Partners For Tonight's Town Hall
Julie Bolthouse
Director of Land Use
The Piedmont Environmental Council
PEC’s mission:

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

- Proposed Transmission Line Route and Impacts
- Explosive growth of the data center industry
- Trends and projections
- What can we individually and collectively do
You can view this map and zoom in/out at:

pecva.org/transmissionmap
Transmission lines
Transmission lines are the big, high voltage power lines that bring electricity from where it's made at our generating stations to substations near communities across B.C.

What's a kV?
kV stands for kilovolt, which is a unit of potential energy. One kV is equal to 1,000 volts.
February 1
Initial Cases/Files Posted

May 31
2022 RTEP Window 3 Closed

October 3
TEAC Short-list presentation

Mid-December
PJM Board approval

February 24
2022 RTEP Window 3 Opened

October 31st + December 5th
TEAC First and Second Read

Allows for 35 days between 1st and 2nd reads
Approximately 6 days to Board meeting from 2nd read
Who?

What?

Single 500 kV overhead transmission line
Likely 115-165 foot wide right of way
Likely 100-200 feet in height

Where?
Transmission Line Proposals to Serve Data Center Load Growth
According to PJM, Proposal 853 has medium-high constructability risks due to anticipated lengthy regulatory process, potential public opposition, construction difficulty, environmental constraints and property acquisition, which may have significant impacts on the cost and schedule for the proposed project.

The route through western Loudoun was selected even though…
Side note - the SCC did not eliminate 904 they stated, “765 kV solution could be pursued as part of the longer term solutions in the area depending on how load and generation materialize.”
According to PJM, the model analysis identified a bottleneck through the Doubs-Goose Creek corridor and the need for a solution from the West into the Dominion Data Center vicinity, as such the NextEra proposal ID 853 option yielded higher Capacity Emergency Transfer Limit (CETL) through a 3rd 500 kV supply line to the load center.
The local economy in this area is primarily based on agriculture and tourism.
• $3 Billion Annual Tourist Spending
• 65% of visitors surveyed ranked wineries as their #1 destination
• Citing the “beautiful landscapes, open spaces, and scenery”

<table>
<thead>
<tr>
<th>Most Recent Census of Agriculture Data</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of Farms</strong></td>
</tr>
<tr>
<td><strong>Market Value of Product Sold</strong></td>
</tr>
<tr>
<td><strong>Total Farm Related Income</strong></td>
</tr>
<tr>
<td><strong>Net Cash Farm Income</strong></td>
</tr>
<tr>
<td><strong>Government Subsidies</strong></td>
</tr>
</tbody>
</table>

Loudoun County 1st in Virginia for Visitor Revenue

Most Recent Census of Agriculture Data
Another Beautiful Bird Walk at Sweet Run State Park

July 24, 2023 | Posted by Sheila Ferguson | Field Trips, Wildlife News

Dominion Energy Project: Wishing Star to Mars

July 1, 2023 | Posted by Sheila Ferguson | Action Alerts/Advocacy

Dominion Energy Projects: Twin Creeks to Apollo and Aspen to Golden

July 9, 2023 | Posted by Sheila Ferguson | Action Alerts/Advocacy Highlights

500 kV transmission lines and towers similar to those proposed

Photo by Scott Harris
PJMs rationale:

- PJM has had unprecedented data center load growth (up to ~7,500 MW) currently forecasted by 2027-28 in Dominion (Northern Virginia) and APS (Doubs).
- 11,100 MW of announced deactivations to the west and south of Quantico
  - Approximately 3,000 MW occurring after the 2022
- The ISA is not scheduled to be transmitted to Quantico to the west
- PJM has implemented a new block dispatch procedure
  - The old dispatch procedure maintained historical intraregional transfers, dispatching most of the generators in the Dominion zone at 100%.
There’s **something big** going on.

We don’t have all the answers, but we know what’s happening is important and we know it matters immensely to the **future of Virginia**.

We need to be creative and work together.
Dominion Energy Virginia
Northern Virginia boasts the largest data center market in the world¹

**Data center development in Virginia**

- Connectivity to world class fiber networks
- Attractive business climate
- Access to largest data center workforce (U.S.)
- Access to nearby international airport
- Access to affordable and sustainable energy

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"Committed to deliver safe, reliable, affordable and sustainable energy to our customers"

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¹ https://www.vedp.org/industry/data-centers ² February 2022 Loudoun County Data Center Land Study ³ Data Center locations provided by Data Center Hawk
Data Center Inventory (MW)

Source: CBRE Research, Q1 2022 & Q1 2023. Figures and data for North American markets include only wholesale colocation facilities. In Europe, Latin America, and Asia-Pacific, total inventory includes both wholesale and retail colocation facilities.
TOP 50 BIGGEST DATA CENTER MARKETS
BY ELECTRICITY CONSUMPTION IN MEGAWATTS

1,400+ data centers surveyed from 63 markets.

Recent technical issues with the local utility's ability to distribute enough power to substations could delay projects currently planned or under construction until at least 2024 or later in Northern Virginia, the world's biggest market.

Unlike real estate, which is measured in square footage, data center size is measured in electricity consumption. To determine data center size, server density is key because many servers can be stacked vertically into the same footprint, enabling more value from the same square footage. More servers means more bandwidth but also more power consumed.

The U.S. is the biggest geographical market because it is home to the world's leading data producing and consuming businesses like Facebook, Amazon, Microsoft, and Google.

With more accurate data on the size and scope of data centers in mainland China, Beijing and Shanghai have both risen in the rankings for 2023.

In 2027, Singapore lifted its development moratorium and put in new guidelines that limit power usage until the end of 2029.

SOURCE: Cushman & Wakefield, DataCenterHQ
The digital age relies on **data centers**

- **Fuel Storage**
- **Diesel Generators**
The digital age relies on a **reliable power grid**

*1000 MW = 1 gigawatt*

*250 homes = 1 megawatt (MW)*
Data centers consume a huge amount of electricity.
Their backup power is **diesel generators**
They create a host of community-level impacts

- Noise
- Water
- Air Quality
- Wildlife Habitat
- Design
- Transmission
And the proposals are getting much bigger

- Older data centers used 10-15 MW per building, and multi-building campuses were rare.
- Now we are seeing 30-90 MW data centers with multi-building campuses.
- A large campus could use 600-1000 MW or more.
Prince William Digital Gateway

3 gigawatts (GW) of energy, equivalent to the power used by 750,000 homes

37 buildings and 15 substations

No allocated right of way for transmission lines connecting the new substations.

Approved December 12th
# Approved But Unbuilt + Applications Filed (Virginia)

<table>
<thead>
<tr>
<th>County</th>
<th>Status</th>
<th>Development square feet</th>
<th>Estimated Power Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loudoun</td>
<td>Approved</td>
<td>12,286,529</td>
<td>1,843MW – 5,529MW</td>
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<tr>
<td>Applications</td>
<td></td>
<td>10,938,449</td>
<td>1,641MW – 4,922MW</td>
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<tr>
<td>Prince William</td>
<td>Approved</td>
<td>10,719,984</td>
<td>1,608MW – 4,824MW</td>
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<tr>
<td>Applications</td>
<td></td>
<td>42,510,328</td>
<td>6,377MW – 19,130MW</td>
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<tr>
<td>Fauquier</td>
<td>Approved</td>
<td>2,901,000</td>
<td>435MW – 1,305MW</td>
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<tr>
<td>Applications</td>
<td></td>
<td>1,990,000</td>
<td>299MW - 896MW</td>
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<tr>
<td>Culpeper</td>
<td>Approved</td>
<td>4,630,000</td>
<td>695MW – 2,083MW</td>
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<tr>
<td>Applications</td>
<td></td>
<td>1,990,000</td>
<td>299MW - 896MW</td>
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<tr>
<td>Stafford</td>
<td>Applications</td>
<td>6,010,000</td>
<td>902MW – 2,705MW</td>
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<tr>
<td>Spotsylvania/Caroline</td>
<td>Applications</td>
<td>6,600,000</td>
<td>990MW – 2,970MW</td>
</tr>
<tr>
<td>King George</td>
<td>Applications</td>
<td>7,500,000</td>
<td>1,125MW – 3,375MW</td>
</tr>
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And more are in the pipeline...

Total Current Load From Data Centers (NoVA) = 2,552 MW

Total Approved But Unbuilt (VA) = 7,800–23,400 MW

Total Including Applications (VA) = 16,000–48,000 MW

Source: PEC analysis of applications in Virginia (Aug. 2023)
Let’s put that energy use in context: **1MW = 250 homes**

- **Total Current Load From Data Centers (NoVA)**
  - = 2,552 MW

- **Total Approved But Unbuilt (VA)**
  - = 7,800–23,400 MW

- **Total Including Applications (VA)**
  - = 16,000–48,000 MW

- 638,000 homes
- 5.8 million homes
- 12 million homes
The hidden costs of AI: Impending energy and resource strain

Deep Jariwala and Benjamin C. Lee on the energy and resource problems AI computing could bring.

In recent years, artificial intelligence (AI) models like ChatGPT have seen notable improvements, with some people concerned about the societal impacts these new technologies may bring including looming concerns related to increasing energy and raw materials demands. (Image: [Stock/Adobe Tolkachov])
Figure 2: Annual Virginia Electricity Sales by End Use
Figure 6: Electricity Sales - Baseline and High Demand Scenarios
What’s happening in Virginia is unprecedented.
PJM Mid Atlantic Territory

- 0.3% annual growth

Green = 2022 projection
Blue = 2023 projection
PJM Western Territory

- 0.1% annual growth

Green = 2022 projection
Blue = 2023 projection
Dominion Territory Explosive Growth Trends

- Green = 2022 projection
- Blue = 2023 projection

5% annual growth
That’s a doubling of Virginia’s peak load within 14 years!
What's Dominion's Plan?

Dominion projects new gas plants, advanced nuclear will be needed to meet soaring demand
Latest long-range plan shows data centers and electrification are driving rising power needs

BY: CHARLIE PAULLIN - MAY 3, 2023  12:02 AM
Dominion’s plans rely on...
# Executive Summary Table: 2023 Plan Results

<table>
<thead>
<tr>
<th></th>
<th>Plan A</th>
<th>Plan B</th>
<th>Plan C</th>
<th>Plan D</th>
<th>Plan E</th>
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</thead>
<tbody>
<tr>
<td><strong>NPV Total ($B)</strong></td>
<td>$109.70</td>
<td>$127.70</td>
<td>$127.20</td>
<td>$140.90</td>
<td>$138.00</td>
</tr>
<tr>
<td><strong>Approximate CO₂ Emissions from Company in 2048 (Metric Tons)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Solar (MW)</td>
<td>10,800 15 yr.</td>
<td>10,875 15 yr.</td>
<td>10,800 15 yr.</td>
<td>10,875 15 yr.</td>
<td>11,094 15 yr.</td>
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<td></td>
<td>19,800 25 yr.</td>
<td>19,875 25 yr.</td>
<td>19,800 25 yr.</td>
<td>23,955 25 yr.</td>
<td>24,294 25 yr.</td>
</tr>
<tr>
<td>Wind (MW)</td>
<td>3,040 15 yr.</td>
<td>3,040 15 yr.</td>
<td>3,040 15 yr.</td>
<td>3,040 15 yr.</td>
<td>3,040 15 yr.</td>
</tr>
<tr>
<td>Storage (MW)</td>
<td>1,050 15 yr.</td>
<td>2,370 15 yr.</td>
<td>2,220 15 yr.</td>
<td>2,370 15 yr.</td>
<td>2,910 15 yr.</td>
</tr>
<tr>
<td></td>
<td>3,960 25 yr.</td>
<td>5,190 25 yr.</td>
<td>5,220 25 yr.</td>
<td>9,780 25 yr.</td>
<td>10,350 25 yr.</td>
</tr>
<tr>
<td>Nuclear (MW)</td>
<td>— 15 yr.</td>
<td>804 15 yr.</td>
<td>804 15 yr.</td>
<td>1,608 15 yr.</td>
<td>1,072 15 yr.</td>
</tr>
<tr>
<td></td>
<td>— 25 yr.</td>
<td>1,608 25 yr.</td>
<td>1,608 25 yr.</td>
<td>4,824 25 yr.</td>
<td>4,288 25 yr.</td>
</tr>
<tr>
<td>Natural Gas-Fired (MW)</td>
<td>5,905 15 yr.</td>
<td>2,910 15 yr.</td>
<td>2,910 15 yr.</td>
<td>970 15 yr.</td>
<td>970 15 yr.</td>
</tr>
</tbody>
</table>
This cost will be **passed on to ratepayers**
“For Alternative Plan B… the Company projects the monthly bill of a Virginia residential customer using 1,000 kilowatt hours (‘kWh’) per month to be $243.20 by 2035, an increase of $127.02 over the May 1, 2020 level…”

- Dominion legal notice Oct. 25, 2023
“For Alternative Plan B… the Company projects the monthly bill of a Virginia residential customer using 1,000 kilowatt hours ("kWh") per month to be $243.20 by 2035, an increase of $127.02 over the May 1, 2020 level…”

- Dominion legal notice Oct. 25, 2023

That's a 100% increase by 2035!
Are Virginia ratepayers and residents subsidizing the data center industry?
Virginia cannot continue down this path.
Unprecedented problems call for new and innovative solutions.

- New policies
- New regulatory framework
- New technology
- New approaches
Unprecedented problems call for new and innovative solutions.

- **New policies**
  - Are incentives for data center development in Virginia still necessary?
  - If so, shouldn’t those incentives be tied to performance standards?
  - Shouldn’t the industry be paying for the additional infrastructure needed?

- **New regulatory framework**
  - Transparency around energy and water usage
  - Siting regulations protecting residents, schools, parks, and communities
  - Assessment of cumulative impacts on grid, ratepayers, air quality, water resources, parks, historic sites, viewsheds, and agricultural resources.

- **New technology**
  - Energy efficiency and more sustainable equipment and design
  - Alternative transmission options such as advanced conductors, underground options including HVDC for long distance power deliver

- **New approaches**
  - Onsite power generation (a new industry favorite topic, but brings new issues…
So what are we doing?
Spreading the word and pushing for reform
Advocating for state legislative changes...

MITIGATING DATA CENTER DEVELOPMENT'S IMPACTS
LAND USE REFORM

EXECUTIVE SUMMARY
Virginia is home to the largest concentration of data centers in the world, widely cited as hosting 70% of global internet traffic. This massive industry is continuing to grow very fast, requiring huge amounts of energy, land, and water to operate, resulting in widespread community impacts. Yet, the Commonwealth does not currently have any regulatory oversight of data center development and localities continue to approve more facilities without considering the cumulative impacts. This explosive growth of data centers threatens to derail state efforts to meet climate goals, improve air and water quality, advance land conservation, and protect national and state parks.

CHALLENGE
Data center development in Virginia has been accelerating for years with the hub in northern Virginia known as the largest in the world. Recently, that demand has exploded throughout the state, with buildings larger than 100 big box stores and as tall as 50 feet on sprawling campuses. Developments are now being proposed in environmentally sensitive areas next to our national parks, local parks, and rural areas requiring costly new electrical infrastructure. Others are adjacent to critical neighborhoods, schools, medical facilities, and nursing homes.

THE GIANT FOOTPRINT OF THE DATA CENTER INDUSTRY THREATENS REGIONAL POWER, LAND CONSERVATION, AND AIR & WATER QUALITY
The footprint of this industry is gigantic and threatens regional power supply, water quality, land conservation, and air quality beyond individual communities. The Virginia Department of Emergency Management reports that the amount of power consumed by data centers in Virginia far outstrips the amount of electricity consumed by all households combined.

SOLUTION
Despite Virginia having the highest number of data centers in the world, the state lacks critical information about their impacts on our environment and energy grid. Currently, approvals are made unitarily by localities, which have a strong tax incentive to approve proposals without considering the broader statewide impacts. A comprehensive study of the impacts on the Commonwealth's electrical grid, environment, historic and natural resources, and energy security concerns, and ability to meet climate goals is critically needed to protect our communities including those residents most vulnerable to utility rate hikes, air pollution, and climate impacts.

The National Academies of Science is an independent academic institution with the ability to lead this study and provide objective advice to inform policy as they have done on past issues such as gold mining and uranium mining. Using data from utilities, localities, and state agencies, the study would include a robust analysis of what is in operation, approved, and planned and an evaluation of impacts on the electrical grid and ratepayers. Climate goals, water consumption, water quality, air quality, land conservation, recreation, and historic preservation.

The General Assembly must also establish a process for state review including a grid impact statement submitted to Virginia Energy for all new data center power demand requests and a regional review of impacts from new data center proposals by federal and state agencies and regional utilities. Virginia Energy review would provide oversight to ensure continued grid reliability and prevent excessively high costs falling to the ratepayers. The regional review would provide an opportunity for these entities...
Advocating for state legislative changes...

MITIGATING DATA CENTER DEVELOPMENT'S IMPACTS
LAND USE REFORM

EXECUTIVE SUMMARY
Virginia is home to the largest concentration of data centers in the world, widely cited as hosting 30% of global internet traffic. This massive industry is growing very fast, requiring huge amounts of energy, land, and water to operate, resulting in widespread community impacts. Yet, the Commonwealth does not currently have any regulatory oversight of data center development and localities continue to approve more facilities.

A data center can also consume 5-6 million gallons of water a day for cooling - the equivalent of a small city’s overall annual consumption. They consume massive amounts of land as well. Digital Gateway, a project in Prince William County, would allow 27 million square feet of data center development which is the equivalent of about 180 Walmart Supercenters. All of this unprecedented surface results in increased stormwater runoff and pollution.

The General Assembly must also establish a process for state review, including a grid impact statement submitted to Virginia Energy for all new data center power demand requests and a regional review of impacts from new data center proposals by federal and state agencies, and regional utilities. Virginia Energy review would provide oversight to ensure grid reliability and prevent overbuilding falling to the ratepayers, which would then be reflected in the rate impacts.

POLICY RECOMMENDATIONS
Study the impacts of data center development on the Commonwealth’s electrical grid, environment, historic and recreational resources, and ability to meet climate goals through The National Academies of Science.

Require a grid impact statement be submitted to and approved by the State Corporation Commission for all new data center power demand requests.

Create a framework for a regional review board that evaluates large data center projects.
Advocating for state legislative changes...

SURGING ENERGY DEMAND FROM DATA CENTERS

DIRTY ENERGY INFRASTRUCTURE

EXECUTIVE SUMMARY

Data centers are large industrial buildings filled with computer that store, process, and distribute vast amounts of digital information. Northern Virginia leads the world in data center development, housing nearly 50% of all US facilities. While data centers generate significant energy use for the localities in which they reside, they also require massive spikes in peak electricity demand in Virginia, which, through some estimates, is projected to more than double by 2030. Virginia needs a chart a responsible path forward, balancing the growth of our digital world with the need to power that growth with affordable clean-energy free.

CHALLENGE

Data storage needs have grown exponentially with the rise of the Internet and new trends like Artificial Intelligence (AI), cryptocurrency, and the expansion of rural broadband have dramatically accelerated this pace. For a variety of reasons, including industry tax breaks, low costs, and an existing fiber network, Northern Virginia is expected to continue to serve as a favored location for new data centers. As a result, the state’s planned growth in the region is projected to cost more than double the state’s peak electricity demand through 2038. According to Dominion Energy, the state’s largest electricity provider (see graph below), the increase in energy demand over the next 20 years is significant and will place a strain on the electricity grid.

DATA CENTER DEVELOPMENT IS PROJECTED TO MORE THAN DOUBLE THE STATE’S PEAK ELECTRICITY DEMAND THROUGH 2038

In their latest long-term integrated Resource Plan (IRP) filed in April, Dominion Energy has suggested meeting demand growth by building a substantial amount of renewable energy and storage. This plan ignores Virginia’s clean energy requirements and places a significant burden on families and other businesses to subsidize the construction and operation of the inefficient and expensive infrastructure necessary to meet the increase in electricity demand.

In addition to a massive increase in needed electric generation, data center growth will also require significant new transmission infrastructure. Just this past General Assembly session, legislation was passed recognizing a $672 million emergency transmission project in response to the Northern Virginia data center strain. This data center grid has not only been an increased use of diesel generators which serve as the backup power source for data centers, raising concerns about local air quality.

While data centers are an important part of Virginia’s economic development plan, that plan must align with our ability to protect the environment and provide for a clean, affordable energy transition for all. Virginia is facing an unprecedented energy challenge with explosive growth in this sector. Proprietary planning can increase energy demand and offset some of the anticipated impacts, and we can take steps now to provide appropriate cost allocation, ensuring responsible parties are paying for the necessary upgrades to our electric system. But in order to develop a holistic and sustainable solution, we need to establish a proper accounting of the externalities of this industry.

A comprehensive study is necessary to illustrate the externalities and impacts related to different scenarios for buildout of the data industry in Virginia. This study should address energy demand and gauge our ability to meet our goal of a clean energy transition while avoiding unnecessary impacts on communities and natural resources.

POLICY RECOMMENDATIONS

An Independent Study: Conduct an independent study like the National Academy of Sciences to study all costs and benefits of the data center industry. Specifically related to energy demand, it should evaluate the grid and our ability to reliably meet demand with carbon-free energy. We could also integrate other sectors of the industry to improve efficiency and procure clean energy so as to avoid duplication of efforts by our utilities and highlight the impacts to ratepayers.

Permitting, Planning and Education: Implement a state review process for new proposals. A review of individual projects that fail to account for the aggregate impacts of all projects is necessary, ensuring that no one only appreciates the total picture. The Department of Energy, in coordination with the Department of Environmental Quality, should provide assistance to local governments, including directing critical information related to necessary energy infrastructure to propose the project.

Protect from Cost Shift: The rules governing approval and allocation of costs for new transmission and generation approval should be examined and, if necessary, changed to ensure that parties causing investments bear the costs of these investments; preventing residential energy customers from shouldering this burden.
Advocating for state legislative changes…

The January 2023 PUD Load Forecast projects that the data center industry’s planned growth in the region will more than double the state’s peak electricity demand through 2058 (blue line). In addition to a massive increase in needed electric generation, data center growth will also require significant new transmission infrastructure. Just this past General Assembly session, legislation was passed recognizing a $627 million emergency transmission project in response to the Northern Virginia data center cluster. Strain on the grid has also brought an increased use of diesel generators which serve as the backup power source for data centers, raising concerns about local air quality.

While data centers are an important part of Virginia’s economic development plan, that plan must align with our ability to protect the environment and provide for a clean, affordable energy transition for all. Virginia is facing an unprecedented energy challenge with explosive growth in this sector. Proper planning can offset some of the anticipated impacts, and we can take steps now to provide appropriate cost allocation, ensuring responsible parties are paying for the necessary upgrades to our electric system. But in order to develop a holistic and sustainable solution, we need to establish a proper accounting of the externalities of the industry.

A comprehensive study is necessary to illustrate the opportunities and challenges related to different scenarios for buildout of the data industry in Virginia. This study should address energy demand and gauge our ability to meet our goal of a clean energy transition while avoiding unnecessary impacts on communities and natural resources.

POLICY RECOMMENDATIONS

An Independent Study: Contract with an independent body like the National Academy of Sciences to study all costs and benefits of the data center industry. Specifically related to energy demand, it should evaluate impacts to the grid and our ability to reliably meet demand with carbon-free energy resources. It should integrate efforts of the industry to improve efficiency and procure clean energy so as to avoid duplication of efforts by our utilities and highlight impacts to ratepayers.

Permitting, Planning, and Education: Implement a state review process for new proposals. A review of individual projects that fails to account for the aggregate impacts of all projects invariably means that no one fully appreciates the total picture. The Department of Energy, in coordination with the Department of Environmental Quality, should provide assistance to local governments, including siting criteria information related to the necessary energy infrastructure to power the project.

Protect from Cost Shift: The rules governing approval and allocation of costs for new transmission and generation approval should be examined and – if necessary – changed to ensure that parties causing investments bear the costs of those investments, preventing residential energy customers from shouldering this burden.
General Assembly Update: JLARC Study Underway

- Joint Legislative Audit and Review Commission (JLARCO) has authorized a data center study
- Robust study includes environmental, historic, grid, and climate impacts along with a fiscal benefit analysis and consideration of alternative options
General Assembly Update: JLARC Study Underway

To include an evaluation of:

- recent and expected trends and factors impacting data center industry growth
- impacts on Virginia’s natural resources, as well as historic and cultural resources
- impacts on energy demand and supply in Virginia, future energy infrastructure needs, energy rates paid by customer classes, and the cost allocation
- impact on state’s ability to transition from fossil fuels to renewable energy sources
- impact on local revenue and how local tax policies may affect data centers
- impact on local residents, including noise, property values, and visual impact
- considerations around the construction and siting of data centers, and review of local zoning and regulatory restrictions
- possible guidance and assistance state agencies could provide to localities
- whether more geographically diverse industry growth would provide greater benefits and any obstacles there are to attracting them to other areas, particularly economically distressed or rural regions
- compare Virginia’s competitiveness in attracting data centers with other states
- determine if Virginia’s data center tax exemption could be improved and if the level of benefit is appropriate given the cost
General Assembly Update: Data Center Legislation (17 Bills!)

- Energy efficiency bills
- Siting bills
- Undergrounding of transmission lines bills
- Industry pays bills
- Permitting process bills
General Assembly Update: Data Center Legislation (17 Bills!)

**Energy Efficiency Bills**
- HB116 Sullivan (D) and SB192 Subramanyam (D) - Ties sales and use tax exemption to energy efficiency and procurement of renewables
- HB 910 Srinivasan (D) – Requires quarterly reporting on energy usage and study group

**Undergrounding of Transmission Lines Bills**
- HB 340 Lovejoy (R) and Thomas (D) SB286 Roem (D) – Undergrounding of transmission lines within a half mile of a national park is in the public interest
- SB708 Perry (D) - Undergrounding of 500kV transmission line paid for by the industry

**Siting Bills**
- HB337 Lovejoy (R) and Thomas (D) and SB284 Roem (D) – Discourages siting that impacts historic and agricultural resources and prohibits within ½ mile of park
- HB338 Helmer (D), Lovejoy (R), and Thomas (D) and SB285 Roem (D)– Requires siting assessment on water usage and carbon emissions as well as impact on ag
- HB1010 Lovejoy (R) Prohibits data centers within ¼ mile of schools, parks, or residential areas
- SB288 Roem (D) – Requires noise abatement requirements
- SB289 Roem (D) – Requires additional stormwater management near parks

**Industry Pays Bills**
- HB1288 Webert (R) – Requires public electric, water, and sewer utilities have a separate classification for data centers
- SB191 Subramanyam (D) – Requires aggregate planning of generation, transmission, and distribution and initiates a proceeding to assess the current allocation of costs and amend if found data centers are subsidized
- SB664 Stuart (R) – Prohibits the costs associated with electrical infrastructure required by the industry to be allocated to all ratepayers.

**Process Bills**
- SB 667 Stuart (R) – Removes authority for locality for accelerated permitting
Join us for **Lobby Day** in Richmond on Jan. 31 with the Virginia Conservation Network!

- **Event:** 7:45 a.m. – 4 p.m.
  - Register by Wed. 1/24 @ midnight
  - Chance to lobby your delegate and senator
  - Light breakfast, lunch provided
  - Meet other conservation advocates

- **Optional bus to take down**
  - 5:30 a.m. - departing Haymarket Park & Ride, returns at 6 p.m.
  - Register >>
Join us for Lobby Day in Richmond with the Virginia Conservation Network!

Schedule:

7:30am - Arrive in Richmond

7:45-8:30am - Arrive at St. Paul's Episcopal Church (815 E Grace St, Richmond, VA 23219), coffee and light breakfast fare will be available, legislators give remarks

8:30-11:30am - Lobby your Delegate and Senator with other conservation advocates

11:30-1:30pm - Lunch at St. Paul’s Episcopal Church and remarks from agency staff members

1:30-4:00pm - Lobby key committee members on data center reform (possible interview with press)

4:00pm - return home

Register for Lobby Day:
https://support.npca.org/page/61992/event/1

Want to bus down with us? Register:
www.eventbrite.com/e/data-center-legislation-bus-to-richmond-tickets-795312901297

Departing 5:30am - Haymarket park & ride
Returning 6pm
Loudoun Has An Important Role…

- 2024/2025 changes to Comp Plan and Zoning Ordinance
- Data center applications

“This campus adds like 20% more data center usage in this county than all of our data centers combined right now. It is a huge, huge amount of data center space, power, and [density],” Randall said.

“Is there just no stopping at this point? I don’t know how to deal with this anymore,” she said.

“You’re not the only one,” Planning Director Daniel Galindo responded.
Who is in charge?

- Local governments?
- FERC?
- Virginia State Corporation Commission?
- Dominion?
- General Assembly?
- Governor?
What can **you** do?

- Reach out to elected officials and support data center reform legislation
- Submit initial comments to NextEra: [www.nexteraenergytransmission.com/midatlantic-resiliency-link.html](http://www.nexteraenergytransmission.com/midatlantic-resiliency-link.html) and track their response or lack thereof
- Stay informed - NextEra routing process, County Zoning and Planning, etc.
- Share information/video with friends, family, contacts and neighbors
- Financially support the local efforts and the broader campaign that is needed
Questions?
Final Thoughts

“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

Homework!

- Reach out to elected officials and support data center reform legislation
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