MARYLAND LEAGUE OF CONSERVATION VOTERS

February 20, 2025

SUPPORT: HB 829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies

Chair Wilson and Members of the Committee:

Maryland LCV supports HB 829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies, and we thank Delegate Charkoudian for her leadership and commitment to ensuring grid reliability and resource adequacy in Maryland.

HB 829 is a sensible step in the development of transmission infrastructure, particularly as Maryland seeks to increase grid stability. Advanced transmission technologies (ATTs), which include grid enhancing technologies (GETs), high-performance conductors, and storage used as transmission, provide cost-effective, efficient, and flexible alternatives to building new transmission lines.

ATTs can improve the capacity, efficiency, reliability, and resilience of both new and existing transmission infrastructure, often at a lower cost and faster implementation than traditional upgrades. Unlike traditional transmission line projects, which can take years to plan, site, permit, and gain community acceptance, ATTs can typically be deployed more quickly, offering a faster solution to address grid constraints.

HB 829 importantly requires a CPCN applicant for the construction of an overhead transmission line to include in their application—and the PSC to consider in their review of the application—an analysis of alternatives to the proposed transmission line, which includes the use of ATTs, alternative routings, and technologies or modifications to electric distribution systems that could avoid the need for the transmission line. Additional considerations under this bill include the costs to ratepayers, resource adequacy, energy efficiency and demand response, and the impact of the project on the environment. This allows for a better assessment of the viability and necessity of a transmission construction project. HB 829 also requires biannual reporting on transmission congestion as another opportunity to deploy ATTs. Passing this bill will help us get the most out of the grid that we have in a cost-effective way.

ATTs play a crucial role in integrating renewable energy sources into the grid, to meet increasing electricity demand and achieve the state's climate goals. A recent report by RMI highlighted that GETs could enable the integration of 6.6 GW of new clean energy onto PJM's grid, which would support regional reliability and save approximately $1 billion in production costs annually.

Advanced conductors, which can carry 50% to 110% more power than conventional lines thanks to more efficient materials, can be deployed on existing towers and rights of way to replace older transmission wires.

Storage on the transmission grid offers a cost-effective alternative to building new transmission lines by enhancing system flexibility, managing congestion, reducing renewable curtailment, supporting grid stability, and providing quicker solutions to meet clean energy goals and address resource adequacy concerns.

As the development of renewable energy projects accelerates, ATTs play a vital role in addressing the challenge of limited space on the grid, expediting interconnection processes, and reducing delays. These technologies ensure a smoother transition to a cleaner energy future, enhance grid reliability, and help reduce costs.

ATTs have less land use impacts compared to traditional transmission lines, meaning less disruption to communities and the environment. They can also improve grid access and reliability for underserved or vulnerable communities, ensuring that energy justice is a priority in the state's transition to a more sustainable energy system.

HB 829 is an important part of Maryland's energy landscape. Maryland LCV urges a favorable report on this bill.