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Economic Matters Committee

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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

Delegate C.T. Wilson
Chairman, House Economic Matters Committee
House Office Building - Room 231
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Mr. Chairman,

I am writing to express support of HB 1079, the Public Service Commission — Study on the Electric Transmission and Distribution System (the Transmission Line Reconductoring Study).

The HB 1079, the Public Service Commission — Study on the Electric Transmission and Distribution System, requires the Public Service Commission to conduct a study on the electric transmission system and electric distribution system in the State. Specifically, the study will:

- Identify present and reasonably foreseeable future inadequacies in the electric transmission system in the State;
- Identify alternatives to building transmission lines, including grid-enhancing technologies such as dynamic rating, power flow controllers, topology optimization, and other hardware designed to reduce congestion;
- Identify economic, environmental, and social issues associated with each alternative to building transmission lines;
- Summarize public input, the role of the local government, and other stakeholder involvement in the inadequacies, alternatives, and sustainability issues identified;
- Identify investments necessary to modernize the electric transmission system and electric distribution system by enhancing reliability, improving security against cyber and physical threats, and increasing energy conservation by increasing transparency between utilities and their customers through the use of two-way meters, control technologies, energy storage, and microgrids.

The demand for electricity is growing significantly, as new energy driven projects spearheaded by the Inflation Reduction Act have generated proposals to meet clean energy goals.[1] These

[1] Energy Innovation: Policy and Technology, Reconductoring could help solve America's looming grid crisis Forbes (2024), https://www.forbes.com/sites/energyinnovation/2024/04/09/reconductoring-could-help-solve-americas-looming-grid-problems/

projects currently face challenges connecting to the grid due to inefficiencies in the current transmission system. Existing transmission lines are congested and lack capacity. Thus, new lines are needed in order to harness energy from solar panels, offshore wind, and battery storage facilities.[2]

According to PJM, each high voltage transmission path has a specific limit on the amount of electricity that can be carried. As a result, when demand in a specific area is high, the lowest cost of available electricity may overload the transmission paths which creates congestion. To manage this, higher priced electricity is redirected along less congested pathways to meet this ongrowing demand. This results in higher locational marginal pricing in high demand areas compared to regions where electricity is generated at a lower cost.[3] This is particularly significant for Maryland as it causes a higher burden for ratepayers. Furthermore, Maryland is a net importer of energy, historically relying on other states—such as Pennsylvania—for about 40% of its energy needs.[4] Without expanding the transmission capacity, Maryland may struggle to import enough electricity to meet this growing demand. Thus, in order to prevent grid congestion, future brownouts or blackouts, and maintain competitive energy prices, effective transmission expansion through reconductoring studies are necessary.

Reconductoring is the process of enhancing existing transmission lines to increase the sustainability of transmission line capacity. The process is done by restringing existing transmission towers with new cables made from composite cores that are lighter and stronger instead of steel, and denser aluminum for conductors, both of which increase grid capacity.[5] By updating transmission lines, recondcurting ensures a more efficient and reliable grid, saving time and money in the future.

Maryland has taken a significant step toward reducing statewide greenhouse gas emission by passing the Climate Solutions Now Act of 2022, which set a goal of reducing statewide emission by 60% from 2006 levels by 203, and achieving net-zero by 2045.[6] To meet these standards, the state must prioritize clean, accessible, and sustainable energy sources. Thus, expanding the transition to renewables is essential; however, without retrofitting existing power lines to support advanced conductors, much of this energy remains unusable. The U.S. overall needs to strengthen its grid which must begin with state level initiatives. According to the U.S.

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[2] Ad Crable, Converting to clean energy depends on transmission line buildout The BayNet (2023), https://thebaynet.com/converting-to-clean-energy-depends-on-transmission-line-buildout/

[3] PJM, Gas leak emergency click to close pop-up Maryland Piedmont Reliability Project - FAQs (2024), https://corporate.pseg.com/aboutpseg/companyinformation/thepsegfamilyofcompanies/psegrenewabletransmission/mprp-faqs

[4] Josh Kurtz, Get ready for a dizzying debate on energy policy Maryland Matters (2025), https://marylandmatters.org/2025/01/27/get-ready-for-a-dizzying-debate-on-energy-policy/

[5] Id., at 1

[6] Maryland Department of the environment, Department of the Environment, https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Pages/index.aspx#:~:text=Under%20the%20Climate%20Solutions,%E2%80%9Cnet%20zero%22%20by%202045.

Department of Energy, transmission capacity is expanding at a rate of less than 1% per year which is below the desired 4-7%.[7] Furthermore, the Federal Energy Regulatory Commission's order No. 1920 on transmission planning has promoted technology such as advanced conductors to enhance capacity within existing rights of way.[8] However, the success of this rule will ultimately depend on the actions of utilities and state regulators to expand the current grid.

In 2024, Minnesota successfully passed a similar bill to HB 1079 to identify specific present and reasonably foreseeable inadequacies in its transmission system through a transmission line reconductoring study.[9] Similar successful measures have also been implemented in Virginia and Utah. In Maryland, the Maryland Energy Administration – Resiliency Hub Grant Program and Fund Resiliency Hub Grant Program passed in 2022 (Section 2–110.1(a)) has safeguarded solar photovoltaic and battery energy storage systems designed to provide electricity during extended grid outages.[10] Programs like HB 1079 will be a successful supplement to current programs by enhancing reliability while strengthening the cybersecurity and physical security of Maryland's electric transmission systems.

By conducting a comprehensive assessment of the application of grid enhancing technologies, Maryland can take a significant step forward in expanding its grid capacity. This plan is in full alignment with Governor Moore's mission to accelerate clean energy development, lowering energy costs, and ultimately growing the economy.[11] State level efforts to address funding gaps, approve transmission line proposals, and explore the benefits of advanced reconductoring could significantly improve grid efficiency with the passage of HB 1079.

With this bill, the Public Service Commision will report its findings to the Governor on or before January 1, 2026. The Act will take effect October 1, 2025. Thank you for your consideration, I urge a favorable report on HB 1079.

Respectfully,

Delegate David Fraser-Hidalgo

[7] Id., at 1
[8] Fact sheet: Building for the future through electric regional transmission planning and cost allocation, Federal Energy Regulatory Commission (2024), https://www.ferc.gov/news-events/news/fact-sheet-building-future-through-electric-regional-transmission-planning-and (last visited Feb 6, 2025).
[9] SF 4942, SF 4942 4th Engrossment - 93rd Legislature (2023 - 2024), https://www.revisor.mn.gov/bills/text.php?number=SF4942&version=latest&session=ls93&session_year=2024&session_number=0
[10] Md. Code Ann. § Section 2–110.1(a) (2022)
[11] Wes Moore, X.com X (formerly Twitter) (2025), https://x.com/GovWesMoore/status/1877400246222766462