

POSITION STATEMENT FORM

GENERAL SUBJECT AREA -- TITLE OF PROPOSAL:

Require public quarterly reporting of data center energy and water use.

PROPOSAL:

Support legislation to require reporting of energy, highlighting renewable energy, and water utilization reporting by data centers. Counties should collect this information and make it available on a website so that the public can see energy, especially renewable energy, and water utilization.

SOURCE:

EQAC

BACKGROUND:

Data centers provide a significant source of revenue to Virginia and local governments and data centers are planning additional growth in Virginia, including Northern Virginia. However, planning for data centers to provide the energy, water, land, renewable energy and other needs has been lacking. This lack of planning is now threatening energy, water and creating tensions between communities, especially communities that might be adjacent to data centers, and data center advocates. Energy and water use along with information to show that water waste with elevated salts and minerals from evaporative cooling is not being sent to the Occoquan wastewater treatment facility are all needed to plan so that critical energy and water resources will be sufficient to serve communities, businesses and data centers.

Multiple bills were introduced in 2024 and 2025 that would require reporting of energy or energy and water use by data centers. Such legislation is needed because data centers consume huge amounts of energy and history has shown that planning for sufficient energy has been problematic given the rapid growth and high energy demands of data centers. Reporting of energy utilization would also be helpful in helping the public to see the commitments and accomplishments that corporations make to work towards energy neutrality. Similarly, the use of evaporative cooling may be the most efficient way to meet data center cooling needs but it requires vast amounts of water that can threaten water supplies for all. Public reporting of each data center's energy use would provide regulators and citizens with information to monitor this energy sector, and reward centers that demonstrate their green commitments.

While collection of energy and water use should probably be routine, information on energy and water use by data centers is most important because of their high use of energy and water. Moreover, it is critical that this information be shared openly at a regional level because

STAFF RECOMMENDATION:

(Do not fill out-- This will be indicated by the Legislative Director and County Executive)

POSITION STATEMENT INFORMATION SHEET

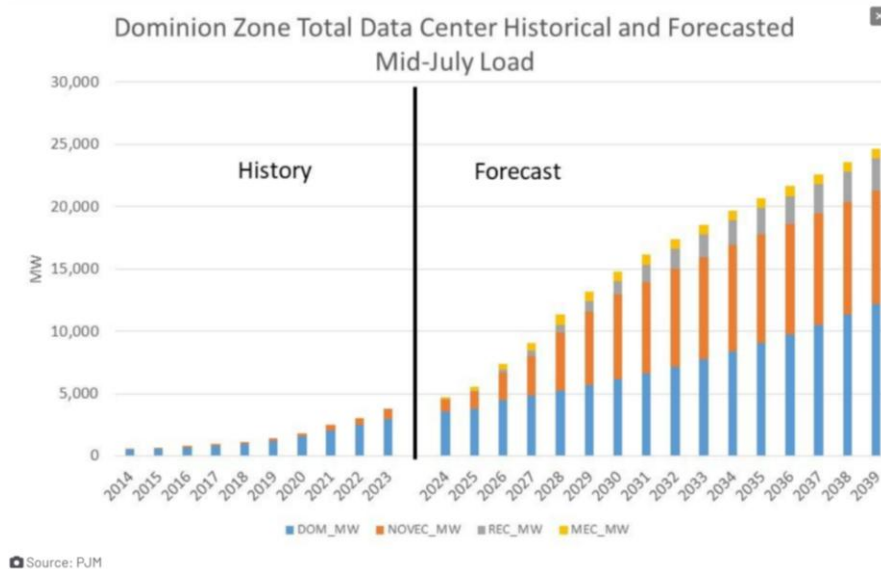
(Supplemental background information to be used by staff)

GENERAL SUBJECT AREA -- TITLE OF PROPOSAL:

Require public quarterly reporting of data center energy and water use.

ADDITIONAL BACKGROUND INFORMATION:

The explosive growth of the data center industry represents a major challenge to achieving a clean energy future in Virginia. An April 29, 2024 by the Wall Street Journal, titled [“How Big Data Centers Are Slowing the Shift to Clean Energy”](#) described how in Virginia’s data-center alley, rising power demand means more fossil fuels. Data center development in Northern Virginia has been accelerating for years, with a higher concentration in Loudoun County than anywhere else in the world. As of late 2022, data centers accounted for [21% of Dominion Energy’s electricity sales](#) in Virginia. In fact, data centers represent [the only growing sector](#) of electricity demand in Virginia, and that demand growth is projected to [more than double peak load by 2040](#). Disturbingly, Dominion’s [Integrated Resource Plan](#) filed in 2023 points to higher-than-anticipated load growth from data centers as the rationale for leaving in place existing fossil-fuel generation and pursuing an “all of the above” energy strategy moving forward. The chart below shows the historic and projected trend in data center energy use in Virginia.



According to data [gathered by regional grid operator PJM](#), half of the coming surge will occur in parts of Virginia served by Dominion Energy. In its [2023 Integrated Resource Plan](#) (IRP), Dominion said it would meet the higher demand by increasing its use of expensive and highly polluting fossil fuels and building new methane gas-fired generating plants. Dominion admitted this will push up carbon emissions at a time when the Virginia Clean Economy Act requires the utility to build renewable energy and cut carbon. PJM projects equally huge data center growth in areas served by Virginia electric cooperatives, especially Northern Virginia Electric Cooperative (NOVEC). The cooperatives are exempt from most VCEA requirements, and NOVEC buys the bulk of its power from PJM’s fossil fuel-heavy wholesale market. NOVEC’s latest [annual report](#) cites load growth of 12% per year, almost

entirely from data centers, but fails to even mention the increase in carbon emissions that will accompany that growth.

Several bills have been introduced in 2024 Virginia general assembly that proposed requiring public reporting of energy use¹, requiring data centers to meet energy performance standards, and purchase or produce renewable energy.²

POSSIBLE SUPPORT OR OPPOSITION BY ORGANIZATIONS:

(List any organizations or groups, if any, which might be in favor of or against the proposed position)

Environmental groups will support local governments concerned about exploding energy use by data centers and the risk of their energy demands on the local jurisdictions meeting their climate goals. CECAP and MWCOG climate and energy reduction goals are jeopardized by the projected heavy energy demands of explosive data center development in Northern Virginia. Virginia Clean Economy Act goals are jeopardized by data center energy demands.

Some data centers will resist public reporting and accountability. Large data corporations, (e.g., Amazon, Google, Meta), have strong green energy commitment and likely would not resist. Data centers with customers that do not have such public commitments would be more likely to resist public reporting of their energy intensity. Some local governments may be reluctant to risk the promise of tax revenues if data center growth is slowed in response to the legislation.

STAFF CONTACT PERSON(S):

(Provide name and phone number of County staff person(s) best able to provide any additional research or necessary information)

¹ [HB 910 Department of Energy; data center energy usage](#). Requires each data center located in the Commonwealth to make a quarterly energy source report to the Department of Energy's Division of Renewable Energy and Energy Efficiency that identifies the amount of energy, disaggregated by the source of energy, consumed by the data center in the previous quarter. The bill requires the Division to publish aggregate deidentified data from such reports on its website. The bill also directs the Secretary of Commerce and Trade to convene a work group to estimate the future energy demands of the data center industry in the Commonwealth. The bill requires the work group to include representatives from the Department of Energy, the Virginia Economic Development Partnership Authority, the State Corporation Commission, the data center industry, electric utilities, and other interested stakeholders. The Secretary is required to report the findings of the work group to the General Assembly by November 30, 2024.

² [HB 116 Sales and use tax exemption; data centers](#). Requires data center operators to meet certain energy efficiency standards in order to be eligible for the sales and use tax exemption for data center purchases. Under the bill, a data center operator shall be eligible for the exemption only if such operator demonstrates that (i) its facilities either (a) have a power usage effectiveness score of no greater than 1.2 or (b) for data centers co-located in buildings with other commercial uses, achieve an energy efficiency level of no less than the most efficient 15 percent of similar buildings constructed in the previous five years and (ii) it will procure carbon-free renewable energy and associated renewable energy certificates from facilities equal to 90 percent of its electricity requirements or that its electricity will be otherwise derived from non-carbon-emitting, renewable sources.