BILL NUMBER: Senate Bill 116

Data Center Impact Analysis and Report

COMMITTEE: Education, Energy, and the Environment Committee

HEARING DATE: February 13, 2025

SPONSOR: Senator Karen Lewis-Young

POSITION: Favorable

Chair, Brian Feldman, Cheryl C. Kagen and Members of the Committee,

As a professional electric power engineer, I ask for a Favorable report on SB 116.

I have a Master of Engineering in Electric Power from Rensselaer Polytechnic Institute, performed contingency analysis as a transmission planner for Con Edison of New York and worked nearly 10 years for the Federal Energy Regulatory Commission in the Office of Electric Reliability investigating blackouts and prescribing mitigation to bring utilities in compliance with the NERC mandatory reliability standards.

As such I am concerned that there has not been sufficient recognition at the state level of the immense power needs of data centers. At present Maryland generates 11,000 megawatts, which only satisfies 60% of the state's power demand. How will the state supply the power needs of an emerging hyperscale data center industry in Maryland, considering that this state already has a power deficit? Hyperscale data centers consume as much power and water as a small city.

The first hyperscale data center in Maryland, Quantum Frederick is projected to require as much as 2000 megawatts at full build out, per TPG, the site's current owner. The power demands of using AI are ten times that of a traditional Google search so this number is but an

¹ "The campus is part of the wider data center park owned by TPG Real Estate being built on the site of a former aluminum plant. The company is developing a 2,100-acre, 2GW data center park for other developers to build data centers in. Quantum Loophole was previously involved in the project until TPG had the company removed." https://www.datacenterdynamics.com/en/news/rowan-secures-975-million-financing-for-maryland-data-center-campus/

estimate. Note that the proposed PSEG Maryland Piedmont Reliability Project transmission line will only carry 1000 megawatts. This means one hyperscale data center would require two or three such transmission lines if the site is not near a large generating facility.

I am deeply concerned that in a rush to satisfy a new industry full of financial promises Maryland officials risk making decisions that will stress the electric grid to the point of instability. The cost to ratepayers for providing the necessary power infrastructure is also unknown.

Most of what has been broadcast about hyperscale data centers comes from industry press releases and studies paid for by industry lobbyists. At present the state does not have an accurate account of how many data centers exist, how many are projected, and what the cumulative power demand will be. The only information so far has been gathered by citizen advocates.² This is not an acceptable way for the state to make such momentous decisions.

The Data Center Impact Analysis and Report Act is necessary to provide our elected officials and state agencies with accurate information to make prudent decisions. The agencies that would conduct the study have proven they can provide informed and practical recommendations. The time frame of 25 months for producing the report is reasonable and not an undue burden on the data center industry and its associates. Finally, the small cost for the research by the University of Maryland of Maryland School of Business is an investment that will pay dividends in orders of magnitude in savings from costly mistakes due to lack of information.

Thank you,

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https://vcu.maps.arcgis.com/apps/mapviewer/index.html?webmap=bdde5f36ea574365b59826e2ba1c3c6f

² Climate Justice Wing, an environmental advocacy group created this tracking. CJW worked with Office of Peoples Council to verify numbers through web searches and news articles. CJW has located ~24 commercial data centers using ~ 235MW of power. Currently, there are 11 new data centers proposed which will use approximately 5-7GW of power or 25 times as much power of what is currently used by data centers. Also, there are non-commercial data centers in MD, i.e. NIH, NSA and private companies selling web services. The Governor just announced a data center at UMD.