



# SIERRA CLUB

## MARYLAND CHAPTER

P.O. Box 278  
Riverdale, MD 20738

**Committee: Economic Matters**  
**Testimony on: HB 0270, Data Center Impact Analysis and Report**  
**Position: Favorable with Amendments**  
**Hearing Date: January 23, 2025**

The Maryland Chapter of the Sierra Club supports HB 0270 but urges the Committee to consider amending the bill to better protect ratepayers, taxpayers, and the environment.

The bill requires a study of the “likely environmental, energy, and economic impacts of data center development” in Maryland. It requires participation of the Department of the Environment, the Maryland Energy Administration, and the University of Maryland School of Business, with overall coordination provided by the Department of Legislative Services. Participation of other agencies, including the Department of Natural Resources, the Department of Assessments and Taxation, the Department of Commerce, and the Public Service Commission is also required, where necessary. The report required by the bill is due no later than September 1, 2026.

We applaud the sponsors in crafting a bill that will provide the general public and policy makers in the General Assembly and the Administration with useful information on the current and anticipated impacts of data centers. Data centers use vast amounts of electricity, among other impacts, and their potential proliferation in Maryland has the potential to negatively affect ratepayers and the environment.

Despite the potential scale of impact in Maryland, the current data and transparency on plans for both the near and longer term are surprisingly lacking. Data centers will have a substantial impact on electric power use and the grid. While systematic collated data is not readily available from the State, the best estimates that we know of – based on data collected by the Maryland Legislative Coalition Climate Justice Wing – indicate that Maryland has about two dozen commercial data centers that currently use about 235 megawatts (MW) of power. About a dozen new data centers have been proposed that, if all constructed, would use on the order of 5 to 7 gigawatts GW (i.e., 5,000 to 7,000MW) of power. If this growth occurs, it would require twenty to thirty times as much power as is currently used by data centers. For perspective, the 5 to 7GW of power is more than double all the electrical use by the 2.3 million households in Maryland.

In addition, data centers require backup power. While use of battery storage or green hydrogen (hydrogen gas produced by clean renewable sources) is a possibility, if backup power is supplied by diesel generators, the air pollution impacts from periodic testing can be significant. Emergency diesel generators tend to have high rates of air pollution, including particulates and nitrogen oxides. Moreover, in addition to periodic testing of hundreds of generators at each center, if the generators need to operate for weeks or more after a major power disruption, the greenhouse gas and regional air quality impacts could be substantial and comparable to or greater

than a large fossil-fueled electric generating plant.<sup>1</sup> Data centers can also require considerable volumes of cooling water and can have noise impacts.

In addition, the transmission and distribution implications of adding these large users to our state's grid can be substantial, as demonstrated by the current environmental concerns surrounding the Piedmont Reliability Project. It would also be valuable for the study to consider whether rate designs should be adjusted to ensure that costs of infrastructure added to the system are borne by the expected large new users. These rate designs should aim to protect general ratepayers, who should not bear the financial risk if planned centers do not come online. Finally, while data centers can strengthen the economy and tax base, because of tax preferences provided by the State and some local jurisdictions, those revenue benefits will be reduced.<sup>2</sup>

While the bill is a commendable step, we urge the Committee to consider two amendments that would strengthen it. First, we recommend that the study examine the merits of targeting state tax incentives to data centers that meet desired impacts on the environment, such as use of clean energy. Data centers could, in principle, be a significant source of funding for clean energy in our State, and we strongly encourage policies that will help bring these new sources online.<sup>3</sup> However, if data centers use fossil energy or simply cannibalize clean energy which is already planned to address Maryland's existing needs, this will lead to increased greenhouse gases as well as harmful particulates and ozone precursors that harm people's health.

In addition, because the State does not systematically collect data on these centers, we also strongly recommend that a reporting requirement be added so that State officials and other stakeholders can track and plan for these large users. This includes reporting on planned energy demand levels, sources, and backup power plans. We recognize that reporting on internal business plans is difficult, and urge the authors, in consultation with experts at the Public Service Commission and Office of People's Counsel to develop practical and transparent advance reporting requirements that will help policy officials, electricity-system planners, and the general public best anticipate and mitigate future growth. Policy makers need to plan for growth of capacity, yet at the same time avoid overbuilding that places future costs on ratepayers for projects that do not come to fruition.

HB 0270 offers a common-sense approach to improving the information available on these major energy users and with minor amendments it would be even more helpful. We believe that well-informed residents, State policy makers, and grid planners offer the best chance for navigating the potential challenges and benefits of data centers for our state.

Randy Lyon  
Legislative Chair  
Randy.Lyon@MDSierra.org

Josh Tulkin  
Chapter Director  
Josh.Tulkin@MDSierra.org

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<sup>1</sup> Sierra Club Prince George's County Group, Testimony to the Prince George's County Council on CB-52-2024: Subdivision Regulations: Exemptions for Qualified Data Centers, November 14, 2024.

<sup>2</sup> See, for example, Marty Schladen, "Serious concerns raised over proliferation of Ohio data centers," [Ohio Capital Journal](#), January 13, 2025.

<sup>3</sup> Fisher, Jeremy, Laurie Williams, Dori Jaffe, and Megan Wachspress. [Demanding Better: How Growing Demand for Electricity Can Drive a Cleaner Grid](#). Sierra Club. September 2024.