OPC Testimony HB0829 in the Senate.pdf
Uploaded by: David Lapp
Position: FAV

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 829 – Public Utilities - Transmission Lines - Advanced Transmission Technologies
COMMITTEE:	Education, Energy, and the Environment
HEARING DATE:	March 26, 2025
SPONSOR:	Delegate Charkoudian
POSITION:	Favorable

****

The Office of People's Counsel (OPC) respectfully offers the following supportive comments on HB 829 – Public Utilities - Transmission Lines - Advanced Transmission Technologies. As amended, HB 829 will require that a transmission owner report any alternatives analyzed when applying for a certificate of public convenience and necessity (CPCN), which is primarily required upon construction of a new transmission line. This report will include, among other things, a description of any advanced transmission technologies (ATTs) that were considered as part of the transmission line build. The bill also requires transmission owners to submit a report to the Public Service Commission (PSC) every four years on transmission congestion costs and whether ATTs could decrease these costs for ratepayers.

ATTs encompass a host of technologies including:

- high performance conductors, which allow for increased line capacity, higher transmission efficiency, and reduced thermal sag;
- 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; and
- grid enhancing technologies (GETs), which squeeze more performance out of existing transmission assets using advanced power flow controls, dynamic line ratings, and topology optimization.

ATTs 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.

ATTs 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, ATTs 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]

ATTs 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.

As amended, HB 829 requires that alternatives analyses, including consideration of alternatives enabled by ATTs, be reported to the PSC if such analyses were actually conducted by the applicant or otherwise required by local, state, or federal transmission planning processes. In contrast, the original version of the bill would have required an alternatives analysis, including how ATTs could be utilized, even in the case that such an analysis had not already been conducted. As a result of this change, consideration of ATTs which are not explicitly required under any local, state, or federal planning process—including use of batteries as a transmission asset and topology optimization—would no longer be required.

Other changes in the amendment include:

- clarifying that ATTs include technologies that enhance *all* transmission facilities, not just the line itself;

[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.

- adding additional flexibility to the periodic review of how ATTs can enhance existing transmission facilities; and
- allowing the PSC to provide financial incentives to utilities for the application of ATTs.

ATTs can provide significant savings for transmission costs. For example, evaluations of ATTs 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] As amended, however, the bill only requires reporting on any ATT solutions a utility, in fact, has studied; it does not require a study of any additional ATT solutions that the utility has not considered. The bill's added value is informational, by providing a reporting mechanism that could give additional insights to the PSC in its CPCN hearings rather than necessarily spurring adoption of ATTs that had not been considered.

This bill takes an important step toward maximizing the utility of existing transmission infrastructure in Maryland and is likely to prevent unnecessary investments in new infrastructure that could prove costly to ratepayers.

Recommendation: OPC requests a favorable committee report on HB 829.

[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.

Testimony HB829 DAC for Senate EEE.pdf
Uploaded by: Debbie Cohn
Position: FAV

Committee: **Education, Energy, and the Environment**
Testimony on: **HB829 – Public Utilities – Transmission Lines – Advanced Transmission Technologies**
Submitting: **Deborah A. Cohn**
Position: **Favorable**
Hearing Date: **March 26, 2025**

Dear Chair Feldman, Vice-Chair Kagan and Committee Members:

Thank you for allowing my testimony today in support of HB82. I am writing to underscore Maryland's need to create a 21st century grid in the most cost effective manner.

HB829 strengthens the Public Service Commission (PSC) process for issuing a certificate of public convenience and necessity (CPCN) for construction of an overhead transmission line.

Applications for a CPCN. In a request for a CPCN to construct a new overhead transmission line an applicant would need to include evidence that it considered alternatives to the new line, including 1) alternate routes; 2) the use of advanced transmission technologies; and 3) changes to the existing distribution system and a review of an integrated electric transmission-distribution system that could avoid the need for the new transmission line or delay or prevent the need for future transmission or generation upgrades. The application would also need to include the cost to ratepayers and the impact of the proposed line on the environment.

Congestion Planning. HB820 requires owners and operators of overhead transmission lines to plan for future congestion and determine the degree to which advanced transmission technologies can address this congestion. Every four years starting in December 2026, the owner or operator of an overhead transmission line must identify line congestion in the preceding three years, anticipated transmission congestion in the next five years, projected costs to ratepayers from this congestion, and the opportunity to use advanced transmission technologies to address the congestion and reduce costs.

Maryland consumes almost six times more energy than it produces and imports around 40 percent of its electricity from other states. Importing electricity from other PJM states requires a robust transmission grid. Economic incentives, however, have induced utilities to invest in the distribution grid, leading to inadequate investment in the transmission grid. This investment is expensive and consumers are already concerned about rising utility bills. To contain increases in electricity bills, Maryland needs to anticipate how best to provide for a robust 21st century grid so that it never again finds itself paying for a $796 million new transmission line as a result of PJM's failure to anticipate and plan adequately for the closure of the Brandon Shores and Wagner coal generating stations.[1]

To manage this grid build-out prudently, the PSC needs additional information so that it can appreciate grid congestion points and then 1) ensure that utilities maximize the throughput of the existing grid, and 2) determine the most efficient build-out of additional transmission lines.

[1] Federal Energy Regulatory Commission Order on Cost Allocation Report and Tariff Revisions, Docket Nos. ER23-2612-001 and ER23-2612-002 (November 8, 2023), https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20231108-3068&optimized=false

HB829 addresses all three concerns, ensuring in particular, that utilities identify existing and foreseeable areas of grid congestion, plan infrastructure investments to avoid emergency construction, and in that process, maximize transmission through the existing grid by taking advantage of existing advanced transmission technologies.

Advanced transmission technologies include the infrastructure, hardware and software that increase the capacity, efficiency, reliability or resilience of new and existing transmission lines. They include grid enhancing technologies (GETS), high-performance conductors and storage systems used as transmission.

GETS includes several technologies. Dynamic line rating (DLR), the real time monitoring of wind, humidity, temperature and other factors that impact the amount of electricity that can flow safely through an existing transmission or distribution line, can increase line capacity by an average of 10-30 percent, take three to six months to deploy and cost less than five percent of the price of building new transmission lines[2]. Advanced power flow control devices act like air traffic controllers. They enable the redistribution of power from congested lines to lines with available capacity, increasing capacity by 10-25 percent.[3] Topology optimization addresses congestion in a manner similar to the rerouting of trains along different tracks through controlling switches in the tracks. Topology optimization uses software models of the grid network and real time conditions to trigger high voltage circuit breakers to redistribute power flow more efficiently through the existing grid.

Reconductoring existing lines with improved conductors using composite cores also increases throughput, enabling a wire to carry higher mechanical loads without increasing weight. Reconductoring can take one to three years to deploy but can double capacity and reduce transmission line loss by around 30 percent. It generally costs less than half the price of building a new transmission line.[4]

Storage systems are also transmission assets as they can quickly absorb excess electricity production and later reinject it into the grid to manage power flows on transmission lines. In effect, they function as virtual transmission lines that can be used to alleviate congestion, support voltage levels and improve grid stability. These functions are often referred to as "storage as transmission."[5]

Summary. HB820 imposes two requirements to ensure right-sizing the build-out of the transmission grid. The first ensures that any applicant for authority to build a new transmission line carefully consider technological advances to defer or avoid the new construction. The second requires advanced grid planning by owners and operators of overhead transmission lines to reduce the need for costly reactive emergency construction of high voltage transmission lines.

For these reasons I support HB829 and urge a FAVORABLE report in Committee.

Thank you.

[2] https://ceepr.mit.edu/wp-content/uploads/2024/09/MIT-CEEPR-RC-2024-06.pdf
[3] Ibid.
[4] Ibid.
[5] https://www.utilitydive.com/news/energy-storage-underused-transmission-asset-ferc/727946/

HB0829-EEE_MACo_SUP.pdf
Uploaded by: Dominic Butchko
Position: FAV

House Bill 829

Public Utilities - Transmission Lines - Advanced Transmission Technologies

MACo Position: **SUPPORT**

To: Education, Energy, and the Environment Committee

Date: March 26, 2025

From: Dominic J. Butchko

The Maryland Association of Counties (MACo) **SUPPORTS** HB 829. This bill calls for additional considerations and requirements for the construction of transmission lines.

The 2025 Maryland General Assembly is facing a historic number of complex generational challenges. One of the loudest issues to arise has been Maryland opposition to the Piedmont Reliability Project. The Project, which crosses Baltimore, Carroll, and Frederick Counties, effectively creates an "extension cord" across some of our state's prime agricultural lands, providing Pennsylvania-generated energy to Virginia-based data centers, with little direct benefit to Marylanders. As the General Assembly debates how to address this and other energy challenges, one of the biggest underlying issues will be how to prioritize now competing state priorities (i.e., energy demands and environmental goals).

HB 829 requires the Public Service Commission and applicants to more deeply consider the impact of projects and project routes on ratepayers, the environment, and other factors. Additional consideration must also be given to the use of advanced transmission technologies as a means to avoid unnecessary community and ratepayer impacts. As many transmission infrastructure upgrades may uniquely be accomplished by upgrading existing lines or using existing land, counties join the sponsor in wanting to protect both our mutual constituents and the finite number of conserved lands.

This is commonsense legislation which seeks to address conflicts between Maryland's growing demand for energy and billions invested into other pro-climate policies to date. For this reason, MACo urges the Committee to issue HB 829 a **FAVORABLE** report.

ECA testimony HB829 EEE Advanced Transmission Tech

Uploaded by: Frances Stewart

Position: FAV

HB0829 - SUPPORT
Frances Stewart, MD
Elders Climate Action Maryland
frances.stewart6@gmail.com
301-718-0446

HB0829, Public Utilities – Transmission Lines – Advanced Transmission Technologies

Meeting of the Education, Energy, and the Environment Committee

March 26, 2025

Dear Chair Feldman, Vice Chair Kagan, and Members of the Committee, on behalf of Elders Climate Action Maryland, I urge a favorable report on HB0829.

Elders Climate Action is a nationwide organization devoted to ensuring that our children, grandchildren, and future generations have a world in which they can thrive. The Maryland Chapter has members across the state.

Each day, we see the climate crisis more clearly. We know that Maryland is at risk for sea level rise, flooding from intense rainfall, heat waves, and other extreme weather events. Maryland can also be a leader in moving us to a safer, cleaner future where we all can thrive. The clean energy transition is an essential part of that future.

Maryland imports about 40% of the electricity we consume from other states in the PJM grid. Unfortunately, the grid is inadequate for current and future needs. That increases costs for ratepayers, decreases reliability, and makes it difficult to add the new clean energy resources we need.

But building new transmission lines is a slow and very expensive process. Fortunately, advanced transmission technologies can maximize transmission through the existing grid quickly and at a much lower cost. Those technologies

include grid enhancing technologies (GETS), high-performance conductors, and using storage as transmission.

These technologies may be new to Maryland, but they have been in widespread use for years. GETS technologies were developed in the 1970's and 80's and are used by power companies in Indiana, Ohio, New York, and the United Kingdom. Belgium, the Netherlands, Italy, India, and China have done large scale reconductoring projects using high-performance conductors. Storage projects in California and Wisconsin are being used as transmission assets. These technologies have been shown to be safe, reliable, and cost-effective ways to increase transmission capacity in much less time than building new lines.

Other states are recognizing the potential of these technologies. In 2023, Montana passed a law that provided an incentive for utilities to use high-performance conductors. In 2024, Minnesota passed a law requiring consideration of advanced transmission technologies in transmission planning.

HB829 requires that utilities identify existing and foreseeable areas of grid congestion, plan infrastructure investments to avoid emergency construction, and maximize transmission through the existing grid by using advanced transmission technologies.

Any applicant for a Certificate of Public Convenience and Necessity (CPCN) for a new transmission line would be required to carefully consider opportunities to defer or avoid the new construction. The bill also requires transmission line planning by owners and operators of overhead transmission lines.

In their request for a CPCN to construct a new overhead transmission line, applicants would need to include an analysis of alternatives to the new line. The alternatives include the use of advanced transmission technologies, alternative routes, changes to the existing distribution system that could avoid the need for the new transmission line, an analysis of the proposed transmission line route and the consideration of alternative routes. The application would also need to include the cost to ratepayers and the impact of the proposed line on the environment.

HB0829 also requires owners and operators of overhead transmission lines to plan for future congestion and determine the degree to which advanced transmission technologies can address this congestion. Every two years starting in December 2025, the owner or operator of an overhead transmission line must identify line congestion in the preceding three years, anticipated transmission congestion in the

next five years, projected costs to ratepayers from this congestion, and the opportunity to use advanced transmission technologies to address the congestion and reduce costs.

HB0829 provides many benefits to Maryland through its use of technological advances and advanced grid planning. It reduces costs to ratepayers, increases throughput on existing lines, reduces the need for costly emergency construction of high voltage transmission lines, such as the $796 million new transmission line designed to facilitate import of electricity upon the closure of the Brandon Shores and Wagner coal generating station, and increases reliability of our electricity supply.

For all of these reasons, we strongly urge a favorable report on HB0829.

Thank you.

HB829_Transmission Lines Advance Technologies_EEE_

Uploaded by: Laurie McGilvray

Position: FAV

Committee: Education, Energy and the Environment
Testimony on: HB0829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies
Organization: Maryland Legislative Coalition Climate Justice Wing
Submitting: Laurie McGilvray, Co-Chair
Position: Favorable
Hearing Date: March 26, 2025

Dear Mr. Chair and Committee Members:

Thank you for allowing our testimony today in support of HB829. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations, urges you to vote favorably on HB829.

HB829 strengthens the Public Service Commission (PSC) process for issuing a certificate of public convenience and necessity (CPCN) for construction of an overhead transmission line to include analyses of "advanced transmission technologies" and alternate routes. The bill also requires each owner or operator of an overhead transmission line to submit a periodic report to the PSC that identifies: 1) areas of transmission congestion; 2) the projected or actual costs to ratepayers of that congestion; 3) the feasibility and cost of alternatives to address congestion; 4) the economic, environmental, and social issues posed by each alternative; and (5) proposes an advanced transmission technology implementation plan to address areas of congestion.

Maryland is faced with challenges regarding the adequacy of our transmission system to deliver the right amount of power to the right regions of the state. Building new transmission lines is extremely expensive and highly controversial. Case in point, Maryland ratepayers will bear the $796 million cost for making transmission upgrades to handle the planned retirement of the Brandon Shores and Wagner power plants. In addition, the Maryland Piedmont Reliability Project is extremely controversial with opposition from landowners, farmers, communities and elected officials.

Getting more out of the grid we have is a practical and cost-effective way to address these challenges. While our grid operator, PJM, and the Federal Energy Regulatory Commission have the ultimate say over transmission lines, Maryland's PSC approves aspects of the transmission line through their CPCN process. HB829 will promote greater consideration of "advanced transmission technologies" - a fancy term for infrastructure, hardware, or software that increases the capacity, efficiency, reliability, or resilience of a new or existing transmission line. Maryland will be in good company as twenty other states are taking steps to squeeze every amp possible out of existing lines (see *Utility Dive* - **21 states, DOE launch initiative to spur grid-enhancing technologies, advanced conductors**).

Grid-enhancing technologies (GETs) are a suite of software and hardware technologies that boost the ability of transmission lines to carry more power and are typically deployed faster and at a lower cost than traditional options, such as new lines and substations. GETs include:

- **Dynamic Line Ratings (DLR) -** a methodology that uses sensors to calculate the rating or maximum electricity flow allowed on a line, based on real-time weather conditions, which allows grid operators to safely boost the line capacity when weather conditions allow, rather than using the more conservative static rating.
- **Advanced Power Flow Control (APFC) -** are devices that allow grid operators to direct electricity flows to avoid congested areas of the grid – akin to air traffic control.
- **Topology Optimization (TO) -** a software technology that allows grid operators to reroute power flows to avoid congested areas, like using WAZE to find driving routes to avoid traffic.

Advanced conductors are a modern, commercialized technology that increases line capacity up to two-fold. Advanced conductors use composite cores instead of steel (making them stronger and lighter) and denser annealed aluminum for conductors instead of aluminum strands. "Reconductoring" is the term used for re-stringing existing transmission towers with new cables, without having to permit and build expensive new transmission towers and power lines.

In addition line upgrades, an applicant for a CPCN for construction of an overhead transmission line must provide an analysis of the transmission line route selection, including the risks associated with cost estimates; cost containment efforts; construction schedule; rights-of-way acquisition; outage coordination; and experience working with communities and stakeholder on route consideration.

HB829 is a common-sense and cost-effective approach to improving Maryland transmission grid. For all of these reasons, we strongly support HB829 and urge a **FAVORABLE** report in Committee.

350MoCo
Adat Shalom Climate Action
Cedar Lane Unitarian Universalist Church Environmental Justice Ministry
Chesapeake Earth Holders
Chesapeake Physicians for Social Responsibility
Climate Parents of Prince George's
Climate Reality Project
ClimateXChange – Rebuild Maryland Coalition
Coming Clean Network, Union of Concerned Scientists
DoTheMostGood Montgomery County
Echotopia
Elders Climate Action
Fix Maryland Rail
Glen Echo Heights Mobilization
Greenbelt Climate Action Network
HoCoClimateAction
IndivisibleHoCoMD

Maryland Legislative Coalition
Mobilize Frederick
Montgomery County Faith Alliance for Climate Solutions
Montgomery Countryside Alliance
Mountain Maryland Movement
Nuclear Information & Resource Service
Progressive Maryland
Safe & Healthy Playing Fields
Takoma Park Mobilization Environment Committee
The Climate Mobilization MoCo Chapter
Unitarian Universalist Legislative Ministry of Maryland
WISE

HB0829_FAV_Trans_GETS_EEE_HoCoCA.org.pdf
Uploaded by: Liz Feighner
Position: FAV

HoCoClimateAction.org
Howard County, Maryland

HB0829 – Transmission Lines - Advanced Transmission Technologies
Hearing Date: March 26, 2025
Bill Sponsor: Delegate Charkoudian
Committee: Education, Energy, and the Environment
Submitting: Liz Feighner for **Howard County Climate Action**
Position: Favorable

HoCo Climate Action is a 350.org local chapter and a grassroots organization representing approximately 1,400 subscribers. We are also a member of the Climate Justice Wing of the Maryland Legislative Coalition.

We urge you to vote favorably on **HB0829**, **Advanced Transmission Technologies,** which strengthens the Public Service Commission (PSC) process for issuing a certificate of public convenience and necessity (CPCN) for construction of an overhead transmission line to include analyses of "advanced transmission technologies" and alternate routes. The solutions in the bill can be implemented more quickly and cost effectively than ill-conceived proposals like new gas-fired power plants and untested small modular nuclear reactors which would inevitably take longer to come online and jeopardize the state meeting its climate requirements.

There are cost-effective advanced technologies available today that can help us get more out of our existing transmission system. Maryland is faced with challenges regarding the adequacy of our transmission system to deliver the right amount of power to the right regions of the state. Building new transmission lines is extremely expensive and highly controversial. Case in point, Maryland ratepayers will bear the $796 million cost for making transmission upgrades (*costs have ballooned to over $1 billion*) to handle the planned retirement of the Brandon Shores and Wagner power plants. In addition, the Maryland Piedmont Reliability Project is extremely controversial with opposition from landowners, farmers, communities and elected officials.

Electricity costs are increasing rapidly in large part because of problems with PJM, our grid operator. Proposed clean renewable energy projects have been stuck in PJM's interconnection queue for years and the queue has been so long that they stopped accepting projects at one point. By the time projects clear the queue and are approved, they are no longer financially viable and many are not built. Now, increasing electricity demand due to high-intensity energy use facilities like data centers plays a major role in our rising rates. We need to get more out of our existing transmission system while saving ratepayer dollars.

HB0829 represents a comprehensive approach to modernizing Maryland's transmission system using best practices for modern approaches and technologies that are cost-effective and currently employed by other states or utilities. Maryland will join twenty other states that are taking steps to implement initiatives to spur grid-enhancing technologies, advanced conductors). Grid-enhancing technologies (GETs) are a suite of software and hardware technologies that boost the ability of transmission lines to carry more power and are typically deployed faster and at a lower cost than traditional options, such as new lines and substations. Advanced conductors are a modern, commercialized technology that increases line capacity up to two-fold.

HB0829 is a common-sense and cost-effective approach to improving Maryland's transmission system. For all of these reasons, we strongly support HB0829 and urge a **FAVORABLE** report in Committee.

Howard County Climate Action
Submitted by Liz Feighner, Steering and Advocacy Committee
www.HoCoClimateAction.org
HoCoClimateAction@gmail.com

Senate Testimony.HB829_Delegate Lorig Charkoudian.
Uploaded by: Lorig Charkoudian
Position: FAV

LORIG CHARKOUDIAN
Legislative District 20
Montgomery County

Economic Matters Committee

Subcommittees

Public Utilities

Chair, Unemployment Insurance

Annapolis Office
The Maryland House of Delegates
6 Bladen Street, Room 220
Annapolis, Maryland 21401
410-841-3423 · 301-858-3423
800-492-7122 *Ext.* 3423
Lorig.Charkoudian@house.state.md.us

THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

HB 829 - PUBLIC UTILITIES - TRANSMISSION LINES - ADVANCED TRANSMISSION TECHNOLOGIES

TESTIMONY OF DELEGATE LORIG CHARKOUDIAN
MARCH 26TH, 2025

Chair Feldman, Vice Chair Kagan, and Members of the Education, Energy, and the Environment Committee,

Alternative transmission technologies (ATTs) are a suite of tools that can quickly and cost-effectively increase the capacity of the existing electrical grid without building new transmission lines. These typically encompass grid-enhancing technologies (GETs) — hardware and software solutions that can be deployed on the existing system and essentially act as energy efficiency for the grid — and advanced conductors. By increasing and optimizing the capacity of lines already in place, the grid can transmit more electricity without the lengthy planning and permitting process required for new transmission lines. By adding ATTs to lines being constructed, we can ensure that all new lines being built are as efficient as possible, thus decreasing the need for more lines and ensuring the best use of rate-payer dollars. While construction of new transmission lines will still be needed to support projected increased demand, ATTs ensure that we get the most out of our current and future grid investments. Thus, they merit consideration in grid planning processes, as now required by FERC Order 1920, as well as in the planning and permitting of specific transmission projects.

Some examples of Grid-Enhancing Technologies:

- Dynamic Line Ratings: Measures the ambient conditions and temperature of a line to determine its real-time rated capacity. The capacity of lines can increase up to 50% in cold or windy conditions over the conservatively established static capacity rating.
- Advanced Power Flow Control: Hardware and software that can reroute power flows to optimize line utilization, avoiding overflows of electricity in some areas and underutilization in others.
- Topology Optimization: Software is used to track the best route and combination of lines for transferring power. The software can then proactively alter grid topology to better control power flows.
- Advanced Reconductoring: Replacing old conductors on existing transmission lines with new, higher-capacity conductors that can enhance the overall performance of the line.

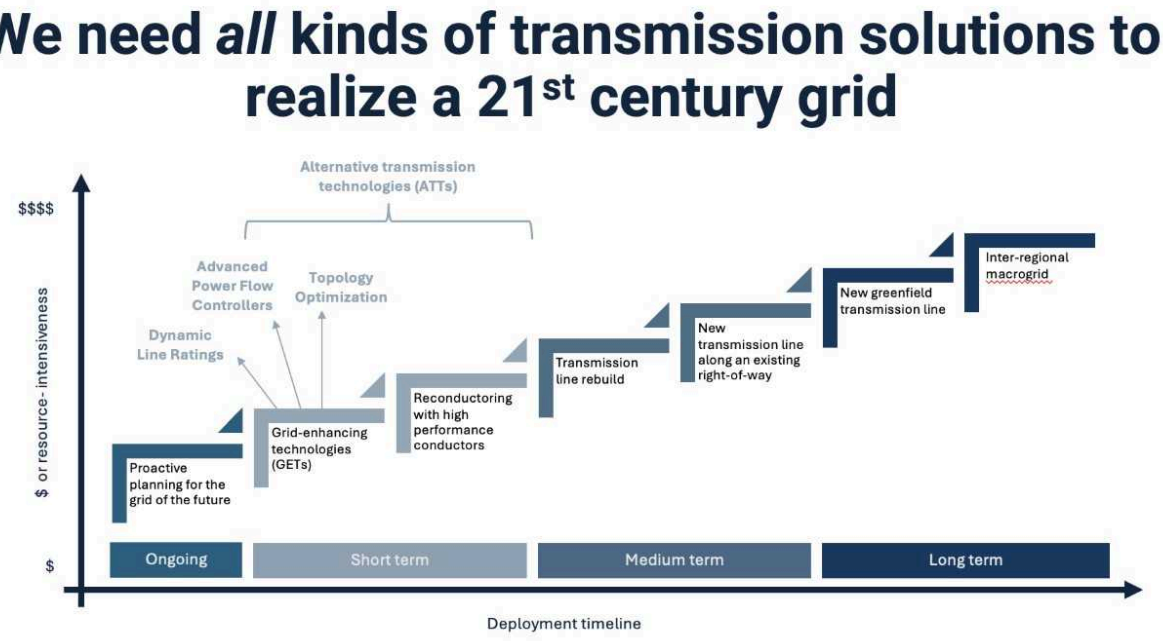
This bill will:

✔ Require transmission owners to identify areas of congestion over the past 3 years and expected in the next 5 years, the increased cost to ratepayers as a result of that congestion, the technical feasibility and cost of installing ATTs to address congestion, and propose an implementation plan to install ATTs at such points.

✔ Allow the Public Service Commission (PSC) to approve cost recovery mechanisms for ATTs investments.

✔ Require transmission developers who are seeking a Certificate for Public Convenience and Necessity to demonstrate to the PSC how they considered ATTs in their transmission proposal.

I respectfully request a favorable report on HB 829.



*Provided by RMI

HB 829 SUPPORT - Robert Gramlich.pdf
Uploaded by: Robert Gramlich
Position: FAV

HB 829 SUPPORT
Public Utilities - Transmission Lines - Advanced Transmission Technologies
Economic Matters Committee
March 26, 2025
Dear Chair Wilson, Vice Chair Crosby, and Members of the Economic Matters Committee:

I'm Rob Gramlich, President of Grid Strategies LLC, an electric transmission policy consulting firm based in Washington, DC. I have been working on transmission issues for 30 years including 8 years as a senior official at the US Federal Energy Regulatory Commission and 2 years as Senior Economist at PJM Interconnection.

I am appearing today in support of House Bill 829. Our firm has run the Working for Advanced Transmission Technologies (WATT) Coalition since it was formed in 2017 on behalf of Grid Enhancing Technology (GETs) vendors, energy generation, and utility members. Much of my work is on building large-scale transmission lines, which is a key part of the solution, but GETs have an important role to play in unlocking capacity in the near term and optimizing infrastructure decisions moving forward. Grid Strategies also administers the Advancing Modern Powerlines (AMP) Coalition for High Performance Conductors (HPCs), which can double capacity on transmission rights-of-way when compared to traditional conductors.

I strongly support the provision for utilities to study Advanced Transmission Technologies (ATTs) to reduce past and projected grid congestion. From 2019 to 2023, transmission congestion increased wholesale electricity prices in the PJM Interconnection by $5.675 billion. While it's not transparent how much those costs affected Maryland, reducing grid congestion will save ratepayers money. GETs can often reduce congestion by 40% or more. For example, dynamic line ratings take advantage of transmission lines being able to carry much more electricity on days like today, when cold winds cool the line.

By not evaluating these technologies, utilities are leaving money on the table. The requirement for a regular study of the opportunity for these technologies

to reduce congestion is a good step for utilities to take. In the long term, ATTs should be fully integrated into transmission planning and operations – tools in the toolbox. This legislation will help push towards that future. Utilities are not rewarded for reducing congestion through rates or any other mechanism, so a requirement is appropriate to unlock this value.

On the requirement for ATTs to be studied as alternatives to new lines, ATTs should primarily be considered to maximize the value of new infrastructure. The requirement for inclusion in CPCN applications should prioritize using ATTs to increase asset utilization and flexibility and reduce constraints during the planning and construction of new infrastructure. With that amendment, I urge a favorable report on HB 829.

HB0829_IndivisibleHoCo_FAV.pdf
Uploaded by: Virginia Smith
Position: FAV

HB0829

Public Utilities - Transmission Lines - Advanced Transmission Technologies

Testimony before Education, Energy, and the Environment

Hearing March 26, 2025

Position: Favorable

Dear Chair Feldman and Vice Chair Kagan, and members of the committee, my name is Virginia Smith, and I represent the 900+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today **in support of HB0829**, which alters the definition of "qualified generator lead line" to include advanced transmission technology, while also strengthening the Public Service Commission (PSC) process for issuing a certificate of public convenience and necessity. With amendments added through the process, it also adds the possibility that the PSC may consider providing financial incentives for the use of Advanced Transmission Technologies. We thank Delegate Charkoudian for sponsoring this bill.

Electricy needs are growing in the state, but building new transmission lines that will provide the appropriate amount of energy to the parts of the state that need it, can be expensive and cause much controversy. For instance, Marylanders will have to pay increased rates to cover $796 million in transmission upgrades[i] Instead, Maryland should focus on getting more from the current power lines by considering advanced transmission technology, which this bill will support. Advanced transmission technology is a term for infrastructure, hardware, or software that increases the capacity, efficiency, reliability, or resilience of new or existing transmission lines.

This bill also includes common sense requirements for applicants wanting a certificate of public convenience and necessity for the construction of overhead transmission lines, including alternatives to the proposed lines, such as using advanced transmission technology, alternative routes, the cost to ratepayers, energy efficiency and demand response, and impacts of the project on the environment. These requirements will ensure that electricity needs increase in a cost-effective, environmentally safe method.

Thank you for your consideration of this important legislation.

We respectfully urge a favorable report.

Virginia Smith
Columbia, MD 21044

[i] FERC approves PJM's Exelon-oriented $796M transmission plan over Maryland objections | Utility Dive

HB 829_FAVWAMEND_PSC (Senate).pdf
Uploaded by: Frederick Hoover
Position: FWA

STATE OF MARYLAND

PUBLIC SERVICE COMMISSION

Chair Brian Feldman
Education, Energy and the Environment Committee
2 West Miller Senate Building
Annapolis, MD 21401

RE: HB 829 – Favorable with Amendments – Public Utilities - Transmission Lines - Advanced Transmission Technologies

Dear Chair Feldman and Committee Members:

The Public Service Commission (the Commission) requests a favorable report on HB 829, with consideration of the amendment detailed below. The Commission has had extensive discussions with the bill sponsor to enhance the bill language to achieve the policy directives set forth in the bill and ensure implementation of the bill.

The bill modifies the regulation and approval process for overhead transmission lines, incorporating requirements for advanced transmission technologies, enhanced analytical reporting, and potential incentives for advanced transmission technologies. The bill alters the Certificate of Public Convenience and Necessity (CPCN) process, mandates transmission congestion reports, and establishes guidelines for considering alternatives to new transmission infrastructure.

The proposed legislation adds requirements to the CPCN process which requires an applicant to demonstrate that evidence of alternatives or options beyond traditional power transmission design methods were considered. These advanced transmission technologies include materials, equipment, software, and energy storage components which increase the ability of transmission lines to transmit electrical power. Additionally, the applicant must demonstrate other items were considered such as costs, resource adequacy, and environmental impacts. The Commission shall then consider the evidence of the alternatives when taking final action on a CPCN.

The Commission notes that a large amount of the work to implement the CPCN provisions will fall to the applicant and the Power Plant Research Program (PPRP), which provides an analysis to the Commission for consideration for conditions for the CPCN. The Commission will then be responsible for reviewing the analysis and the resulting conditions, along with considerations already required by current statute.

The Commission suggests the definition of a "qualified generator lead line" in § 7-207(a)(7) be amended. As written, a possible interpretation might be that any software change might require a CPCN for a qualified transmission lead line without any other work on the transmission line. A possible solution that the sponsor might consider would be the following. "Qualified generator lead line" means an overhead

transmission line INCLUDING ADVANCED TRANSMISSION TECHNOLOGY designed to carry a voltage in excess of 69,000 volts and would allow an out-of-state Tier 1 or Tier 2 renewable source to interconnect with a portion of the electric system in Maryland that is owned by an electric company.

In addition, the Commission interprets the enactment of HB 829 to apply prospectively. Therefore, the provisions would not apply to applications currently under consideration by the Commission. However, the Commission always has discretion to request additional information from applicants not previously provided in the CPCN application.

The Public Service Commission appreciates the opportunity to provide testimony on HB 829. The Commission requests a favorable report, with the amendment as detailed above, as this bill has the potential to mitigate costs for transmission projects. Please contact the Commission's Director of Legislative Affairs, Christina M. Ochoa, if you have any questions.

Sincerely,

Frederick H. Hoover, Chair
Maryland Public Service Commission

HB0829 - Crossover - FWA - Public Utilities - Tran

Uploaded by: Landon Fahrig

Position: FWA

Maryland Energy Administration

TO: Chair Feldman, Vice Chair Kagan, and Members of the Education, Energy, and the Environment Committee
FROM: MEA
SUBJECT: HB 829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies
DATE: March 26, 2025

MEA Position: FAVORABLE WITH AMENDMENTS

While MEA supports the intent of this bill, we recommend targeted amendments to enhance, clarify, and ensure effective implementation.

House Bill 829 seeks to modernize Maryland's approach to transmission line development by integrating Advanced Transmission Technologies (ATTs) into the regulatory process governing Certificates of Public Convenience and Necessity (CPCN).

The bill mandates CPCN applicants to include an analysis of alternative transmission routes. However, COMAR already requires a description of alternative routes:

> "The description of each alternative route considered for the transmission line shall include:
> (1) An estimate of the capital and annual operating cost of each alternative route; and
> (2) A statement of the reason why each alternative route was rejected."[1]

To avoid redundancy, MEA suggests striking "alternative routings" from the bill.

MEA also suggests delineating transmission upgrades from generation, because generation upgrades is not a term used in PJM's transmission planning or generator interconnection processes. Similarly, specifying that enhancements at the distribution level are intended for multiple service areas or electric companies may provide greater clarity.

MEA recommends replacing the cost recovery provision with the financial incentives language rather than adding it. FERC has jurisdiction over the transmission of electricity in interstate commerce, including rates, terms, and conditions, while state regulators handle distribution and retail rates. Supplanting rather than supplementing the mechanism used can avoid state-federal jurisdictional pitfalls. Financial incentives can send a positive signal for ATT deployment in Maryland. However, a minimum standard for their effectiveness may be needed to avoid subsidizing technologies that only marginally enhance grid performance. The PSC could be accorded discretion to establish criteria.

[1] COMAR 20.79.04.03.

MEA urges the committee to issue a **favorable report as amended**, with the adoption of these amendments.

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, at landon.fahrig@maryland.gov or 410.913.1537.

HB829 Testimony LZ 2025.pdf
Uploaded by: Lynne Zink
Position: FWA

HB829 - Public Utilities – Transmission Lines – Advanced Transmission Technologies
Position: Favorable with Amendment: **Suggested amendment outlined at bottom of page.**

Education, Energy, and the Environment Committee

Dear Chair Feldman and fellow members of the EEE Committee,

I write today to ask for a favorable report for HB829. I represent community members of Kingsville, Franklinville, and Upper Falls, Maryland who are dismayed at the proposed new transmission lines due to the retirement of Brandon Shores Power Plant. These proposed lines run through the densely-wooded Gunpowder Falls State Park and the historic communities of Kingsville, Upper Falls, and Franklinville. **These communities are filled with historic homes** listed on the Baltimore County and State registries. **The lines are located near protected wildlands** filled with endangered species and will **continue to deteriorate the esthetics of our small-town, rural neighborhoods**. We are located in both Harford and Baltimore Counties and live outside the URDL (Urban-Rural Demarcation Line). As a result, there are no fire hydrants near our homes because we live in between the Little and Big Gunpowder Rivers.

My family owns a family farm in Kingsville. A second set of power lines running directly through our neighborhoods will increase the likelihood of a wildfire exponentially. **Kingsville, MD cannot become the next Paradise, CA.** In fact, the state of California has been moving towards undergrounding their power lines after the devastating wildfires. The very state which has influenced so much of our climate policies in Maryland has learned their lesson about placing profits over people. 99% of homes in Kingsville are in DIRECT EXPOSURE to wildfire risk and may be ignited by vegetation, flying embers, or nearby structures.

I ask the committee to consider this important piece of legislation which will require the PSC to examine alternatives to the construction of new transmission lines. Our community does not support this expansion because **this project will bankrupt residents, destroy our property values, and impact the environment detrimentally**. Finally, the impact on families already struggling with inflation and rising costs (most especially utility rates) is unconscionable. Once these lines are installed, there is no turning back for our electric bills. Please consider optimizing the existing transmission infrastructure and leave our communities alone.

Suggested Amendment: Amend this bill to become emergency legislation with an immediate effective date so that the PSC will take notice before the Brandon Shores Hearings on April 9th, 10th, and 23rd.

Thank you for your consideration.

Respectfully submitted by Lynn Zink on behalf of the entire Zink family which consists of 37 family members.

HB829 Testimony Zink 2025.pdf
Uploaded by: Lynne Zink
Position: FWA

HB829 - Public Utilities – Transmission Lines – Advanced Transmission Technologies
Position: Favorable with Amendment: **Be amended as an Emergency Bill**

Education, Energy, and the Environment Committee

Dear Committee,

I write today to ask for a favorable report for HB829. I represent community members of Kingsville and Upper Falls, Maryland who are dismayed at the proposed new transmission lines due to the retirement of Brandon Shores Power Plant. We are located in both Harford and Baltimore Counties and live outside the URDL (Urban-Rural Demarcation Line). As a result, there are no fire hydrants near our homes because we live in between the Little and Big Gunpowder Rivers. Much of Harford County nestled along this transmission line route also does not have fire hydrants. The neighborhoods of Jerusalem Mills, Kingsville, Long Green Woods, Pleasant Hills, Fallston. And North Bel Air are full of historic areas and homes - many from the 1700's and 1800's. Harry Dorsey Gough's Perry Hall Mansion, Jerusalem Mill, Saint John's Parish, Jericho Farm, Ishmael Day's House and the Jericho Covered Bridge. Each time one of these historic landmarks is lost they cannot be recovered. One case in point is the childhood home of the Von Paris family. Sadly, the main house at Arcadia was lost to a fire on January 15, 2020 as reported by the media. Our community was devastated by this tragedy.

My family owns a family farm in Kingsville. A second set of power lines running directly through our neighborhoods will increase the likelihood of a wildfire exponentially. **Kingsville, MD cannot become the next Paradise, CA.** In fact, the state of California has been moving towards undergrounding their power lines after the devastating wildfires. The very state which has influenced so much of our climate policies in Maryland has learned their lesson about placing profits over people. 99% of homes in Kingsville are in DIRECT EXPOSURE to wildfire risk and may be ignited by vegetation, flying embers, or nearby structures.

I ask the committee to consider this important piece of legislation which will require the PSC to examine alternatives to the construction of new transmission lines. Our community is rallying together against the Brandon Shores Retirement Mitigation Project and we will not rest until our land, homes, and energy future are protected. In addition to the already rising energy costs we face, we cannot sustain another rate hike on our BGE bills. The new transmission lines will result in a new RMR fee on our bills as well as the surcharge to construct this $800 million project. This is unconscionable at a time when Marylanders are facing tax hikes, struggling with inflation, and simply cannot afford to heat their homes or keep the lights on - not when there are alternatives that can be explored!

Thank you for your consideration.

Respectfully submitted by Lynn Zink on behalf of the entire Zink family which consists of 37 family members.

HB829 Testimony.pdf
Uploaded by: Mark Kukucka
Position: FWA

24 March 2025

HB829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies
Position: Favorable with Amendments

Dear Chairman Feldman and fellow members of the EEE Committee,

I am writing today to ask for a favorable report for HB829. I represent a group of community members of Kingsville, Franklinville, and Upper Falls, Maryland who are dismayed at the proposed new transmission lines due to the retirement of Brandon Shores Power Plant. These proposed lines run through the densely-wooded Gunpowder Falls State Park and the historic communities of Kingsville, Upper Falls, and Franklinville. The lines are located near protected wildlands filled with endangered species and will continue to deteriorate the esthetics of our small-town, rural neighborhoods. We are located in both Harford and Baltimore Counties and live outside the URDL (Urban-Rural Demarcation Line). As a result, there are no fire hydrants near our homes because we live in between the Little and Big Gunpowder Rivers.

My family has resided in Kingsville for over 6 decades dating back to the mid 1960s. Our property lies adjacent to the Gunpowder Falls State Park. A second set of power lines running directly through our neighborhoods will increase the likelihood of a wildfire exponentially. To decrease this fire risk, we have sought the direct burial of any new transmission lines. Ninety-nine percent of the homes in Kingsville are in DIRECT EXPOSURE to wildfire risk and may be ignited by vegetation, flying embers, or nearby structures.

Therefore, I ask the committee to consider this important piece of legislation which will require the PSC to examine alternatives to the construction of new transmission lines. **I specifically ask that grid enhancing technologies and the use of advanced conductors be fully pursued BEFORE any new transmission lines are constructed along our corridor.** Our community does not support this expansion because this project will bankrupt residents, destroy our property values, and impact the environment detrimentally. Please consider optimizing the existing transmission infrastructure and leave our communities alone.

One more thing: Please considering amending this bill to become emergency legislation with an immediate effective date so that the PSC will take notice before the Brandon Shores Hearings on April 9th, 10th, and 23rd.

Thank you for your consideration,

Dr. Mark Kukucka
12402 Jerusalem Road
Kingsville, MD 21087

HB829 Testimony RHU.pdf
Uploaded by: Rachel Ullmann
Position: FWA

HB829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies
Position: Favorable with Amendment
Education, Energy, and the Environment Committee

Dear Chair Feldman and fellow members of the EEE Committee,

I write today to ask for a favorable report for HB829. I represent community members of Kingsville, Franklinville, and Upper Falls, Maryland who are dismayed at the proposed new transmission lines due to the retirement of Brandon Shores Power Plant. These proposed lines run through the densely-wooded Gunpowder Falls State Park and the historic communities of Kingsville, Upper Falls, and Franklinville. **These communities are filled with historic homes** listed on the Baltimore County and State registries. **The lines are located near protected wildlands** filled with endangered species and will **continue to deteriorate the esthetics of our small-town, rural neighborhoods**. We are located in both Harford and Baltimore Counties and live outside the URDL (Urban-Rural Demarcation Line). As a result, there are no fire hydrants near our homes because we live in between the Little and Big Gunpowder Rivers.

My family owns Jubilee which is a historic home in Kingsville built in 1771. Our property lies adjacent to the Gunpowder Falls State Park. A second set of power lines running directly through our neighborhoods will increase the likelihood of a wildfire exponentially. **Kingsville, MD cannot become the next Paradise, CA.** In fact, the state of California has been moving towards undergrounding their power lines after the devastating wildfires. 99% of homes in Kingsville are in DIRECT EXPOSURE to wildfire risk and may be ignited by vegetation, flying embers, or nearby structures.

I ask the committee to consider this important piece of legislation which will require the PSC to examine alternatives to the construction of new transmission lines. Our community does not support this expansion because **this project will bankrupt residents, destroy our property values, and impact the environment detrimentally**. Finally, the impact on families already struggling with inflation and rising costs (most especially utility rates) is unconscionable. Once these lines are installed, there is no turning back for our electric bills. Please consider optimizing the existing transmission infrastructure and leave our communities alone.

Suggested Amendment: Amend this bill to become emergency legislation with an immediate effective date so that the PSC will take notice before the Brandon Shores Hearings on April 9th, 10th, and 23rd.

Thank you for your consideration.
Respectfully submitted by Rachel Ullmann, District 7A, Kingsville

BGE_EEE_HB829-Transmission Lines Advanced Transmis

Position Statement

Oppose
Education, Energy, and the Environment
2/20/2025

House Bill 829 – Public Utilities - Transmission Lines - Advanced Transmission Technologies

Baltimore Gas and Electric Company (BGE) opposes *House Bill 829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies,* which requires an applicant for a certificate of public convenience and necessity (CPCN) for the construction of an overhead transmission line to include in its application, an analysis of alternatives to the proposed transmission line, including the use of advanced transmission technologies, alternative routes, technology modifications to the electric distribution systems in the State, and a review of an integrated electric transmission-distribution system to address the need for the proposed transmission line.

BGE remains steadfast in its commitment to supporting the use of grid-enhancing technologies to advance Maryland's energy transition and endorsing policies that prioritize affordability, resiliency, and reliability. However, BGE opposes House Bill 829, because it is overly prescriptive, will create significant additional regulatory delays in the CPCN process, and increase the costs borne by utility ratepayers.

The Maryland Public Service Commission's ("Commission") CPCN process involves robust, quasi-judicial administrative proceedings, as well as extensive public notification requirements, public hearings, and opportunities for comment from the public, State Agencies, and local jurisdictions. For example, the Power Plant Research Program ("PPRP") in the Department of Natural Resources coordinates a comprehensive environmental and socioeconomic review of a proposed project and presents recommendations on behalf of seven different State agencies. The Staff of the Commission and the Office of People's Counsel also regularly participate as parties in CPCN proceedings.

House Bill 829 expands the required analysis for CPCN applications by potentially prioritizing less economical and reliable transmission options. Further, the CPCN process is already comprehensive and lengthy, typically 12-18 months, and would become even more burdensome, increasing costs for applicants, the Commission, and State agencies like the PPRP. Additionally, the bill will cause further delays in the permitting and siting of overhead transmission lines. Extending CPCN permitting times could make it infeasible to meet required in-service dates for PJM-mandated projects, risking putting the transmission system into an unreliable state and being in non-compliance with federal (i.e., North American Electric Reliability Corporation) reliability standards.

Under current law, applicants for a CPCN must already consider alternatives to newly proposed transmission lines, including the use of existing rights-of-way and alternative routes. This required alternative analysis includes a thorough evaluation and consideration of various potential routes for the proposed power line. Factors such as environmental impact, land use, community

Charles Washington| Brittany Jones | Guy Andes| Dytonia Reed| 410.269.5281

impact, and costs are considered to demonstrate that the proposed route is the most feasible and minimizes negative effects compared to other options.

A significant component of the analysis involves environmental and socioeconomic considerations, such as land use impacts. The impact of each alternative route on natural habitats, sensitive ecosystems, and visual aesthetics are examples of the environmental matters reviewed. Additionally, community impact is evaluated during the alternative analysis study. Factors such as property values, land use, and community concerns are strongly considered when identifying the most viable route for the transmission line. The CPCN process also currently requires that applicants identify whether the overhead transmission line is proposed to be constructed on property that is subject to an existing easement.

Many of the alternative evaluation criteria proposed in House Bill 829 are already part of existing federal approval processes and FERC Order 1920, which considers the use of viable grid enhancing technologies. Incorporating targeted State policies into these planning processes is a more appropriate venue than the CPCN process, which could delay projects thereby negatively impacting Maryland's transmission grid.

BGE remains committed to supporting Maryland's energy transition and supports policies that keep affordably, resiliency, and reliability a priority. For these reasons, BGE opposes House Bill 829 and requests an unfavorable report.

Charles Washington| Brittany Jones | Guy Andes| Dytonia Reed| 410.269.5281

testimonyHB0829 PGAS.pdf
Uploaded by: Lisa Bierer-Garrett
Position: UNF

Transmission Bill HB0829

Inbox

Garrett <froglipp@gmail.com>
to me

Delegate Charkoudian and the Education Energy and the Environment Committee

Regarding unfavorable stance on HB0829

As President of the Prince George's Audubon Society and Advocacy Chair, I represent over 400 members who care for the conservation and protection of our contiguous forests ar actually serve Maryland Residents.

We would like the bill to not be passed as we do not want to support further destruction of wildlife and birding habitats in the wonderful state of Maryland.

Thank you for your consideration and support of our our stand not to continue the current destructive path planned for the Transmission lines.

Sincerely,

Lisa Garrett, President Prince George's Audubon Society Bowie MD

--

Lisa R Bierer-Garrett
North Beach, MD 20714
froglipp@gmail.com

HB829 Oppose PHI 3.26.pdf
Uploaded by: Poetri Deal
Position: UNF

March 28, 2025

112 West Street
Annapolis, MD 21401

Oppose – House Bill 829 Public Utilities - Transmission Lines - Advanced Transmission Technologies

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) respectfully submit this letter of opposition on **House Bill 829 - Public Utilities - Transmission Lines - Advanced Transmission Technologies**. House Bill 829 alters the definition of qualified generator lead line for purposes of provisions of law regarding certificates of public convenience and necessity (CPCN), requires an applicant for a CPCN for the construction of an overhead transmission line to include certain analyses and requires the Public Service Commission (PSC) to consider certain alternatives before taking final action on a certain application for a CPCN.

Pepco and Delmarva Power are committed to supporting the use of grid-enhancing technologies to advance Maryland's energy transition and endorsing policies that prioritize affordability, resiliency, and reliability. However, Pepco and Delmarva Power oppose House Bill 829 as it will create additional regulatory delays in the CPCN process and increase the costs borne by utility ratepayers. While well-intentioned, this legislation attempts to add an unnecessary layer onto an already robust and comprehensive CPCN process that considers the community, physical, environmental, aesthetic and noise impacts for the siting of transmission lines and generating stations.

Pepco and Delmarva Power are concerned that House Bill 829 may add significant time and costs to any future Maryland CPCN application required for any overhead transmission line that does not meet the Commission's waiver requirements. Section 7(iv)1 proposes a new CPCN requirement for an "analysis of alternatives to the proposed transmission line." As part of the CPCN process, the PSC can request certain information, however, the information in the bill is concerning as it includes things that are necessarily related to the transmission line. Also, this requirement for "a review of an integrated electric transmission distribution system to address the need of the transmission line" is very broad and potentially unduly burdensome to produce. These requirements, while well-intentioned, could prolong decision-making process, delaying the timely development of necessary transmission infrastructure, particularly at a time where the state is looking to increase in-state generation quickly in Maryland.

Extending CPCN permitting times could make it infeasible to meet required in-service dates for Mandated projects, risking putting the transmission system into an unreliable state and being in noncompliance with federal (i.e., North American Electric Reliability Corporation) reliability standards. Additionally, the legislation discusses transmission planning and cost recovery, which are areas that are not within the jurisdiction of the PSC. The Federal Energy Regulatory Commission (FERC) regulates transmission planning and cost recovery. The legislation contains various provisions that a court may find are preempted by federal law, particularly the provisions that delve into transmission planning and cost recovery.

Pepco and Delmarva Power respectfully oppose House Bill 829 and are committed to collaborating with the bill sponsor and stakeholders.

Valencia McClure | Anne Klase | Allyson Black-Woodson | Poetri Deal | 410 980 5347

FirstEnergy - EEE UNFAV HB-829 - Transmission Tech

Uploaded by: Timothy Troxell

Position: UNF

Timothy R. Troxell, CEcD
Senior Advisor, Government Affairs
301-830-0121
ttroxell@firstenergycorp.com

10802 Bower Avenue
Williamsport, MD 21795

OPPOSE – House Bill 0829
HB0829 – Public Utilities - Transmission Lines - Advanced Transmission Technologies
Education, Energy, and the Environment Committee
Wednesday, March 26, 2025

Potomac Edison, a subsidiary of FirstEnergy Corp., serves approximately 285,000 customers in all or parts of seven Maryland counties (Allegany, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington). FirstEnergy is dedicated to safety, reliability, and operational excellence. Its ten electric distribution companies form one of the nation's largest investor-owned electric systems, serving customers in Ohio, Pennsylvania, New Jersey, New York, West Virginia, and Maryland.

Unfavorable

Potomac Edison / FirstEnergy opposes House Bill 0829 – *Public Utilities - Transmission Lines - Advanced Transmission Technologies*. While the bill aims to modernize our state's electrical transmission infrastructure, we believe it is laden with unintended consequences that warrant further review and careful consideration.

Potomac Edison / FirstEnergy requests an Unfavorable report on HB 0829 for the following reasons.

While the bill proposes altering the definition of *"qualified generator lead line"* within the context of certificates of public convenience and necessity, this change could lead to ambiguities in regulatory interpretations -- potentially complicating the approval process for new transmission projects. The bill also mandates that the Public Service Commission consider certain evidence before taking decisive action on applications. This requirement, though well-intentioned, could prolong the decision-making process, hindering the timely development of necessary transmission infrastructure.

HB-829 requires applicants seeking certificates for constructing overhead transmission lines to include specific evidence and analysis in their applications. While thorough evaluation is essential, the administrative scope of the required analyses and reports are significant. Imposing these additional mandatory analyses increases the administrative burden on applicants, and potentially delays the start of these critical infrastructure projects. Given the rapid pace of technological advancements and grid changes, the usefulness of these reports and the data within them can quickly become outdated and irrelevant.

The bill also assumes that future areas of grid congestion can be accurately projected. Growth related to new development and the shifting of energy demands make such projections inherently difficult to make -- and may lead to misguided policy decisions or the misallocation of resources.

In addition, multiple provisions of HB-829 appear to conflict with existing authority held by Regional Transmission Organizations (RTOs) and the Federal Energy Regulatory Commission (FERC). These conflicts may create regulatory confusion, delay projects, and lead to potential legal challenges that could hinder Maryland's ability to modernize its grid efficiently.

While the modernization of our electrical transmission system is a worthy goal, it is crucial to implement policies that facilitate progress without introducing new obstacles. Given the administrative scope of the analyses and reports, how quickly data can become irrelevant, the difficulty in projecting future areas of grid congestion, and the fact that multiple portions of this bill conflict with existing RTO/FERC authority, **Potomac Edison / FirstEnergy respectfully request an Unfavorable report on House Bill 0829.**