DAVID S. LAPP
PEOPLE'S COUNSEL

WILLIAM F. FIELDS
DEPUTY PEOPLE'S COUNSEL

JULIANA BELL
DEPUTY PEOPLE'S COUNSEL

OPC
OFFICE OF PEOPLE'S COUNSEL
State of Maryland

6 ST. PAUL STREET, SUITE 2102
BALTIMORE, MARYLAND 21202
WWW.OPC.MARYLAND.GOV

BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

CARISSA RALBOVSKY
CHIEF OPERATING OFFICER

BILL NO.:	HB 1397 – Certificate of Public Convenience and Necessity - Overhead Transmission Lines - Grid Enhancing Technologies
COMMITTEE:	Economic Matters
HEARING DATE:	February 20, 2025
SPONSOR:	Delegates Tomlinson, Bouchat, Ciliberti, Mangione, Miller, Pippy, Rose, and Stonko
POSITION:	Favorable

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The Office of People's Counsel (OPC) respectfully offers the following supportive comments on HB 1397 – Certificate of Public Convenience and Necessity - Overhead Transmission Lines - Grid Enhancing Technologies. Similar to HB 829, HB 1397 would require the consideration of grid-enhancing technologies (GETs) as an alternative to construction of an overhead transmission line during a certificate of public convenience and necessity (CPCN) proceeding. While HB 829 would require a more robust alternatives analysis, both bills have the potential to reduce the costs—ultimately borne by ratepayers—of building new transmission lines in Maryland.

GETs encompass a host of technologies that squeeze more performance out of existing transmission assets using advanced power flow controls, dynamic line ratings, and topology optimization. HB 1397 specifically defines GETs to include high performance conductors—which allow for increased line capacity, higher transmission efficiency, and reduced thermal sag—and storage as a transmission asset—which substitutes batteries for new transmission lines and can enable faster and cheaper transmission system upgrades than traditional transmission lines.

GETs can increase the useful life of existing transmission assets, decrease congestion costs, allow new generation to interconnect more quickly and more cheaply, defer expensive transmission upgrades, and enable transmission system expansion with less disturbance of previously unused land.

GETs can enable more rapid deployment of transmission capacity upgrades that are required for new generation to interconnect to the grid. Some projects drop out of the PJM interconnection queue because once they are studied, they are required to pay for significant transmission system upgrades that will take years to construct. By enabling cheaper and more rapid transmission system upgrades, GETs support generation interconnection at lower cost and more quickly. One recent study found that use of GETs in five PJM states could allow an additional 6 gigawatts of new capacity to come online within the next three years.[1]

GETs can also decrease land use concerns. Storage as a transmission asset can "pre-flow" energy over existing lines so that the line can functionally deliver more energy than the maximum line rating at times of peak demand. While current PJM rules do not allow storage to act as a transmission asset, such a framework has been approved by the Federal Energy Regulatory Commission (FERC) in other regions and the policy has been studied by PJM.[2] Similarly, advanced conductors unlock the possibility that lines with higher ratings can use existing transmission line routes and towers, or allow new transmission builds to have smaller footprints, thus limiting the need to build on new land.

The potential cost savings of the bill are difficult to estimate, given that the efficacy of GETs varies based on the specific needs of a transmission line. Still, evaluations of GETs deployed in the Southwest Power Pool—another regional transmission organization that stretches from North Dakota to Oklahoma—found that GETs increased the utilization level of certain high voltage transmission lines by 16 percent.[3]

It is also worth noting that there are limits to how much the bill—or any legislation—can require GET deployment. For transmission lines regulated by FERC, the PSC would likely be preempted from requiring the installation of GETs unless the use of GETs directly impacts siting concerns. Likewise, for lines with FERC-regulated transmission charges, the PSC is likely preempted from allowing cost recovery for GETs.

Like HB 1397, HB 829 requires the PSC to consider the use of GETS as an alternative to the construction of a new overhead transmission line. HB 829 requires the transmission owner to provide the PSC with a more robust alternatives analysis—including both costs to ratepayers and analysis of the transmission line route selection—

[1] Katie Mulvaney et. al., *GETting Interconnected in PJM* (2024) *available at* *https://rmi.org/wp-content/uploads/dlm_uploads/2024/02/GETs_insight_brief_v3.pdf*.
[2] *See* Storage as a transmission asset issue charge, https://www.pjm.com/committees-and-groups/issue-tracking/issue-tracking-details.aspx?Issue=%7BB435C39B-D4BB-4C3C-ADA9-8EFBC0E52246%7D.
[3] Brattle Group, *Building a Better Grid*, at 5 (2003) *available* at https://www.brattle.com/wp-content/uploads/2023/04/Building-a-Better-Grid-How-Grid-Enhancing-Technologies-Complement-Transmission-Buildouts.pdf.

and specifies that the PSC must also give due consideration to any alternatives proposed by other parties to the proceeding. OPC supports the more explicit direction HB 829 provides but also supports HB 1379 as an important step toward maximizing the utility of existing transmission infrastructure in Maryland that is likely to prevent unnecessary investments in new infrastructure that could prove costly to ratepayers.

Recommendation: OPC requests a favorable committee report on HB 1397.

Office of People's Counsel • 410-767-8150 / 800-207-4055 • opc@maryland.gov