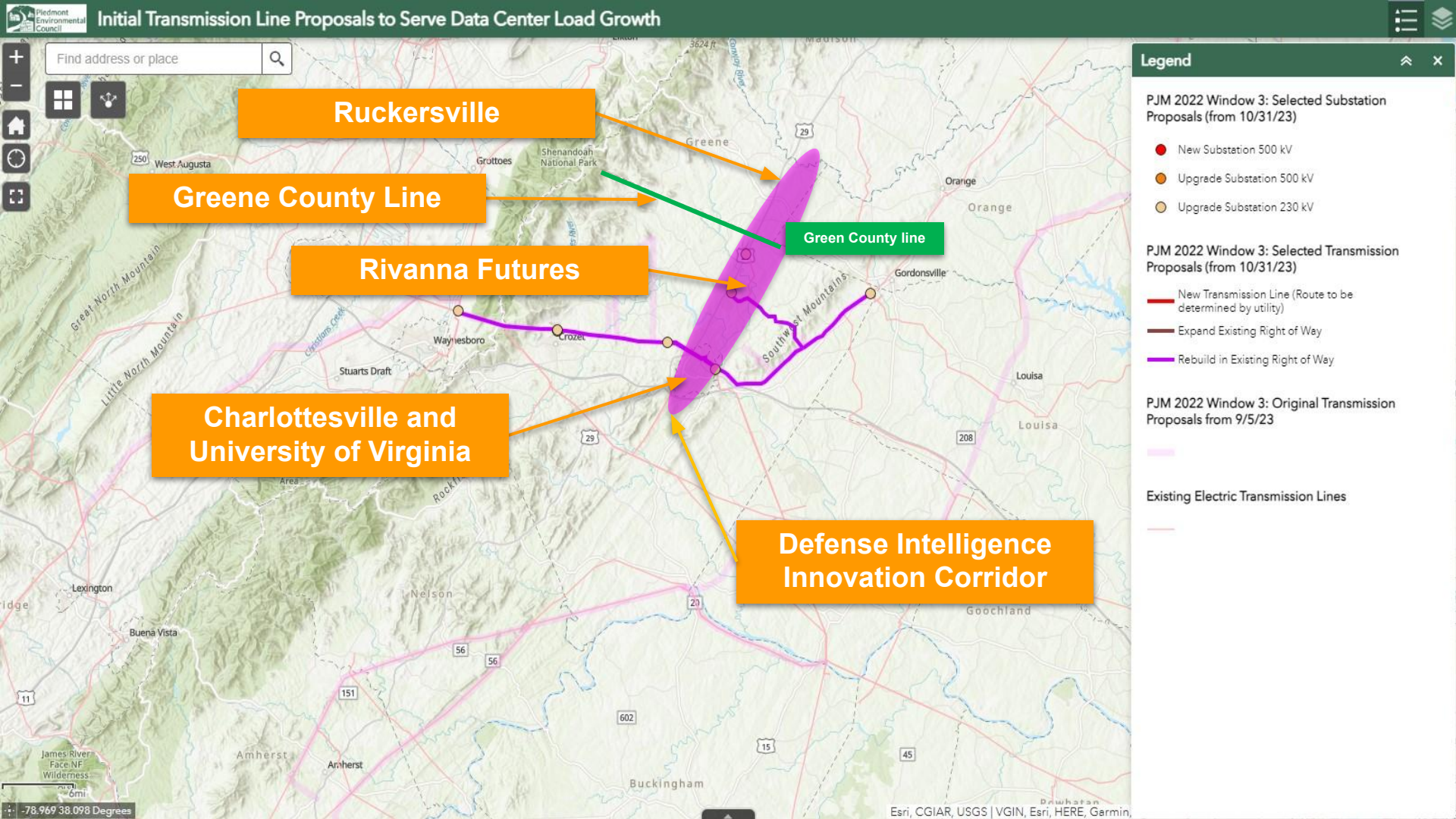
PJM 2022 Window 3: Selected Transmission Proposals (from 10/31/23)

- New Transmission Line (Route to be determined by utility)
- Expand Existing Right of Way
- Rebuild in Existing Right of Way

PJM 2022 Window 3: Original Transmission Proposals from 9/5/23

Data Centers in Virginia

- Existing
- Proposed


Initial Transmission Line Proposals to Serve Data Center Load Growth
Find address or place
Ruckersville
Greene County Line
Rivanna Futures
Charlottesville and University of Virginia
Defense Intelligence Innovation Corridor
Green County line
Legend
PJM 2022 Window 3: Selected Substation Proposals (from 10/31/23)
New Substation 500 kV
Upgrade Substation 500 kV
Upgrade Substation 230 kV
PJM 2022 Window 3: Selected Transmission Proposals (from 10/31/23)
New Transmission Line (Route to be determined by utility)
Expand Existing Right of Way
Rebuild in Existing Right of Way
PJM 2022 Window 3: Original Transmission Proposals from 9/5/23
Existing Electric Transmission Lines
Greene
Orange
Gordonsville
Louisa
Waynesboro
Crozet
Stuarts Draft
Nelson
Buena Vista
Lexington
Amherst
Buckingham
Goochland
Shenandoah National Park
Grottoes
West Augusta
Great North Mountain
Little North Mountain
Southwest Mountains
Esri, CGIAR, USGS | VGIN, Esri, HERE, Garmin,

Climate Impacts

Dominion's Mt. Storm Power Station - West Virginia

Cumulative Environmental Impacts

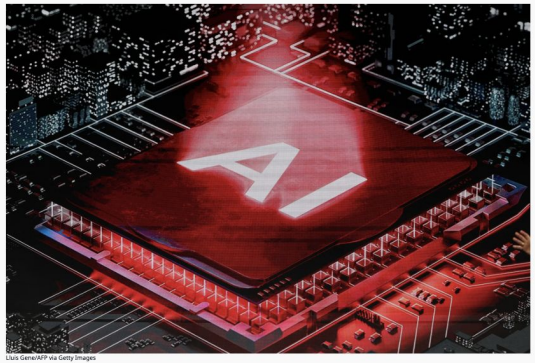
- Combined off-site energy use of multiple data centers leading to additional transmission lines and substations in Albemarle
- Combined on-site energy and air quality impacts of multiple data centers running their generators for testing and during peak energy demand periods
- Combined impacts of data centers on potable and recycled/reclaimed water usage
- Albemarle will not meet its climate action goals owing to massive amount of electricity required to power data centers from fossil fuels

A.I.

Has the tide finally turned on AI's trillion-dollar boom?

For over a year, AI was gospel. Now, Wall Street, Silicon Valley, and regulators are asking the same question: What if it's not?

By **Shannon Carroll** Updated August 28, 2025



Lluis Gene/AFP via Getty Images

AI Bubble

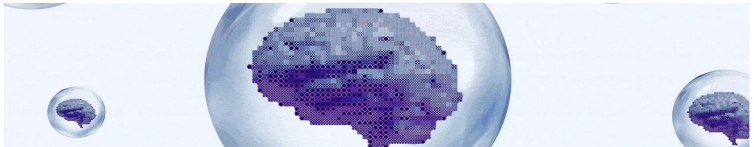
Popular Latest Newsletters *The Atlantic* Sign In Su

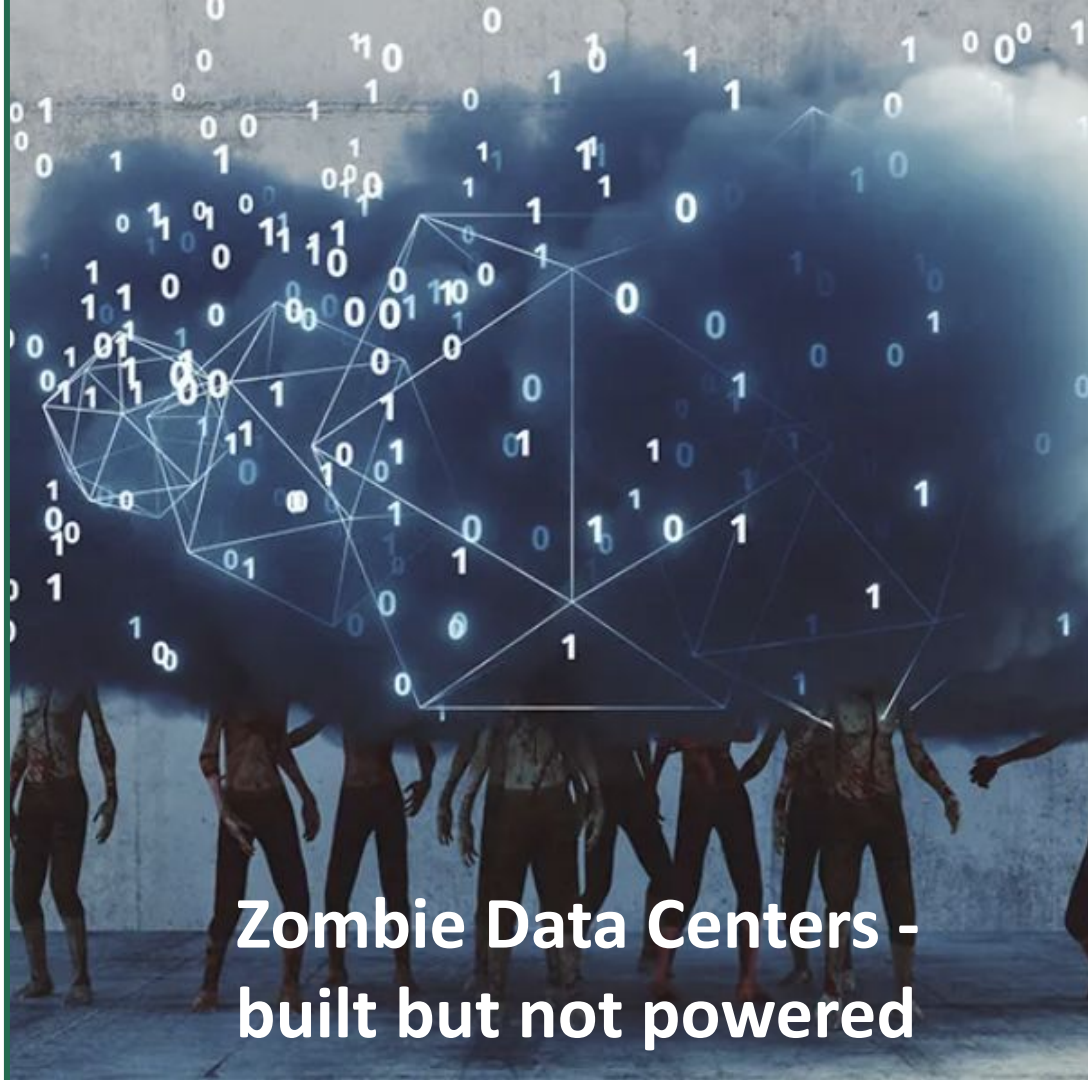
WORK IN PROGRESS

Just How Bad Would an AI Bubble Be?

The entire U.S. economy is being propped up by the promise of productivity gains that seem very far from materializing.

By Rogé Karma





Large data centers are unlike any other large building in Albemarle

PEC is advocating that Albemarle County:

- **Heed the warnings** from Loudoun, Louisa, and other counties, and to **continue requiring special use permits for all data centers larger than 40,000 square feet**.
- **Allow the public and elected officials to have a voice** on data center proposals over 40,000 sf so the county can make informed, community-centered decisions.

LoudounNow

By-Right Data Centers Eliminated in Loudoun, Existing Applications Grandfathered

Hanna Pampaloni Mar 19, 2025 20

A view in Ashburn showcases several data center buildings.

Hanna Pampaloni/Loudoun Now

Responsible regulation
&
transparency are needed

Especially at the local level

Next Steps

- **Write the Board of Supervisors at BOS@albemarle.org**
  - Ask that all data centers above 40,000 Sq. Ft. be required to have a Special Use Permit

- **Speak at a Public Hearing**
  - **Oct. 14:** Planning Commission
  - **Nov. 19:** Board of Supervisors

Questions

Key Takeaways

- **Data center growth is unprecedented** with massive impacts to land, water, air and climate

- We need **state AND local action**

  - Write the Board of Supervisors

  - Speak at a Public Hearing
    - Oct. 14: Planning Commission
    - Nov. 19: Board of Supervisors

- **Get involved with PEC** during State Corporation Commission Hearings & the upcoming Virginia General Assembly

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.” - Margaret Mead


Thank you for coming!
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bitly